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AS SHEEP AMIDST THE WOLVES

religion in the social environment

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DUTCH SUMMARY

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Korte Samenvatting

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Dit doctoraat beoogt een bijdrage te leveren aan het debat inzake of religie al dan niet tot intolerantie leidt. Hiertoe wordt er in een eerste deel een nieuwe manier om religie te meten voorgesteld (de Post-Kritisch Geloof schaal). De Post-Kritisch Geloof schaal verschaft informatie over individuele verschillen tussen mensen in de dimensies Exclusie vs. Inclusie van Transcendentie en Letterlijk vs. Symbolisch die Wulff (1991, 1997) gebruikte om de mogelijke manieren van omgaan met religie te ordenen, en laat toe de effecten van het al of niet gelovig zijn te scheiden van de effecten van de manier waarop met geloof wordt omgesprongen. In een tweede deel wordt dit instrument aangewend om een antwoord te verschaffen op de vraag of al dan niet gelovig zijn in se gerelateerd is aan intolerantie. Hiertoe wordt aandacht besteed aan de relatie tussen de twee geloofsdimensies enerzijds en sociale en politieke attitudes, persoonlijkheidskarakteristieken, waardenoriëntaties en manieren van cognitief functioneren anderzijds. De resultaten die in dit doctoraat gepresenteerd worden, tonen aan dat de dimensie Exclusie vs. Inclusie van Transcendentie gerelateerd is aan autoritaire submissie, cultureel conservatisme, conservatieve waarden, normativiteit en een voorkeur voor orde, structuur en voorspelbaarheid, en suggereren dat gelovigen over het algemeen gericht zijn op het vrijwaren van hun culturele tradities van de invloed van afwijkende opinies en levensstijlen omdat die indruisen tegen het waardenkader dat ze er zelf op na houden. Daarnaast tonen de onderzoeksresultaten aan dat de dimensie Letterlijk vs. Symbolisch gerelateerd is aan cultureel conservatisme, racisme, autoritarisme, onaangenaamheid, intolerantie van ambiguïteit, dualisme, geslotenheid van geest en normativiteit alsook aan een gebrekkige capaciteit tot perspectiefname, een gebrekkige morele competentie en een gebrek aan openheid, wat suggereert dat mensen die op een letterlijke manier met religie omgaan over een gelimiteerd cognitief functioneren beschikken en, allicht ten gevolge daarvan, intolerant zijn, en dit niet alleen naar afwijkende opinies en levensstijlen toe, maar ook naar mensen van een vreemde origine toe.

Op basis van de inzichten uit de hedendaagse autoritarisme-theorie die een onderscheid maakt tussen autoritaire submissie en autoritaire dominantie wordt geargumenteerd dat de resultaten erop wijzen dat gelovigen (in vergelijking met ongelovigen) iets weg hebben van schapen. Schapen die bereid zijn zich te onderwerpen aan om het even wie cultuurbehoud wil garanderen. Veel hangt er echter van af hoe er met het geloof wordt omgesprongen. Wanneer dit op symbolische wijze gebeurt, dan is intolerantie weinig waarschijnlijk. Wanneer dit daarentegen op een letterlijke manier gebeurt, dan neemt de intolerantie sterk toe. Op basis van de gepresenteerde resultaten worden suggesties gedaan om intolerantie tegen te gaan. Hierbij wordt geargumenteerd dat geestelijken, catechisten en leraars de gelovigen positief kunnen beïnvloeden door open interpretaties van religieuze teksten en culturele tradities naar voren te schuiven en door hun appreciatie te laten blijken voor de waardevolle aspecten van andere opvattingen en levensstijlen. Tenslotte wordt er ook nog geargumenteerd dat een brede applicatie van programma's gericht op het opkrikken van de morele competentie efficiënt zou zijn om intolerantie tegen te gaan.

Lange Samenvatting

8   DUTCH SUMMARY

Introductie

Op 11 september 2001 rammen twee vliegtuigen zich in de torens van het World Trade Center in New York. Een politieke terreurdaad die werd verrechtvaardigd op religieuze gronden en die leidde tot een stortvloed van weinig genuanceerde opiniestukken in een aantal toonaangevende Europese tijdschriften en magazines inzake de rol van religie als vermeende katalysator van fanatisme en intolerantie. Een mening die gevoed wordt door de vaststelling dat, niettegenstaande het feit dat alle grote wereldreligies broederliefde schijnen te propageren, de geschiedenis bol staat van de momenten waarop religie de verrechtvaardiging of zelfs ronduit de aanleiding vormde voor allerhande wreedheden ten aanzien van mensen met een andere godsdienst, een andere ideologie, een andere cultuur, een andere huidskleur of een andere sexuele voorkeur. Het mag dan ook geen verwondering wekken dat heel wat sociale wetenschappers zich voornamelijk zijn gaan richten op het schijnbaar paradoxale karakter van de relatie tussen religie en intolerantie, en dat er heel wat psychologisch, sociologisch en historisch onderzoek werd verricht om uit te maken of het inderdaad zo is dat religie intolerantie in de hand werkt. Het samenvatten van dit onderzoek levert een uitermate gefragmenteerd beeld op. Sommige onderzoekers en theologen concluderen dat religie inderdaad kan beschouwd worden als een katalysator van intolerantie, racisme, vooroordeel en dergelijke meer (bijv., Flannery & Oesterreicher, 1985; Kertzer, 2001; Poliakov, 1974; Salemink, 1995). Andere onderzoekers concluderen dan weer dat, wanneer niet-religieuze factoren zoals anomie, lokalisme en autoritarisme in rekening gebracht worden, religie eigenlijk eerder tolerantie in de hand werkt (bijv., Billiet et al., 1995; Eisinga et al., 1989, 1990, 1991, 1993; Scheepers et al., 1989). Nog andere onderzoekers beweren dan weer dat er geen intrinsieke band is tussen religie en intolerantie, maar dat alles ervan af hangt op welke manier iemand met religie omspringt (bijv., Allport & Ross, 1967, Batson et al., 1978, 1982, 1993).

As Sheep amidst the Wolves

Dit doctoraat bestaat uit 17 verschillende Engelstalige papers die elk een op zich staand geheel vormen, en die elk afzonderlijk ter publicatie werden ingestuurd. Sommige van deze papers zijn ondertussen reeds gepubliceerd of aanvaard, andere zijn nog onder revisie. Een nadeel van deze aanpak, naast het feit dat het geheel op deze manier lichtjes repetitief wordt en allicht vol fouten tegen het Engels staat, is dat dit doctoraat geen klassiek groot verhaal met een eigen dynamiek en een eigen logica is. Een voordeel is dan weer dat de lezer die maar in een aantal deelonderwerpen geïnteresseerd is gemakkelijker zijn gading kan vinden en niet in een kluwen van resultaten op zoek moet naar die zaken die hem interesseren. Bent u zo iemand, bekijk dan de inhoudstafel en ga direct naar de pagina waar de tekst begint die je ertoe bracht dit doctoraat ter hand te nemen. Wil je daarentegen graag een geïnte-

greerd beeld krijgen van de 17 papers die misschien op het eerste zicht lukraak in een willekeurige volgorde zijn geplaatst, dan kan je daarvoor hier terecht. In deze samenvatting zal ik immers een poging ondernemen om je doorheen deze papers te navigeren en je blik te doen rusten op die aspecten die relevant zijn voor de hoofddoelstelling van dit doctoraat (met name het verschaffen van een antwoord op de vraag of er een verband is tussen religiositeit en intolerantie). Om hier licht op te werpen, wordt in het eerste deel van dit doctoraat (The Structure of the Herd) een nieuwe manier geïntroduceerd om verschillen in religiositeit te meten. Deze aanpak zou vervolgens moeten toelaten een meer genuanceerd antwoord te verschaffen op de vraag of, en zo ja, hoe en waarom religie in relatie staat tot intolerantie, wat de focus is van het tweede deel van dit doctoraat (Separating the Sheep from the Goats). In mijn poging om deze vraag te beantwoorden, heb ik er daarom voor geopteerd om de focus van dit tweede deel zo breed mogelijk te houden en zodoende niet alleen een brede waaier van sociale en politieke attitudes in rekening te brengen, maar ook rekening te kunnen houden met een aantal variabelen die geacht worden meer fundamenteel te zijn naar de manier waarop mensen in de wereld staan toe dan hun concrete attitudes. Het betreft persoonlijkheidskenmerken, waardenoriëntaties en manieren van cognitief functioneren. Deze variabelen worden geacht meer fundamenteel te zijn dan de concrete attitudes die mensen erop na houden in de zin dat er meestal van uitgegaan wordt dat ze deze attitudes voorafgaan en zelfs tot op grote hoogte bepalen. In de conclusie-sectie op het einde van deze samenvatting zal ik vervolgens proberen een synthese te maken van de resultaten van de verschillende in dit doctoraat opgenomen studies, waarna ik zal eindigen met het poneren van een aantal theoretische en maatschappelijke implicaties die hieruit lijken voort te vloeien.

The Structure of the Herd

Volgens Wulff (1991, 1997) zijn de mogelijke manieren om met religie om te gaan te lokaliseren in een twee-dimensionele ruimte langs de bipolaire dimensies Exclusie vs. Inclusie van Transcendentie en Letterlijk vs. Symbolisch. Op deze manier kunnen vier kwadranten onderscheiden worden die elk een specifieke manier van omgaan met religie omvatten. Deze kwadranten worden door Wulff benoemd als, respectievelijk, Letterlijke Affirmatie, Letterlijk Disaffirmatie, Symbolische Disaffirmatie (ofte reductieve interpretatie) en Symbolische Affirmatie (ofte restoratieve interpretatie). Letterlijke Affirmatie representeert een positie waarin het letterlijk bestaan van de religieuze realiteit bevestigd wordt. Deze positie wordt het duidelijkst belichaamd door religieuze fundamentalisten, hoewel sommige elementen typisch aan deze positie ook kunnen voorkomen bij mensen die niet bepaald conservatief zijn. Letterlijk Disaffirmatie representeert een positie waarin het bestaan van de religieuze realiteit wordt verworpen en waarin de mogelijkheid dat de religieuze taal een symbolische betekenis kan hebben uit het oog verlo-

ren wordt. Net als in het eerste kwadrant wordt de religieuze taal dus op een letterlijke manier geïnterpreteerd. Het verschil is erin gelegen dat mensen die deze positie innemen de religieuze boodschap verwerpen. Als er iets is dat als een absolute en onfeilbare waarheid wordt aanzien, dan is het de wetenschappelijke methode en de rationele principes van kennisverwerving die aan deze methode onderliggen. Symbolische Disaffirmatie representeert een positie waarin het bestaan van de religieuze realiteit wordt verworpen, en waarin men een geprivilegieerd perspectief op de verborgen betekenis van religieuze mythen en rituelen claimt. Dit kwadrant werd door Wulff afgeleid uit het werk van Ricoeur (1970) die vooropstelde dat er in de moderne hermeneutiek een reductieve interpretatie nodig is om de religieuze symboliek te kunnen uitzuiveren van illusoire overblijfselen en restanten van idolatrie. Symbolische Affirmatie representeert een positie waarin het bestaan van de religieuze realiteit bevestigd wordt, maar waarin men de hierboven beschreven reductieve interpretaties incorporeert en probeert te overstijgen om tot de symbolische betekenis van de religieuze taal te komen. Ook dit kwadrant werd afgeleid uit het werk van Ricoeur (1970) die vooropstelde dat een restoratieve interpretatie voor de moderne mens nodig is om ertoe te kunnen komen het verdachte object te restoreren tot een object dat begrip en geloof waardig is. In dit kader introduceerde Ricoeur de term Tweede Naïviteit.

Verder werkend op Wulff's theoretisch kader, begon Hutsebaut (1996, 1997) met de constructie van de Post-Kritisch Geloof schaal. Deze schaal beoogt de meting van individuele verschillen in de dimensies Exclusie vs. Inclusie van Transcendentie en Letterlijk vs. Symbolisch in een geseculariseerde Christelijke context. Een initiële analyse van de interne structuur van deze schaal in een gemengde steekproef van adolescenten, universiteitsstudenten en volwassenen (Hutsebaut, 1996) verschafte echter slechts partiële steun voor Hutsebauts bewering dat de Post-Kritisch Geloof schaal een valied instrument is om Wulffs concepten te operationaliseren. Factor analyse gevolgd door VARIMAX-rotatie wees noch op het bestaan van de twee bipolaire factoren die Wulff wist te onderscheiden, noch op het bestaan van vier unipolaire factoren. In de plaats daarvan kwamen er drie unipolaire factoren naar voren die door Hutsebaut werden geïnterpreteerd als Letterlijke Affirmatie (Orthodoxie), Letterlijke Disaffirmatie (Externe Kritiek) en Symbolische Affirmatie (Historisch Relativisme).

De Post-Kritisch Geloof Schaal

In het eerste hoofdstuk van The Structure of the Herd wordt de interne structuur van de Post-Kritisch Geloof schaal onderzocht aan de hand van multi-dimensionele scalering (MDS). MDS is een statistische techniek die de psychologische afstand tussen stimuli, in dit geval vragenlijst-items, representeert in een geometrische ruimte zodat de afstanden tussen de stimuli de geobserveerde (dis)similariteit tussen deze stimuli zo goed mogelijk weerspiegelen. De resultaten van een dergelijke analyse tonen aan dat een twee-dimensionele MDS-representatie van de geobserveerde relaties tussen de items van de Post-

Kritisch Geloof schaal kan worden geïnterpreteerd aan de hand van zowel een dimensionele als een regionale interpretatie. De eerste dimensie kan geïnterpreteerd worden als de dimensie Exclusie vs. Inclusie van Transcendentie. Alle items die onder het label Externe Kritiek thuishoren, hebben negatieve coördinaten op deze dimensie en alle items die onder het label Orthodoxie thuishoren en bijna alle items die onder het label Historisch Relativisme thuishoren, hebben hier positieve coördinaten op. De tweede dimensie kan geïnterpreteerd worden als de dimensie Letterlijk vs. Symbolisch. Alle items die onder het label Orthodoxie thuishoren en alle items die onder het label Externe Kritiek thuishoren, hebben negatieve coördinaten op deze dimensie en alle items die onder het label Historisch Relativisme thuishoren, hebben hier positieve coördinaten op. Deze interpretatie is compatibel met een regionale interpretatie. De items die onder het label Orthodoxie thuishoren, blijken gesitueerd in het kwadrant linksboven, de items die onder het label Externe Kritiek thuishoren, blijken gesitueerd in het kwadrant links onder en de meeste items die onder het label Historisch Relativisme thuishoren, blijken gesitueerd in het kwadrant rechts boven. Sommige items die onder het label Historisch Relativisme thuishoren, bevinden zich echter in het kwadrant rechtsonder. Een inspectie van de items maakt duidelijk dat, waar de items in het kwadrant rechtsboven gekenmerkt worden door een aanhangen van de Christelijke godsdienst, de items in het kwadrant rechts onder zich laten kenmerken door een relativering van de Christelijke godsdienst op historische grond zonder dat dit een aanhangen ervan impliceert. Zowel op basis van de positionering van de items als op basis van de inhoud van de items wordt dus duidelijk dat de items in het kwadrant rechts onder eigenlijk niet geschikt zijn als meting van Symbolische Affirmatie, en dat het beter is Historisch Relativisme uit te splitsen in twee delen. Het kwadrant rechtsboven, dat een Inclusie van Transcendentie impliceerde, werd Tweede Naïviteit genoemd en het kwadrant linksonder, dat een puur relativistische houding vat, werd Relativisme genoemd. Het feit dat de items die onder het label Relativisme thuishoren een negatieve lading hebben op de eerste dimensie suggereert bovendien dat ze eigenlijk een maat van Symbolische Disaffirmatie verschaffen.

Dit alles nam evenwel niet weg dat er een discrepantie bleef bestaan tussen de resultaten verkregen aan de hand van MDS en de resultaten verkregen aan de hand van factor analyse, en meerbepaald aan de hand van principale component analyse (PCA). PCA is een statistische techniek die toelaat om een groep variabelen, in dit geval vragenlijst-items, te reduceren tot een beperkt aantal dimensies of componenten die de geobserveerde relaties tussen deze variabelen op een meer economische manier beschrijven. Waar de resultaten van de MDS wijzen op het bestaan van twee bipolaire dimensies en vier houdingen ten aanzien van religie, wijzen de resultaten van de PCA op het bestaan van drie hoofdzakelijk unipolaire factoren. Een verklaring voor deze discrepantie in termen van individuele verschillen in responstendenzen werd vooropgesteld en getest. De resultaten van de analyses die hiertoe uitgevoerd werden, wijzen uit dat er, na orthogonale procrustes rotatie van de drie componenten die uit de

PCA naar voren traden naar de twee dimensies toe die uit de MDS naar voren kwamen, een hoge congruentie bestaat tussen de eerste twee componenten en de twee bipolaire dimensies. De eerste geroteerde factor kan geïnterpreteerd worden in termen van een bipolaire dimensie Exclusie vs. Inclusie van Transcendentie en de tweede kan geïnterpreteerd worden in termen van een bipolaire dimensie Letterelijk vs. Symbolisch. Na deze rotatie bleken alle items (ook deze met een duidelijk tegenstrijdige inhoud) een niet-negatieve lading te hebben op de derde component. Dit suggereert dat individuele verschillen in responsstijl en schaalgebruik, en meer bepaald verschillen in de tendens tot het al of niet instemmen met de items van de Post-Kritisch Geloof schaal (en dit los van hun inhoudelijke betekenis), een plausibele verklaring bieden voor het opduiken van deze additionele component. Op die manier leidde de assumptie van het bestaan van individuele verschillen in schaalgebruik, in combinatie met het gebruik van orthogonale procrustes rotaties, tot een convergentie tussen de resultaten verkregen met MDS en met PCA. Deze convergentie levert steun voor de bewering dat de Post-Kritisch Geloof schaal geschikt is om Wulffs concepten te operationaliseren.

De Post-Kritisch Geloof Schaal Herzien

In het tweede hoofdstuk van The Structure of the Herd wordt de interne structuur van de Post-Kritisch Geloof schaal herbekeken aan de hand van zowel multi-dimensionele scalering (MDS) als principale component analyse (PCA). Hiertoe werden alle 16 op dat moment reeds verzamelde steekproeven samengevoegd om zo adequaat mogelijk na te gaan (1) of twee dimensies inderdaad voldoende zijn om de empirische relaties tussen de items van de Post-Kritisch Geloof schaal weer te geven, (2) of deze dimensies geïnterpreteerd kunnen worden in termen van de dimensies Exclusie vs. Inclusie van Transcendentie en Letterlijk vs. Symbolisch en (3) of deze structuur stabiel is over de verschillende versies van de Post-Kritisch Geloof schaal die doorheen de jaren zijn gebruikt en over de verschillende steekproeven die doorheen de jaren werden verzameld heen. Aangezien de resultaten van een PCA beïnvloed worden door interindividuele verschillen in schaalgebruik, en aangezien in het eerste deel van The Structure of the Herd evidentie gevonden werd voor het bestaan van dergelijke interindividuele verschillen in schaalgebruik (en meerbepaald in de mate waarin mensen los van de concrete item-inhoud instemmen met de items), werd er besloten eerst een correctie voor deze verschillen in schaalgebruik door te voeren. Hiertoe werd het instemmingsniveau van ieder subject geschat door diens gemiddelde te berekenen over alle items heen. Aangezien niet elk kwadrant in elk van de vier versies door evenveel items vertegenwoordigd wordt, werd er bij de berekening van dit gemiddelde aan elk kwadrant een gewicht toegekend, zodat elk kwadrant voor evenveel meetelt in deze score, ongeacht het aantal items dat tot dit kwadrant behoort. Dit gewogen gemiddelde werd vervolgens voor elk subject afzonderlijk afgetrokken van de geobserveerde scores op de verschillende items. Op deze manier werden interindividue-

le verschillen in de tendens tot het al of niet instemmen met de items van de Post-Kritisch Geloof schaal (en dit los van hun inhoudelijke betekenis) verwijderd. De PCA-analyses werden vervolgens op deze voor instemmingstendenzen uitgezuiverde scores uitgevoerd.

De resultaten van de analyses leveren steun voor de constructvaliditeit van de Post-Kritisch Geloof schaal. Ten eerste wijzen zowel een MDS-analyse op de gemiddelde Euclidische afstanden tussen de gestandaardiseerde items over de 16 samples als een PCA-analyse op de voor instemmingstendenzen uitgezuiverde scores in elke sample afzonderlijk duidelijk uit dat respectievelijk een twee-dimensionele en een twee-componentiële oplossing voldoende is om de geobserveerde relaties tussen de items van de Post-Kritisch Geloof schaal weer te geven. Ten tweede wordt de interpretatie van deze twee dimensies en componenten in termen van de dimensies Exclusie vs. Inclusie van Transcendentie en Letterlijk vs. Symbolisch gesteund doordat de empirische structuur van de items sterke gelijkenissen vertoont met de theoretische structuur van deze items. Ten derde blijkt deze twee-dimensionele en twee-componentiële oplossing stabiel over de verschillende versies van de Post-Kritisch Geloof schaal die doorheen de jaren werden gebruikt en over de verschillende steekproeven die doorheen de jaren werden verzameld. Hieruit kan worden geconcludeerd dat de Post-Kritisch Geloof schaal directe maten levert voor individuele verschillen in de dimensies Exclusie vs. Inclusie van Transcendentie en Letterlijk vs. Symbolisch die zijn uitgezuiverd voor de storende invloed van individuele verschillen in responsstijl (zoals verschillen in de mate waarin mensen met de items uit deze schaal instemmen los van hun inhoudelijke betekenis). Op deze manier laat de Post-Kritisch Geloof schaal onderzoekers toe om de pure effecten van al of niet gelovig zijn te scheiden van de pure effecten van de manier waarop met religie en religieuze inhouden wordt omgesprongen.

De Post-Kritisch Geloof Schaal Appendix

In deze appendix worden alle items van de Post-Kritisch Geloof schaal voor de vier subschalen afzonderlijk opgesomd (Orthodoxie, Externe Kritiek, Relativisme en Tweede Naïviteit). Alle items zijn hierbij vergezeld van een label dat toelaat hen te identificeren in de analyses in de andere delen van The Structure of the Herd alsook van een aanduiding in welke versie van de Post-Kritisch Geloof schaal ze voorkomen. En hoewel deze items in bijna alle studies die in dit doctoraat aan bod komen in het Nederlands werden afgenomen, worden ze hier toch in het Engels weergegeven. De vertaling gebeurde volgens de richtlijnen van de Internationale Test Commissie. Hiertoe werden de items eerst naar het Engels vertaald en daarna terug naar het Nederlands. De verschillen tussen de originele versie en de versie die bekomen werd na vertaling en hervertaling waren minimaal, en een commissie van tweetalige onderzoeksassistenten besliste over de uiteindelijk Engelstalige versie.

Separating the Sheep from the Goats

In het tweede deel van dit doctoraat (<u>Separating the Sheep from the Goats</u>) werd de Post-Kritisch Geloof schaal aangewend om verschillen in religiositeit en omgaan met religie te meten. Aangezien dit doctoraat bestaat uit verschillende papers die allemaal op een verschillend tijdstip geschreven zijn en de Post-Kritisch Geloof schaal doorheen de jaren nogal wat veranderingen onderging, werd niet in elke paper dezelfde versie van deze schaal gebruik. Bovendien werd deze schaal door de jaren heen ook op verschillende manieren verwerkt. Grosso modo gebeurde dit op twee verschillende manieren. Een verschil in aanpak dat zich reeds weerspiegelde in <u>De Post-Kritisch Geloof Schaal</u> and <u>De Post-Kritisch Geloof Schaal Herzien</u>. In de originele gebruikswijze werden uit deze schaal scores afgeleid voor de verschillende kwadranten uit Wulffs model die in de concrete versie van deze schaal vertegenwoordigd waren. Dit gebeurde door de scores op alle items die geacht werden tot hetzelfde kwadrant te behoren te middelen. In de nieuwe gebruikswijze worden uit deze schaal scores afgeleid voor elk van de twee bipolaire dimensies uit Wulffs model. Deze nieuwe gebruikswijze is om twee redenen statistisch superieur aan de originele gebruikswijze. Allereerst worden de scores die uit deze schaal worden afgeleid om de positie van een individu in het model van Wulff te bepalen in deze nieuwe gebruikswijze gecorrigeerd en uitgezuiverd voor verschillen in schaalgebruik, waardoor deze verschillen de bekomen resultaten niet meer vertekenen. Vervolgens worden de scores die uit deze schaal worden afgeleid om de positie van een individu in het model van Wulff te bepalen in deze nieuwe gebruikswijze op (ruwweg) vier keer het aantal items berekend waarop de scores in de originele gebruikswijze werden berekend, wat uiteraard een meer betrouwbare positionering van elk subject in het model van Wulff toelaat.

Het tweede deel van dit doctoraat (<u>Separating the Sheep from the Goats</u>) beoogt een antwoord te verschaffen op de vraag of religie nu al of niet gerelateerd is aan intolerantie. De doelstelling van dit deel is echter op het eerste zicht nogal breed. Ten gevolge daarvan is dit deel dan ook ingedeeld in vijf hoofdstukken. Elk hoofdstuk probeert een antwoord te verschaffen op schijnbaar verschillende vragen. Het eerste hoofdstuk beperkt zich tot de relatie tussen religiositeit en sociale en politieke attitudes. Het tweede hoofdstuk beperkt zich tot de relatie tussen religiositeit en autoritarisme. Het derde hoofdstuk beperkt zich tot de relatie tussen religiositeit en waardenoriëntaties en probeert bovendien een antwoord te verschaffen op de vraag of religiositeitsmaten een extra voorspellende kracht hebben naar sociale en politieke attitudes toe bovenop de voorspellende waarde die aanwezig is in metingen van waardenoriëntaties. Het vierde hoofdstuk beperkt zich tot de relatie tussen religiositeit en cognitief functioneren. Het vijfde appendix-achtige hoofdstuk, tenslotte, focust op de vraag of er een verband is tussen cognitief functioneren en sociale en politieke attitudes en, indien dit zo is, of de effecten van cognitief functioneren op sociale en politieke attitudes gemedieerd worden door autoritarisme.

The tale of the black sheep

In het eerste hoofdstuk van <u>Separating the Sheep from the Goats</u> wordt de relatie tussen religiositeit en sociale en politieke attitudes belicht. Dit hoofdstuk bestaat uit vier delen die een antwoord proberen te verschaffen op vragen als "Zijn gelovigen meer geneigd er racistische denkbeelden op na te houden?", "Zijn gelovigen meer geneigd mensen in nood te helpen?" en "Zijn gelovigen conservatiever?".

Religie en Racisme 1

In het eerste deel van <u>The tale of the black sheep</u> wordt geprobeerd een antwoord te verschaffen op de vraag of gelovigen meer geneigd zijn er racistische denkbeelden op na te houden. Hierbij wordt de originele gebruikswijze van de Post-Kritisch Geloof schaal gehanteerd. Zowel Orthodoxie als Externe Kritiek werden verwacht positief samen te hangen met racisme omwille van het eerder fundamentalistische en dogmatische karakter van deze posities (Desimpelaere et al., 1999; Duriez, Fontaine & Hutsebaut, 2000). Relativisme werd verwacht negatief samen te hangen met racisme omdat het relativisme-concept nu eenmaal een tolerante houding naar andere opvattingen en andere culturen toe impliceert. En hoewel voorgaand onderzoek reeds had uitgewezen dat Tweede Naïviteit ongerelateerd is aan racisme (Duriez, Fontaine & Hutsebaut, 2000), werd er om theoretische redenen toch een negatief verband verwacht. Theoretisch gesproken kan men immers verwachten dat vanuit deze positie het gebod tot universele broederliefde serieus genomen wordt. Resultaten tonen aan dat zowel Orthodoxie als Externe Kritiek positief samenhangen met racisme en dat Relativisme negatief samenhangt met racisme. In overeenstemming met voorgaande analyses blijken Tweede Naïviteit en racisme ongerelateerd. De resultaten van een padanalyse waarin opleiding, leeftijd, kerkpraktijk en het belang dat mensen aan geloof hechten als onafhankelijke variabelen worden aanzien, waarin Orthodoxie, Externe Kritiek, Relativisme en Tweede Naïviteit als mediatorvariabelen worden aanzien en waarin racisme als afhankelijke variabele wordt aanzien, tonen evenwel aan dat dit een deels onterechte conclusie is. Hoewel Tweede Naïviteit geen direct effect blijkt te ressorteren op racisme, heeft het wel een indirect effect in de verwachte richting. Deze resultaten suggereren dat, hoewel Tweede Naïviteit dan misschien wel niet leidt tot grotere tolerantie, deze geloofshouding toch inhiberend werkt naar racisme toe.

Religie en Racisme 2

In het tweede deel van <u>The tale of the black sheep</u> wordt geprobeerd een meer accuraat antwoord te verschaffen op de vraag of gelovigen meer geneigd zijn er racistische denkbeelden op na te houden. Hierbij wordt de nieuwe gebruikswijze van de Post-Kritisch Geloof schaal gehanteerd. De dimensie Exclusie vs. Inclusie van Transcendentie werd verwacht ongerelateerd te zijn aan racisme omdat er eigenlijk niet echt een intrinsieke reden is om een dergelijk verband te verwachten. De dimensie Letterlijk vs.

Symbolisch daarentegen werd verwacht sterk negatief samen te hangen met racisme, omdat intolerantie van ambiguïteit gerapporteerd werd als zijnde tekenend voor zowel letterlijk denken (Desimpelaere et al., 1999, Duriez, 2002c) als racisme (Sidanius, 1985). De resultaten wijzen erop dat racisme inderdaad ongerelateerd is aan de dimensie Exclusie vs. Inclusie van Transcendentie en sterk negatief gerelateerd is aan de dimensie Letterlijk vs. Symbolisch. Met andere woorden: wanneer de effecten van het al dan niet gelovig zijn gescheiden worden van de effecten van de manier waarop met geloof wordt omgesprongen, dan blijkt duidelijk dat gelovig zijn op zich niet leidt tot racisme. De manier waarop mensen met geloof omspringen daarentegen zegt vrij veel over de mate waarin men geneigd is er racistische denkbeelden op na te houden. Deze resultaten suggereren dat het antwoord op de vraag of gelovigen meer geneigd zijn er racistische denkbeelden op na te houden nee is.

Religie en Empathie

In het derde deel van <u>The tale of the black sheep</u> wordt geprobeerd een antwoord te verschaffen op de vraag of gelovigen meer geneigd zijn mensen in nood te helpen. Hierbij wordt de nieuwe gebruikswijze van de Post-Kritisch Geloof schaal gehanteerd, en wordt er gefocust op het concept empathie. Empathie wordt immers als fundamenteel aanzien voor altruïsme en hulpvaardig gedrag. De resultaten van dit onderzoek tonen aan dat empathie positief gerelateerd is aan de dimensie Letterlijk vs. Symbolisch en ongerelateerd is aan de dimensie Exclusie vs. Inclusie van Transcendentie. Met andere woorden: wanneer de effecten van het al dan niet gelovig zijn gescheiden worden van de effecten van de manier waarop met geloof wordt omgesprongen, blijkt duidelijk dat gelovig zijn op zich ongerelateerd is aan empathie. De manier waarop mensen met geloof omspringen daarentegen zegt vrij veel over de mate waarin iemand geneigd is empathische gevoelens gewaar te worden. Deze resultaten suggereren dat het antwoord op de vraag of gelovigen meer geneigd zijn om mensen in nood te helpen nee is.

Religie en Conservatisme

In het vierde deel van <u>The tale of the black sheep</u> wordt geprobeerd een antwoord te verschaffen op de vraag of gelovigen conservatiever zijn. Hierbij wordt de nieuwe gebruikswijze van de Post-Kritisch Geloof schaal gehanteerd, alsook een multidimensionele kijk op conservatisme die een onderscheid maakt tussen cultureel en economisch conservatisme. Dit onderscheid neemt een centrale plaats in in het werk van prominente onderzoekers en theoretici die zich met conservatisme hebben beziggehouden. Cultureel conservatisme impliceert een voorkeur voor traditionele waarden en normen, en dit in tegenstelling tot het kiezen voor de vrijheid om je leven te leiden volgens zelf verworven inzichten. Economisch conservatisme impliceert een voorkeur voor kapitalisme, privé-initiatieven en ongelimiteerde competitie tussen individuen, en dit in tegenstelling tot het geven van de voorkeur aan economische gelijkheid, vakbonden en overheidsinterventies in de economische sfeer. De dimensie Exclusie vs. Inclusie

van Transcendentie werd verwacht positief samen te hangen met cultureel conservatisme en ongerelateerd te zijn aan economisch conservatisme. De dimensie Letterlijk vs. Symbolisch werd verwacht negatief samen te hangen met cultureel conservatisme en ongerelateerd te zijn aan economisch conservatisme. De resultaten bevestigen deze hypothesen en suggereren dat het antwoord op de vraag of gelovigen conservatiever zijn nee is wanneer het gaat om economisch conservatisme maar ja wanneer het gaan om cultureel conservatisme.

Do sheep need a leader?

In het tweede hoofdstuk van Separating the Sheep from the Goats wordt de relatie tussen religiositeit en de persoonlijkheidstrek autoritarisme belicht. Autoritarisme werd gekozen omdat dit geacht wordt een uitermate belangrijke vooroordeelsdispositie te constitueren (zie McFarland, 2001). De drie papers die samen dit hoofdstuk vormen, vertrekken evenwel vanuit een ietwat andere optiek dan de andere papers die in dit doctoraat verzameld zijn. De eerste twee papers spitsen voornamelijk toe op de differentiële relaties tussen autoritaire submissie (ofte right-wing autoritarianism) en autoritaire dominantie (ofte sociale dominantie). Religiositeit is hierbij slechts één van de variabelen die in deze papers werden opgenomen. De derde paper spitst dan weer toe op de differentiële relaties tussen rechts autoritarisme (ofte right-wing autoritarianism) en links autoritarisme (ofte left-wing autoritarianism). En hoewel de Post-Kritisch Geloof schaal opgenomen werd in de studie die in deze paper gerapporteerd werd, werd hier niets over gerapporteerd. Daarom werd er een kleine appendix aan deze paper toegevoegd waarin de relatie tussen religiositeit en links autoritarisme wordt bekeken.

Religie en Autoritarisme 1

In het eerste deel van Do sheep need a leader? wordt geprobeerd een aantal variabelen te identificeren die differentieel gerelateerd zijn aan right-wing authoritarianism (RWA) en de sociale dominantie oriëntatie (SDO). De afhankelijke variabelen die in deze studie werden opgenomen, zijn racisme, waardenoriëntaties, religiositeit, cultureel en economisch conservatisme, morele competentie, leeftijd en opleidingsniveau. RWA en SDO bleken sterk positief gerelateerd, zowel aan elkaar als aan racisme, maar desondanks bevestigden de resultaten het idee dat het hier om twee verschillende vooroordeelsdisposities gaat. Wanneer RWA uitgezuiverd wordt voor SDO, dan blijkt RWA negatief geassocieerd te zijn met opleidingsniveau, morele competentie, Relativisme en de waardenoriëntaties hedonisme, stimulatie, en zelfbeschikking, en positief met leeftijd, cultureel conservatisme, Orthodoxie en de waardenoriëntaties traditie, conformiteit en veiligheid. Wanneer SDO daarentegen uitgezuiverd wordt voor RWA, dan blijkt SDO negatief geassocieerd te zijn met leeftijd, Tweede Naïviteit en de waardenoriëntaties universalisme, goedaardigheid en traditie, en positief met economisch conservatisme, Externe Kritiek en de waardenoriëntaties macht, prestatie, hedonisme en stimulatie.

Vooral belangrijk in het licht van dit doctoraat is dat de resultaten van deze studie, die de originele ge-bruikswijze van de Post-Kritisch Geloof schaal hanteert, erop wijzen dat, waar RWA positief gerelateerd is aan Orthodoxie en negatief aan Relativisme, SDO positief gerelateerd is aan Externe Kritiek en nega-tief aan Tweede Naïviteit. Deze resultaten suggereren dat, hoewel beide persoonlijkheidskarakteristie-ken gekenmerkt worden door een letterlijke benadering van religie, RWA geassocieerd is met Inclusie van Transcendentie en SDO niet. Dit is in overeenstemming met Altemeyer (1998) zijn stelling dat religi-ositeit typerend is voor RWA maar niet voor SDO, alsook met de stelling van Van Hiel en Mervielde (in press) dat de CVP (ondertussen omgedoopt tot CD&V) voor mensen die hoog scoren op RWA een vol-waardig alternatief biedt voor het eerder a-religieuze Vlaams Blok.

Religie en Autoritarisme 2

In het tweede deel van Do sheep need a leader? wordt onderzocht of er cross-culturele verschillen zijn in de relatie tussen RWA en SDO en of er in deze relatie ook intra-culturele verschillen zijn, en als zulke verschillen optreden, of de differentiële relaties met religiositeit, waardenoriëntaties en ideologische atti-tudes die in de vorige studie werden gevonden (zie Religie en Autoritarisme 1) stabiel blijven ondanks deze verschillen. De resultaten wijzen zowel op het bestaan van cross-culturele verschillen als intra-culturele verschillen in de relatie tussen RWA en SDO. De cross-culturele verschillen kunnen toege-schreven worden aan verschillen in socio-politieke context. De intra-culturele verschillen kunnen dan weer toegeschreven worden aan verschillen in politieke betrokkenheid. En hoewel de externe relaties met de verschillende onafhankelijke variabelen relatief stabiel blijken te zijn, blijken er toch kleine ver-schillen op te treden. Deze kleine verschillen kunnen echter eveneens verklaard worden in termen van verschillen in hetzij socio-politieke context hetzij politieke betrokkenheid.

Vooral belangrijk in het licht van dit doctoraat is dat deze resultaten van deze studie, die de nieuwe ge-bruikswijze van de Post-Kritisch Geloof schaal hanteert, erop wijzen dat de dimensie Letterlijk vs. Sym-bolisch negatief samenhangt met zowel SDO en RWA. De dimensie Exclusie vs. Inclusie van Trans-cendentie daarentegen blijkt positief gerelateerd te zijn aan RWA maar niet aan SDO. Deze resultaten bevestigen de resultaten van de vorige studie (zie Religie en Autoritarisme 1): hoewel beide persoon-lijkheidskarakteristieken gekenmerkt worden door een letterlijke benadering van religie, wordt RWA ge-kenmerkt door Inclusie van Transcendentie. Voor SDO geldt dit evenwel niet.

Links en Rechts Autoritarisme

In het derde deel van Do sheep need a leader? wordt het voorkomen van left-wing authoritarianism (LWA) en de relaties hiervan met RWA, ideologie-vrij autoritarisme en verscheidene ideologische varia-belen (racisme, cultureel conservatisme en economisch conservatisme) nagegaan. De resultaten wijzen op het voorkomen van autoritarisme bij aanhangers van extreem-linkse partijen. De LWA-schaal blijkt

bovendien niet alleen bruikbaar om een onderscheid te maken tussen mensen die er een extreem-linkse ideologie op na houden (in casu anarchisten en communisten) en mensen die dat niet doen, maar ook om een onderscheid te maken tussen mensen die er een autoritaire extreem-linkse ideologie op na houden (in casu communisten) en mensen die er een anti-autoritaire extreem-linkse ideologie op na houden (in casu anarchisten). Tegelijkertijd suggereren de resultaten van dit onderzoek echter dat er een hemelsbreed verschil is tussen links autoritarisme en wat er doorgaans onder de term autoritarisme verstaan wordt. Waar autoritaire mensen die er een extreem-linkse ideologie op na houden enkel bereid zijn zich te onderwerpen aan leiders die er eveneens een extreem-linkse ideologie op na houden, doet het er voor autoritaire mensen die er een rechtse ideologie op na houden niet zozeer toe welke ideologie een leider er op na houdt, zolang die maar een poging doet om de eigen cultuur te vrijwaren van de invloed van buitenstaanders (in casu immigranten) en oproerkraaiers en onruststokers (in casu mensen met afwijkende mening of een afwijkende levensstijl).

Vooral belangrijk in het licht van dit doctoraat zijn de resultaten die in de appendix beschreven worden. Deze resultaten handelen over de relatie tussen religiositeit enerzijds en LWA en ideologie-vrij autoritarisme anderzijds, waarbij de nieuwe gebruikswijze van de Post-Kritisch Geloof schaal gehanteerd wordt, en tonen aan dat de dimensie Letterlijk vs. Symbolisch negatief gerelateerd is aan zowel LWA als ideologie-vrij autoritarisme. De dimensie Exclusie vs. Inclusie van Transcendentie daarentegen blijkt positief gerelateerd te zijn aan ideologie-vrij autoritarisme maar niet aan LWA. Het lijkt er dus op dat, waar de relatie tussen autoritarisme en de dimensie Exclusie vs. Inclusie van Transcendentie sterk beïnvloed wordt door de operationalisatie van het concept autoritarisme, de relatie tussen autoritarisme en de dimensie Letterlijk vs. Symbolisch vrij stabiel is, en dit ongeacht hoe het autoritarisme concreet geoperationaliseerd wordt. Dit lijkt erop te wijzen dat, waar de relatie tussen RWA en de dimensie Exclusie vs. Inclusie van Transcendentie toe te schrijven is aan de deelcomponenten van RWA die gerelateerd zijn aan conventionalisme (cf. de resultaten van de studies inzake de relatie tussen religiositeit en waardenoriëntaties die later in dit doctoraat aan bod komen), de relatie tussen RWA en de dimensie Letterlijk vs. Symbolisch voornamelijk te wijten is aan de cognitieve rigiditeit die zowel met RWA als met een letterlijke benadering van religie gepaard gaat (cf. de resultaten van de studies inzake de relatie tussen religiositeit en cognitief functioneren die later in dit doctoraat aan bod komen).

The color of the grass

In het derde hoofdstuk van <u>Separating the Sheep from the Goats</u> wordt de relatie tussen religiositeit en waardenoriëntaties belicht. Er werd besloten hierop te focussen omdat de papers die gepresenteerd werden in <u>Do sheep need a leader?</u> suggereerden dat de relatie tussen religiositeit en autoritarisme ten dele te wijten zou zijn aan hun respectievelijke relatie met deze waardenoriëntaties. Deze papers heb-

ben er in het bijzonder de aandacht op gevestigd dat de dimensie Exclusie vs. Inclusie van Transcendentie wel eens sterk positief gerelateerd zou kunnen zijn aan het belangrijk achten van waarden die op conventionaliteit gericht zijn. Of dit inderdaad het geval is, is de vraag die de eerste twee papers van dit hoofdstuk proberen te beantwoorden. De derde en laatste paper uit dit hoofdstuk richt zich dan weer op de vraag of religiositeitsmaten een extra voorspellende kracht hebben naar sociale en politieke attitudes toe bovenop de voorspellende waarde die aanwezig is in metingen van waardenoriëntaties.

Religie en Waarden 1

In het eerste deel van The color of the grass wordt de relatie tussen religiositeit en waardenoriëntaties onderzocht aan de hand van de originele gebruikswijze van de Post-Kritisch Geloof schaal. Op basis van Schwartz' (1992) waardentheorie vonden Fontaine, Luyten en Corveleyn (2000) dat de waardenpatronen die geassocieerd zijn met de religieuze attitudes uit de Post-Kritisch Geloof schaal grotendeels te reduceren vallen tot een combinatie van twee theoretisch betekenisvolle waardenpatronen: een "transcendentie / zorg"-patroon ofte een Transcendence / mutual Care (TC) pattern en een "sociale orde / onzekerheidsreductie"-patroon ofte een Social order / Uncertainty avoidance (SU) pattern. In deze paper wordt nagegaan of deze bevindingen te repliceren vallen met een recentere versie van de Post-Kritisch Geloof schaal. De resultaten tonen aan dat het waardenpatroon dat geassocieerd is met Orthodoxie best begrepen kan worden in termen van het SU patroon. Dit bevestigt de hypothese dat een orthodoxe benadering van religie voornamelijk gekenmerkt wordt door het streven naar zekerheid en een veilige sociale omgeving. Het TC-patroon was hierbij slechts van marginaal belang. De correlaties tussen Orthodoxie en de waardenoriëntaties suggereren evenwel dat een puur zorg-patroon van weinig tel is voor Orthodoxie, en dit in tegenstelling tot een puur transcendentie-patroon.

De resultaten tonen ook aan dat het waardenpatroon dat geassocieerd is met Externe Kritiek best begrepen kan worden in termen van het omgekeerd TC-patroon. De correlaties tussen Externe Kritiek en de waardenoriëntaties suggereren evenwel dat een puur zorg-patroon van weinig tel is voor Externe Kritiek, en dit in tegenstelling tot een puur anti-transcendentie-patroon. De bijdrage van het SU-patroon was hierbij slechts van marginaal belang. De afwezigheid van een betekenisvolle relatie tussen het SU-patroon en het waardenpatroon dat geassocieerd is met Externe Kritiek zou wel eens kunnen te wijten zijn aan het feit dat mensen die hoog scoren op Externe Kritiek een vrij heterogene groep vormen die enkel het verwerpen van transcendentie en het waardenpatroon dat hiermee gepaard gaat gemeenschappelijk hebben. De resultaten tonen voorts ook aan dat het waardenpatroon dat geassocieerd is met Relativisme best begrepen kan worden in termen van het omgekeerd TC-patroon. De correlaties tussen Relativisme en de waardenoriëntaties suggereren evenwel dat een puur transcendentie-patroon van weinig tel is voor Relativisme, en dit in tegenstelling tot een puur zorg-patroon. Het omgekeerde

SU-patroon draagt ook bij tot het waardenpatroon dat geassocieerd is met Relativisme, maar deze bij-drage is minder uitgesproken. De resultaten tonen tenslotte ook aan dat het waardenpatroon dat geas-socieerd is met Tweede Naïviteit best begrepen kan worden in termen van het TC-patroon. De correla-ties tussen Tweede Naïviteit en de waardenoriëntaties suggereren evenwel dat een puur zorg-patroon van weinig tel is voor Tweede Naïviteit, en dit in tegenstelling tot een puur transcendentie-patroon. Het SU-patroon draagt ook bij tot het waardenpatroon dat geassocieerd is met Tweede Naïviteit, maar deze bijdrage is van relatief weinig belang. Wel is het zo dat de correlaties tussen Tweede Naïviteit en de waardenoriëntaties erop wijzen dat Tweede Naïviteit wel degelijk tot op zekere hoogte gekenmerkt wordt door een streven naar zekerheid en voorspelbaarheid. Deze resultaten zijn grotendeels in over-eenstemming met de resultaten van Fontaine et al. (2000), maar suggereren dat het misschien beter is om het "transcendentie / zorg"-patroon op te splitsen in een puur transcendentie-patroon en een puur zorg-patroon om te komen tot een beter begrip van de verschillende types van omgaan met religie.

Religie en Waarden 2

In het tweede deel van <u>The color of the grass</u> wordt de relatie tussen religiositeit en waardenoriëntaties herbekeken aan de hand van de nieuwe gebruikswijze van de Post-Kritisch Geloof schaal. Op basis van zowel een theologische als een socio-psychologische analyse werden de doelstellingen van de Rooms-Katholieke godsdienst geïdentificeerd en vertaald in termen van Schwartz' (1992) waardenoriëntaties. Afhankelijk van het theoretisch perspectief (theologisch-verticaal, theologisch-horizontaal of socio-psychologisch) kan verwacht worden dat de dimensie Exclusie vs. Inclusie van Transcendentie gerela-teerd is aan één van de drie grote conflicten binnen het waardendomein: Hedonisme vs. Traditie, Zelf-verbetering vs. Zelf-transcendentie en Openheid vs. Behoudsgezindheid. Aangezien het conflict tussen Hedonisme en Traditie een aantal kenmerken deelt met zowel het conflict tussen Zelfverbetering en Zelf-transcendentie als het conflict tussen Openheid en Behoudsgezindheid, werd dit conflict verwacht best geschikt te zijn om de waardenoriëntaties die relateren aan verschillen in Exclusie vs. Inclusie van Transcendentie te beschrijven. Aangezien de Rooms-Katholieke theologie echter een brede waaier van letterlijke en symbolische interpretaties van de boodschap van Christus omvat, kan er vanuit dit per-spectief echter weinig gezegd worden over de dimensie Letterlijk vs. Symbolisch. Het socio-psycho-logisch perspectief daarentegen kan gemakkelijk met deze dimensie in verband gebracht worden. Een letterlijke benadering laat slechts één interpretatie toe en verschaft hierdoor zekerheid. Een symbolische benadering daarentegen laat meerdere interpretaties toe en impliceert niet alleen tolerantie voor ambi-guïteit maar ook de mogelijkheid dat sommige interpretaties kritisch zullen zijn naar de bestaande socia-le orde toe. Vanuit dit perspectief kan dan ook verwacht worden dat de dimensie Letterlijk vs. Symbo-lisch duidelijk negatief zal relateren aan het conflict tussen Openheid en Behoudsgezindheid.

De resultaten tonen aan het waardenpatroon dat geassocieerd is met de dimensie Exclusie vs. Inclusie van Transcendentie sterk overeenkomt met het waardenpatroon waarin het conflict tussen Hedonisme en Traditie centraal staat en dat verwacht werd vanuit een theologisch-verticale analyse. In mindere mate vertoonde het waardenpatroon dat geassocieerd is met de dimensie Exclusie vs. Inclusie van Transcendentie eveneens overeenkomsten met het waardenpatroon waarin het conflict tussen Openheid en Behoudsgezindheid centraal staat en dat verwacht werd vanuit een socio-psychologisch analyse. De correlaties tussen de waardenoriëntaties en de dimensie Exclusie vs. Inclusie van Transcendentie maken eveneens duidelijk dat het voornamelijk het conflict tussen Hedonisme en Traditie is dat het centrale intra-persoonlijke conflict vormt dat gerelateerd is aan het al dan niet gelovig zijn op zich. Het waardenpatroon dat geassocieerd is met de dimensie Exclusie vs. Inclusie van Transcendentie vertoonde vrijwel geen overeenkomsten met het waardenpatroon waarin het conflict tussen Zelfverbetering en Zelf-transcendentie centraal staat. Hieruit kan afgeleid worden dat het al of niet gelovig zijn blijkbaar geen invloed heeft op de mate waarin iemand bekommerd is om het welzijn van iemand anders. Wat de dimensie Letterlijk vs. Symbolisch betreft, tonen de resultaten aan dat het waardenpatroon dat geassocieerd is met deze dimensie zo goed als geen overeenkomst vertoont met het waardenpatroon waarin het conflict tussen Openheid en Behoudsgezindheid centraal staat. Dit gaat in tegen wat op basis van de socio-psychologische analyse verwacht werd. Blijkbaar is deze analyse dan ook niet geschikt om het waardenpatroon dat geassocieerd is met de dimensie Letterlijk vs. Symbolisch te begrijpen. Het waardenpatroon dat wordt gekenmerkt door het conflict tussen Zelfverbetering en Zelf-transcendentie blijkt daarentegen wel heel goed aan te sluiten bij het waardenpatroon dat geassocieerd is met de dimensie Letterlijk vs. Symbolisch en beschrijft dit waardenpatroon zelfs quasi perfect. Er wordt geargumenteerd dat de relatie tussen de waardenoriëntaties en de dimensie Letterlijk vs. Symbolisch best kan gevat worden in termen van verschillen in de capaciteit tot perspectiefname.

Religie, Waarden en Ideologie

In het derde deel van The color of the grass wordt aan de hand van de originele gebruikswijze van de Post-Kritisch Geloof schaal gepoogd een antwoord te verschaffen op de vraag of religiositeitsmaten een extra voorspellende kracht hebben naar sociale en politieke attitudes zoals cultureel conservatisme, economisch conservatisme, nationalisme en racisme toe bovenop de voorspellende waarde die aanwezig is in metingen van waardenoriëntaties. Het is vaak beargumenteerd dat de invloed van religie op sociale en politieke attitudes indirect verloopt. Het geloof dat mensen aanhangen zou hun waardenkader beïnvloeden, en dit waardenkader zou vervolgens op zijn beurt dienen als leidraad bij de vorming van politieke attitudes. De resultaten wijzen echter uit dat, hoewel waardenoriëntaties een sterker predictief vermogen hebben naar politieke attitudes toe, metingen van religiositeit toch nog een extra voorspellen-

de kracht hebben. Deze resultaten suggereren dat de manier waarop met religie wordt omgegaan, zelfs los van de waarden die mensen erop na houden, toch nog een belangrijke factor is in de vorming van politieke attitudes. Vervolgens werden de waardenoriëntaties en religieuze attitudes geïdentificeerd die het belangrijkst zijn naar het voorspellen van politieke attitudes toe. De resultaten tonen aan dat elk van de politieke attitudes die in deze studie zijn opgenomen voorspeld worden door een min of meer uniek patroon van waardenoriëntaties en religieuze attitudes. Voornamelijk belangrijk naar dit doctoraat toe is dat de resultaten suggereren (1) dat economisch conservatisme negatief gerelateerd is aan religieuze attitudes die een reflectie over religie inhouden, (2) dat zowel cultureel conservatisme als nationalisme geassocieerd zijn met de neiging zich te conformeren aan de normen van de samenleving en het religieus kader dat deze naar voren schuift, en (3) dat racisme geassocieerd is met de bereidheid zich te conformeren aan de normen van de samenleving, met een orthodox instemmen met het religieus kader dat de samenleving naar voren schuift, en met het niet bekommerd zijn om anderen.

The fence around the meadow

In het vierde hoofdstuk van Separating the Sheep from the Goats wordt de relatie tussen religiositeit en cognitief functioneren belicht. Er werd besloten hierop te focussen omdat de papers die gepresenteerd werden in Do sheep need a leader? suggereerden dat de relatie tussen religiositeit en autoritarisme ten dele te wijten zou zijn aan hun respectievelijke relatie met cognitief functioneren. Deze papers hebben er in het bijzonder de aandacht op gevestigd dat de dimensie Letterlijk vs. Symbolisch wel eens sterk gerelateerd zou kunnen zijn aan het zaken zoals cognitieve rigiditeit en gemotiveerde cognities zoals morele competentie, behoefte aan cognitieve afsluiting, intolerantie voor ambiguïteit, geslotenheid van geest, openheid en identiteitsstijlen. Of dit inderdaad het geval is, is de vraag die de laatste drie papers van dit hoofdstuk proberen te beantwoorden. De eerste paper uit dit hoofdstuk behandelt eveneens de relatie tussen religiositeit en cognitief functioneren, maar deze paper is voornamelijk belangrijk in de zin dat de resultaten die hierin gepresenteerd worden ons jaren terug overtuigden van de noodzaak om de Post-Kritisch Geloof schaal aan te passen (zie The Structure of the Herd).

Religie en Psycho-Epistemologie

In het eerste deel van The fence around the meadow wordt de relatie tussen religiositeit en psycho-epistemologische stijlen onder de loupe genomen aan de hand van de allereerste versie van de Post-Kritisch Geloof schaal die nog enkel een differentiatie tussen Orthodoxie, Externe Kritiek en Historisch Relativisme maakte. De psycho-epistemologische items die gebruikt werden, waren gebaseerd op de drie factoren die Wilkinson en Migotsky (1994) vonden in een poging om een alomvattend meetinstrument te construeren voor de meting van verschillen in psycho-epistemologische stijl (naïef realisme, logisch zoeken en skeptisch subjectivisme). Een factor analyse op deze items laat uitschijnen dat de rela-

ties tussen de gebruikte items voor te stellen zijn aan de hand van drie factoren. Deze kunnen echter juister geïnterpreteerd worden als dualisme, relativisme en verbondenheid (Perry, 1970). De resultaten tonen aan dat dualisme positief correleert met zowel Orthodoxie als Externe Kritiek, en dat zowel relativisme als verbondenheid positief correleren met Historisch Relativisme. Deze resultaten suggereren dat mensen die hoog scoren op Orthodoxie en mensen die hoog scoren op Externe Kritiek een zelfde dualistische denkstijl hanteren, maar dat mensen die een op een orthodoxe manier met geloof omgaan een keuze maken in het voordeel van de kerk, terwijl mensen die op een extern kritische manier met geloof omgaan een keuze maken in het voordeel van de wetenschappelijke kritieken. Op basis van de latere adaptaties aan de Post-Kritisch Geloof schaal (The Structure of the Herd) kan de hypothese gesteld worden dat de correlatie tussen Historisch Relativisme en relativisme allicht te wijten is aan de items die refereren aan Symbolische Disaffirmatie, terwijl de correlatie tussen Historisch Relativisme en verbondenheid allicht te wijten is aan de items die refereren aan Symbolische Affirmatie. Helaas kon deze hypothese niet getest worden omdat we er geen flauw idee van wat er met de data van dit onderzoek gebeurd is.

Religie en Morele Competentie

In het tweede deel van The fence around the meadow wordt de relatie tussen religiositeit en morele competentie onderzocht aan de hand van de nieuwe gebruikswijze van de Post-Kritisch Geloof schaal. Aangezien Kohlberg (1981) argumenteerde dat religiositeit en moreel redeneren inherent ongerelateerd zijn omdat ze betrekking hebben op verschillende domeinen van het leven, werd de dimensie Exclusie vs. Inclusie van Transcendentie geacht ongerelateerd te zijn aan zowel morele attitudes als de morele competentie. Bovendien argumenteerde Wahrman (1981) dat de schijnbare relatie tussen religiositeit en moraliteit waarschijnlijk te verklaren valt in termen van dogmatisme. Op basis hiervan werd verwacht dat de dimensie Letterlijk vs. Symbolisch, die zoals de andere delen van The fence around the meadow laten uitschijnen voornamelijk een cognitieve dimensie is, negatief zou relateren aan een voorkeur voor lagere morele fasen en positief aan zowel een voorkeur voor hogere morele fasen als morele competentie. De resultaten wijzen uit dat de dimensie Letterlijk vs. Symbolisch inderdaad negatief relateert aan een voorkeur voor lagere morele fasen en positief aan zowel een voorkeur voor hogere morele fasen als morele competentie. Daarenboven wijzen de resultaten er op het eerste zicht op dat de dimensie Exclusie vs. Inclusie van Transcendentie ongerelateerd is aan zowel morele attitudes als de morele competentie. Wanneer de resultaten echter van naderbij worden bekeken, blijkt evenwel dat de subjecten met een duidelijke religieuze affiliatie lage morele competentie scores ten toon spreiden. De resultaten tonen aan dat deze lage scores niet kunnen worden verklaard op theologische gronden en suggereren dat de Rooms-Katholieke Kerk niet alleen mensen aantrekt die hoog religieus zijn, maar vooral mensen die hoog religieus zijn op een letterlijke manier.

Religie en Behoefte aan Cognitieve Afsluiting

In het derde deel van <u>The fence around the meadow</u> wordt de relatie tussen religiositeit en de behoefte aan cognitieve afsluiting en zijn verschillende facetten onderzocht met behulp van de nieuwe gebruikswijze van de Post-Kritisch Geloof schaal. Aangezien mensen volgens Wulff (1991, 1997) zowel op dogmatische wijze religieus als a-religieus kunnen zijn, werd er verwacht dat de dimensie Letterlijk vs. Symbolisch eerder dan de dimensie Exclusie vs. Inclusie van Transcendentie gerelateerd zou zijn aan de behoefte aan cognitieve afsluiting. Maar hoewel de behoefte aan cognitieve afsluiting verwacht werd enkel en alleen gerelateerd te zijn aan de dimensie Letterlijk vs. Symbolisch wijzen de resultaten uit dat er ook een significante relatie bestaat tussen behoefte aan cognitieve afsluiting en de dimensie Exclusie vs. Inclusie van Transcendentie. De resultaten wijzen echter ook uit dat de relatie tussen behoefte aan cognitieve afsluiting en de dimensie Exclusie vs. Inclusie van Transcendentie te wijten is aan de relatie tussen Exclusie vs. Inclusie van Transcendentie en de facetten orde en structuur en voorspelbaarheid, terwijl de relatie tussen behoefte aan cognitieve afsluiting en de dimensie Letterlijk vs. Symbolisch te wijten is aan de relatie tussen Letterlijk vs. Symbolisch en de facetten intolerantie voor ambiguïteit en geslotenheid van geest. En hoewel deze resultaten suggereren dat het de mensen zijn die op een letterlijke manier met religie omgaan die niet met alternatieve opinies om kunnen, suggereren deze resultaten toch ook een zeker instrumentaliteit van religie. Vanuit deze optiek zou religie door het aanbieden van een globale wereldvisie en een moreel programma de complexiteit van het leven reduceren en zodoende een psychologisch veilige omgeving creëren.

Religie en Persoonlijkheid

In het vierde deel van <u>The fence around the meadow</u> wordt de relatie tussen religiositeit en het vijf-factoren-model van de persoonlijkheid onderzocht met behulp van de nieuwe gebruikswijze van de Post-Kritisch Geloof schaal. Enerzijds werd hierbij, op basis van eerder onderzoek naar de relatie tussen religiositeit en persoonlijkheid, een positieve relatie verwacht tussen de dimensie Exclusie vs. Inclusie van Transcendentie en de persoonlijkheidsdimensies aangenaamheid en gewetensvolheid. Anderzijds werd hierbij, op basis van de theorievorming van Wulff (1991, 1997) en McCrae (1999), een positieve relatie verwacht tussen de dimensie Letterlijk vs. Symbolisch en de persoonlijkheidsdimensie openheid. Maar hoewel de resultaten de relatie tussen de dimensie Letterlijk vs. Symbolisch en openheid bevestigen, is dat niet het geval voor de vermeende relatie tussen de dimensie Exclusie vs. Inclusie van Transcendentie en aangenaamheid en gewetensvolheid. In tegenstelling tot wat verwacht werd, bleek aangenaamheid wel positief samen te hangen met de dimensie Letterlijk vs. Symbolisch. Deze resultaten suggereren dat er hoegenaamd geen verband is tussen het al of niet gelovig zijn en de persoonlijkheidsdimensies uit het vijf-factoren-model. Deze resultaten suggereren echter ook dat dit niet

wegneemt dat openheid een belangrijke variabele is om religieuze fenomenen te kunnen interpreteren, aangezien deze persoonlijkheidsdimensie samenhangt met de manier waarop met religie wordt omgesprongen. Hetzelfde geldt, in iets mindere mate, ook voor aangenaamheid.

Om meer inzicht te krijgen in de relatie tussen openheid en de dimensie Letterlijk vs. Symbolisch werd vervolgens onderzocht of deze relatie verklaard kan worden in termen van verschillen in de manier waarop mensen informatie verwerken die relevant is naar hun identiteit toe. In de hedendaagse persoonlijkheidspsychologie wordt ervan uit gegaan dat persoonlijkheidstrekken, zoals diegene die in het vijf-factoren-model aan bod komen, niet zomaar beschrijvingen van statische individuele verschillen zijn, maar eerder moeten opgevat worden als dynamische en organiserende constructen die de manier beinvloeden waarop mensen zich gedragen, waarop mensen informatie verwerken en waarop mensen zich aanpassen aan hun sociale omgeving. En gegeven dat het ontwikkelen van een eigen identiteit en een eigen stijl om informatie te verwerken van groot belang is tijdens de adolescentie, kan verwacht worden dat de relatie tussen openheid en de religiositeitsdimensies gemedieerd zal worden door de identiteitsstijlen die laat-adolescenten gebruiken. Bovendien werd verwacht dat de normatieve identiteitsstijl op directe wijze een gedeelte van de variantie in de dimensie Exclusie vs. Inclusie van Transcendentie zou verklaren. Het voorgestelde geïntegreerde model van relaties tussen openheid, de identiteitsstijlen en de religiositeitsdimensies, waarin aangenomen wordt dat de relatie tussen openheid en de dimensie Letterlijk vs. Symbolisch volledig gemedieerd wordt door de identiteitsstijlen en waarin wordt aangenomen dat de normatieve identiteitsstijl een direct effect heeft op de dimensie Exclusie vs. Inclusie van Transcendentie, blijkt goed aan te sluiten bij de data. Uit het feit dat de relatie tussen openheid en de dimensie Letterlijk vs. Symbolisch niet langer significant was nadat de identiteitsstijlen als mediator-variabelen werden opgenomen, kan besloten worden dat de relatie tussen openheid en de dimensie Letterlijk vs. Symbolisch volledig gemedieerd wordt door de identiteitsstijlen. Bovendien wijst een uitbreiding van ons model erop dat, eens openheid in rekening is gebracht, aangenaamheid niet langer een significante predictor van de verschillen in de dimensie Letterlijk vs. Symbolisch is. Hieruit kan geconcludeerd worden dat openheid de enige echt belangrijk persoonlijkheidsfactor is naar de verklaring van individuele verschillen in religiositeit toe.

Appendix

In het vijfde en laatste hoofdstuk van <u>Separating the Sheep from the Goats</u> wordt gefocust op de vraag of er een verband is tussen cognitief functioneren en sociale en politieke attitudes en, indien dit zo is, of de effecten van cognitief functioneren op sociale en politieke attitudes gemedieerd worden door autoritarisme. Op deze manier vormt dit hoofdstuk een brug tussen het eerste, het tweede en het vierde hoofdstuk van <u>Separating the Sheep from the Goats</u>.

<u>Cognitie, Autoritarisme en Ideologie</u>

De huidige studie is erop gericht de resultaten van Chirumbolo (2002), die argumenteerde dat de effecten van behoefte aan cognitieve afsluiting op politieke partijvoorkeur gemedieerd worden door autoritarisme, te repliceren en uit te breiden. Hiertoe wordt onderzocht of gemotiveerde cognitie (een noemer waaronder onder andere de behoefte aan cognitieve afsluiting valt) relateert aan conservatisme en racisme, of gemotiveerde cognitie (differentieel) relateert aan autoritaire submissie (RWA, zie eerder) en autoritaire dominantie (SDO, zie eerder) en, indien dit het geval is, of de effecten van gemotiveerde cognitie op conservatisme en racisme gemedieerd worden door RWA en SDO. Om de generalizeerbaarheid van onze bevindingen te vergroten, wordt hierbij een waaier van indicatoren van gemotiveerde cognitie (in case behoefte aan cognitieve afsluiting, behoefte aan cognitie en dogmatisme), conservatisme (in casu algemeen conservatisme, cultureel conservatisme en economisch conservatisme) en racisme (in casu algemeen racisme, klassiek racisme en symbolisch racisme) gebruikt. De resultaten repliceren de bevindingen van Chirumbolo (2002) maar maken duidelijk dat de mediërende rol van autoritarisme niet beperkt blijft tot behoefte aan cognitieve afsluiting en RWA maar uitstrekt tot gemotiveerde cognitie en SDO. De resultaten tonen meer bepaald aan dat de effecten van dogmatisme op conservatisme en racisme grotendeels gemedieerd worden door SDO in plaats van door RWA. Deze resultaten suggereren dat het conservatisme en racisme gebaseerd op RWA en het conservatisme en racisme gebaseerd op SDO elk een andere cognitieve basis hebben. Blijkbaar vormt de behoefte aan cognitieve afsluiting de cognitieve basis voor het conservatisme en racisme gebaseerd op RWA, terwijl dogmatisme de cognitieve basis voor het conservatisme en racisme gebaseerd op SDO vormt. Dit suggereert dat het blijkbaar zo is dat mensen die hoog scoren op RWA weinig moeite steken in het verwerken van informatie (wat leidt tot overgesimplifieerde oordelen), terwijl mensen die hoog scoren op SDO niet per se minder nadenken maar er eerder voor kiezen te focussen op pro-attitudinale informatie en contra-attitudinale informatie negeren, discrediteren of herinterpreteren.

Conclusie

In deze conclusie-sectie zal allereerst een synthese gemaakt worden van de resultaten van de verschillende in dit doctoraat opgenomen studies. Deze synthese zou moeten toelaten de grote lijnen die hieruit naar voren komen duidelijker te onderscheiden. Vervolgens zal worden aangegeven of, en zo ja, hoe en eventueel zelfs waarom religie hieruit blijkt in relatie tot intolerantie te staan. Op basis hiervan zullen tenslotte een aantal theoretische en maatschappelijke implicaties naar voren geschoven worden, alsook een aantal mogelijke manieren om intolerantie te genezen en / of te voorkomen.

De Post-Kritisch Geloof Schaal

Volgens Wulff (1991, 1997) zijn de mogelijke manieren om met religie om te gaan te lokaliseren in een twee-dimensionele ruimte langs de bipolaire dimensies Exclusie vs. Inclusie van Transcendentie en Letterlijk vs. Symbolisch. In het eerste deel van dit doctoraat, The Structure of the Herd, werd aangetoond dat de Post-Kritisch Geloof schaal maten levert voor bestaande interindividuele verschillen in de dimensies Exclusie vs. Inclusie van Transcendentie en Letterlijk vs. Symbolisch. Maten die zijn uitgezuiverd voor de storende invloed van individuele verschillen in responsstijl (in case in de mate waarin mensen met de items uit de Post-Kritisch Geloof schaal instemmen los van hun inhoudelijke betekenis). Op deze manier laat de Post-Kritisch Geloof schaal onderzoekers toe om de pure effecten van al of niet gelovig zijn (Exclusie vs. Inclusie van Transcendentie) te scheiden van de pure effecten van de manier waarop met religie en religieuze inhouden wordt omgesprongen (Letterlijk vs. Symbolisch). Vervolgens werd in het tweede deel van dit doctoraat, Separating the Sheep from the Goats, een poging gedaan om wat meer licht te werpen op de relatie tussen religie en intolerantie. Om dit zo adequaat mogelijk te maken, werd ervoor geopteerd om de focus van dit tweede deel zo breed mogelijk te houden, en niet alleen aandacht te schenken aan de relaties tussen de dimensies Exclusie vs. Inclusie van Transcendentie en Letterlijk vs. Symbolisch en sociale en politieke attitudes (in casu cultureel en economisch conservatisme, empathie en racisme), maar ook aan de relaties tussen de dimensies Exclusie vs. Inclusie van Transcendentie en Letterlijk vs. Symbolisch enerzijds en persoonlijkheidskenmerken (in casu autoritarisme en de vijf factoren van het persoonlijkheidsdomein), waardenoriëntaties en manieren van cognitief functioneren (in casu psycho-epistemologische stijlen, morele competentie, behoefte aan cognitieve afsluiting, openheid en identiteitsstijlen) anderzijds. Wat zijn nu de belangrijkste bevindingen die hieruit naar voren treden? In het vervolg van deze sectie zullen deze bevindingen eerst en vooral nog eens netjes op een rijtje worden gezet, en dit voor de dimensies Exclusie vs. Inclusie van Transcendentie en Letterlijk vs. Symbolisch afzonderlijk. Ten tweede zal geprobeerd worden deze bevindingen terug te koppelen aan de relatie tussen religie en intolerantie. Hierbij zal ook aandacht geschonken worden aan enkele algemene implicaties van deze bevindingen, waarna enkele suggesties naar voren zullen worden geschoven om het probleem van intolerantie aan te pakken.

Exclusie vs. Inclusie van Transcendentie

De dimensie Exclusie vs. Inclusie van Transcendentie blijkt positief te zijn gerelateerd aan andere maten van religiositeit zoals kerkpraktijk, godsgeloof en kerkelijke betrokkenheid (zie Hutsebaut, 2001), sociale en politieke attitudes zoals cultureel conservatisme, persoonlijkheidskenmerken zoals autoritaire submissie, waarden gericht op conventionaleit en bepaalde wijzen van cognitief functioneren zoals het

hebben van een voorkeur voor orde en structuur, het hebben van een voorkeur voor voorspelbaarheid en het erop na houden van een normatieve identiteitsstijl. Deze dimensie was daarentegen ongerelateerd aan sociale en politieke attitudes zoals economisch conservatisme, empathie en racisme, persoonlijkheidskenmerken zoals autoritaire dominantie, aangenaamheid, neuroticisme, extraversie, gewetensvolheid en openheid, waarden gericht op zelf-transcendentie en bepaalde wijzen van cognitief functioneren zoals dualisme, morele competentie, de capaciteit tot perspectiefname, intolerantie van ambiguïteit, geslotenheid van geest, openheid en zowel de informatie-georiënteerde als de verward / vermijdend georiënteerde identiteitsstijl. In grote lijnen kan dan ook gesteld worden dat al of niet geloven in een transcendente realiteit, ofte al dan niet gelovig zijn, in se gerelateerd is aan cultureel conservatisme, autoritaire submissie, conventionele waarden, normativiteit en het hebben van een voorkeur voor orde, structuur en voorspelbaarheid. Dit suggereert dat religieuze mensen hun cultuur en hun tradities wensen te vrijwaren van de dreiging die uitgaat van mensen die er andere opinies en / of een andere levensstijl op na houden. De reden waarom gelovigen willen vastklampen aan hun culturele tradities en afwijkingen hiervan niet lijken te tolereren, lijkt niet gelegen in het feit dat ze de cognitieve capaciteiten ontberen om met dergelijke verschillen om te gaan, en ook niet in het feit dat ze niet over de nodige empathische vaardigheden beschikken om zich in andermans positie in te leven, maar wel aan het feit dat ze er een waardenkader op na houden dat incompatibel is met wat gepercipieerd wordt als ingaand tegen hun geloof en de culturele tradities die hier onlosmakelijk mee verbonden lijken.

Letterlijk vs. Symbolisch

De dimensie Letterlijk vs. Symbolisch blijkt negatief te zijn gerelateerd aan sociale en politieke attitudes zoals cultureel conservatisme en racisme en positief aan andere sociale en politieke attitudes zoals empathie, negatief aan persoonlijkheidskenmerken zoals autoritaire submissie en autoritaire dominantie en positief aan andere persoonlijkheidskenmerken zoals aangenaamheid en openheid, positief aan waarden gericht op zelf-transcendentie, en positief aan bepaalde wijzen van cognitief functioneren zoals morele competentie, de capaciteit tot perspectiefname, openheid en het erop na houden van een informatie-georiënteerde identiteitsstijl en negatief aan bepaalde andere wijzen van cognitief functioneren zoals dualisme, intolerantie voor ambiguïteit, geslotenheid van geest en het erop na houden van een normatieve identiteitsstijl. Deze dimensie was daarentegen ongerelateerd aan politieke attitudes zoals economisch conservatisme, persoonlijkheidskenmerken zoals neuroticisme, extraversie en gewetensvolheid en waarden gericht op conventionaliteit. In grote lijnen kan dan ook gesteld worden dat de manier waarop mensen met religie omgaan een grote impact heeft op hun sociale en politieke attitudes, en dit ongeacht of mensen al dan niet geloven in een transcendente realiteit. Op een letterlijke manier met religie en religieuze inhouden omgaan blijkt hierbij gerelateerd te zijn aan cultureel conservatisme, racisme,

autoritarisme, onaangenaamheid, dualisme, intolerantie voor ambiguïteit, geslotenheid van geest, een normatieve identiteitsstijl en een gebrek aan empathie, perspectiefname, openheid en morele competentie. Dit suggereert dat mensen die op een letterlijke manier met religieuze inhouden omgaan (los van of ze nu al dan niet gelovig zijn) gelimiteerd zijn in hun cognitief functioneren en in hun empathische vaardigheden en, allicht ten gevolge hiervan, intolerant zijn ten aanzien van mensen die er een andere opinie of een andere levensstijl op na houden in het algemeen.

Religie en intolerantie

Hoe kan dit alles teruggekoppeld worden aan de hoofddoelstelling van dit doctoraat? Is religiositeit gerelateerd aan intolerantie? Leidt religie tot intolerantie? De resultaten die in dit doctoraat gepresenteerd werden, tonen overduidelijk aan dat dit niet het geval is. Tenminste wanneer onder intolerantie racisme verstaan wordt. Al dan niet gelovig zijn is immers ongerelateerd aan intolerantie naar mensen van een ander ras of een andere cultuur toe. Dit is echter niet het volledige plaatje. De resultaten suggereren immers dat religieuze mensen hun cultuur en hun tradities wensen te beschermen tegen de dreiging die uitgaat van mensen die er andere opinies en een andere levensstijl op na houden. En hoewel deze wens kleurenblind lijkt te zijn, kan hieruit toch besloten worden dat religieuze mensen inderdaad als eerder intoleranter kunnen worden bestempeld en als niet bereid toe te laten dat andere mensen hun leven baseren op andere waarden. Niet omdat religieuze mensen de nodige cognitieve of empathische capaciteiten ontberen om met dergelijke verschillen om te kunnen, maar omdat ze het fundamenteel oneens zijn met deze andere opinies en levensstijlen.

Een interessant additioneel perspectief op deze resultaten wordt geboden door de hedendaagse autoritarisme-theorie die een onderscheid maakt tussen autoritaire submissie en autoritaire dominantie. Vanuit deze theorie kunnen mensen die hoog scoren op autoritaire dominantie bij wijze van metafoor gekarakteriseerd worden als wolven die de wereld beschouwen als een competitieve jungle gekenmerkt door een meedogenloze, amorele strijd om macht en middelen waarin de sterken succesvol zijn ten koste van de zwakkeren. De hoofdinteresse van deze mensen is erin gelegen zoveel mogelijk macht en middelen te verwerven. Mensen die hoog scoren op autoritaire submissie kunnen daarentegen bij wijze van metafoor gekarakteriseerd worden als schapen die bereid zijn zich te onderwerpen aan autoritaire leiders die conservatieve en autoritaire waarden propageren en een dito politiek beleid voorstaan, en daarenboven vinden dat andere mensen net hetzelfde moeten doen. Wanneer de resultaten die in dit doctoraat gepresenteerd werden vanuit de optiek van deze metafoor bekeken worden, dan kan er gesteld worden dat gelovigen (in vergelijking met ongelovigen) iets weg hebben van schapen temidden van hongerige wolven. Schapen die bereid zijn zichzelf te onderwerpen aan om het even wie bereid is de schapencultuur en schapentradities veilig te stellen van de dreiging die uitgaat van mensen die er

andere opinies en / of een andere levensstijl op na houden. Dit is een gevaarlijke situatie, want er lopen nu eenmaal wolven rond die, hoewel ze misschien zelf niet religieus zijn, tot alles in staat zijn om de macht te verwerven om hun intolerante ideeën in de praktijk te brengen, inclusief het misbruiken van het geloof als drager van hun boodschap om zodoende meer schapen voor zich te winnen. In de Vlaamse politieke context vormt het Vlaams Blok hier een perfect voorbeeld van. Hoewel het Vlaams Blok een eerder a-religieuze partij is, schuift ze toch een aantal leden op de voorgrond die dwepen met hun katholieke waarden (bijvoorbeeld Alexandra Colen) en zich voornamelijk richten op een katholiek kiespubliek. Op deze manier probeert het Vlaams Blok kennelijk de zuigkracht die de verkondigde conservatieve waarden hebben op katholieke gelovigen te versterken. Deze gedachtengang kan eveneens toegepast worden op de situatie die werd aangegrepen om dit doctoraat in te leiden, en suggereert dat het antwoord op de vraag wat mensen ertoe brengt een vliegtuig in een symbolisch gebouw te boren in de wetenschap daar zelf ook bij te zullen sterven, vrij simpel is. Kennelijk loopt er ergens een wolf rond die de religieuze taal en het geloof in een hiernamaals misbruikt om een letterlijke interpretatie van deze symbolen te installeren in de hoofden van een paar religieuze schapen. Het feit dat de piloot in kwestie gelovig is, biedt op zich natuurlijk geen verklaring. Uitermate belangrijk is de manier waarop deze piloot gelooft, en dat is nu misschien net iets wat vrij gemakkelijk te manipuleren valt. En wanneer iemand erin slaagt een letterlijke interpretatie van die religieuze symboliek te presenteren als de enige juiste interpretatie, dan vormt dit de gelovigen blijkbaar om tot dogmatische en intolerante wezentjes.

Op zoek naar middelen tegen intolerantie

Wat kan er tegen intolerantie gedaan worden? Hoe kan het genezen worden? Hoe kan het voorkomen worden? De resultaten die in dit doctoraat gepresenteerd werden, geven aan dat er op zijn minst twee veelbelovende strategieën voorhanden zijn. Er werd reeds geargumenteerd dat het ernaar uitziet dat godsdienst een obstakel vormt voor het in toenemende mate pluralistische karakter van de samenleving omdat gelovigen over het algemeen de wens hebben hun culturele tradities te vrijwaren van de vermeende dreiging die uitgaat van mensen die er andere opinies en andere levensstijlen op na houden. Veel lijkt er dan ook van af te hangen hoe religie en de eigen culturele tradities gepercipieerd worden, en dit is waar geestelijken, catechisten en leraars een belangrijke rol te vervullen hebben. Als zij erin slagen religieuze inhouden en culturele tradities op een open manier in te vullen, en hierbij de speelruimte kunnen laten die nodig is opdat een brede waaier van opvattingen en levensstijlen hieronder vervat zou kunnen worden, zou dit wel eens een gunstig effect kunnen hebben op de gelovige medemens. Die zou op deze manier immers gestuurd worden in de richting van een minder conservatieve en een meer open kijk op de wereld. Uiteindelijk is de bereidheid tot luisteren naar en gehoorzamen aan autoriteitsfiguren en religieuze leiders nu eenmaal kenmerkend voor de modale gelovige.

Waar het effect van deze strategie zich noodzakelijkerwijs beperkt tot het ressorteren van een effect op de gelovigen, zal het effect van de tweede strategie zich waarschijnlijk ook uitstrekken naar niet-gelovigen toe. De sleutel tot deze strategie is het cognitief functioneren. Alle maten van cognitieve rigiditeit die in dit doctoraat werden opgenomen, bleken gerelateerd te zijn aan conservatisme en racisme (hoewel bijlange niet alle resultaten die deze uitspraak ondersteunen in dit doctoraat werden opgenomen). De relevante theorievorming wijst er bovendien op dat het cognitief functioneren een niet onbelangrijke determinant is van sociale en politieke attitudes, en suggereert dat interventies gericht op het wijzigen van het cognitief functioneren in de richting van minder cognitieve rigiditeit de potentie hebben mensen om te vormen tot tolerantere wezentjes. In het verleden is er al heel wat onderzoek verricht die deze redenering volgt. Het betreft voornamelijk onderzoek omtrent de morele ontwikkeling en hoe die ontwikkeling kan worden gestimuleerd (in casu, Power, Higgins & Kohlberg, 1989; Reimer, Paolitto & Hersch, 1983). De essentie hiervan is de veronderstelling dat mensen in hun morele ontwikkeling gestimuleerd worden door over morele probleemsituaties te discussiëren met mensen die reeds hogere niveaus van morele ontwikkeling hebben bereikt. Voortbouwend op deze assumptie hebben heel wat onderzoekers zich beziggehouden met het ontwikkelen van educatieve programma's die gebruik maken van de zogeheten Morele Dilemma Discussies (zie Claypoole, Moody & Peace, 2000; Codd, 1975; Enright, Colby & McMullic, 1977; Schlaefli, Rest & Thoma, 1985). Het doel van deze discussies is erin gelegen jongeren om te vormen tot moreel competente mensen die goede argumenten kunnen onderscheiden van slechte en minder goede argumenten en die hun morele principes kunnen vertalen naar rechtvaardige oplossingen voor bestaande problemen, zelfs in situaties waarin vooroordelen, autoriteiten of meerderheidsopinies interfereren met het maken van beslissingen die gebaseerd zijn op morele principes. Het educatief programma dat Lind (1993, 2000a, 2000b, 2002a, 2002b) heeft voorgesteld, is één van de meest recente en best uitgewerkte programma's. De hoofddoelstelling is erin gelegen (1) mensen te leren hun argumenten te organiseren door ze te laten ontdekken dat er goede en minder goede argumenten bestaan, (2) mensen te leren goede argumenten te appreciëren ook al worden ze aangedragen door mensen die er een andere mening op na houden, en (3) mensen te leren dat het voeren van fundamentele discussie over serieuze zaken de kwaliteit van het leven kan verhogen. De resultaten die werden bekomen met behulp van dit programma zijn veelbelovend (zie Lind, 2002a, 2002b) en suggereren dat het antwoord op de vraag op intolerantie kan genezen of voorkomen worden misschien wel eens positief zou kunnen zijn (zie ook Duriez, 2002d). En uiteraard gaat het er niet om een keuze te maken tussen verschillende strategieën om intolerantie tegen te gaan, maar komt het erop aan zoveel mogelijk strategieën, die elk op zich tot op zekere hoogte effectief kunnen zijn, tegelijkertijd aan te wenden.

ENGLISH SUMMARY

Short Summary

The main aim of the present dissertation is to contribute to the debate whether religion causes intolerance. In order to shed a light on the religiosity-intolerance relation, in the first part, a new and more accurate way of measuring religiosity (the Post-Critical Belief scale) is introduced. It is shown that the Post-Criticial Belief scale provides measures of individual differences in the dimensions of Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic along which Wulff (1991, 1997) organized the possible approaches to religion. In this way, the Post-Critical Belief scale allows the disentanglement of the effects of believing in a transcendent reality, or being religious or not, from the effects of the way in which religion is being dealt with. This approach was thought to allow for the provision of a nuanced answer to the question whether and how religiosity relates to intolerance, which is the aim of the second part. In order to do so, attention is paid to the relations of both religiosity dimensions with social and political attitudes, personality traits, value orientations and modes of cognitive functioning. Results show that the Exclusion vs. Inclusion of Transcendence dimension relates to cultural conservatism, authoritarian submission, conservation values, normativity, and preferring order, structure and predictability. This suggests that religious people have a desire to protect their cultural traditions from the influence of deviating opinions and life-styles because these are imcompatible with their value pattern. Moreover, results show that the Literal vs. Symbolic dimension relates to cultural conservatism, racism, authoritarianism, disagreeableness, dualism, intolerance of ambiguity, closed-mindedness and normativity, and to a lack of empathy, perspective taking, openness to experience and moral competence. This suggests that people who deal with religion in a literal fashion are limited in their cognitive functioning and, as probably a consequence of this, intolerant towards both deviating opinions and life-styles and people of a foreign origin.

Based on the insights of contemporary authoritarianism theory, which makes a distinction between authoritarian submission and authoritarian dominance, it is argued that the results presented in this dissertation make it clear that, metaphorically speaking, religious people have something in common with sheep (when compared with a-religious people). Sheep that are prepared to submit themselves to no matter who fulfills their desire to protect their culture and traditions from the influence of deviating opinions and life-styles. However, a lot depends on how religion is being dealt with, and this is true both for religious and a-religious people. If religion is being dealt with in a symbolic fashion, intolerance is unlikely. In contrast, if religion is being dealt with in a literal fashion, the vulnerability to become intolerant dramatically increases. Based on the results presented in this dissertation, some suggestions are presented as to how intolerance can be cured and prevented. It is argued that clergy, catechists and teachers can positively affect the religiously by proposing interpretations of religious contents and cultural tradition in an open way, and by allowing for and positively evaluating diversity in opinions and life-styles. Moreover, it is argued that the educational programs that were designed in order to boost people's moral competence deserve more attention, and that a broad application of these educational programs might effectively counter intolerance.

Long Summary

Introduction

September 11, 2001. Two airplanes crash into the twin towers of the World Trade Center in New York. An act of violence with political goals that was justified on religious grounds. An act of violence that led to an upsurge of little nuanced opinion articles on religion and religiosity in several European journals and magazines. According to some of the people advocating their opinion in these journals and magazines, religion would, almost by definition, cause fanaticism and intolerance. A point of view that is quite widespread in Europe, and that is fueled by the fact that, although all world religions appear to proclaim brotherly love, history is nevertheless littered with moments in which religion has provided a justification for, or has given cause to, atrocities directed towards people from a different religion, a different race, a different culture, a different ideology or a different sexual orientation. And indeed, the relationship between religiosity and intolerance is probably the most important paradox within the psychology of religion, and a lot of social scientists have carried out research in order to investigate whether this is true. Summarizing this research provides a fragmented picture. Some researchers, historians and theologians of different origin conclude that religion should be considered as a catalyst for intolerance, prejudice, racism, etc. (e.g., Flannery & Oesterreicher, 1985; Kertzer, 2001; Poliakov, 1974; Salemink, 1995). Other researchers conclude that, when non-religious factors such as anomia, localism and authoritarianism are taken into account, religion fosters tolerance instead (e.g., Billiet et al., 1995; Eisinga et al., 1989, 1990, 1991, 1993; Scheepers et al., 1989). Yet other researchers argue that there is no intrinsic relationship between being religious or not and being intolerant or not, but that it all depends on how religion is being dealt with (e.g., Allport & Ross, 1967, Batson et al., 1978, 1982, 1993).

As Sheep amidst the Wolves

The dissertation at hand is constituted of 17 different studies that are presented as independent papers. All of these papers were submitted for publication. Some of these papers have already been published or accepted, whereas others are still under revision. One major drawback of this approach, apart from being slightly repetitive, is that the reader will not find himself presented with a research story that has a drive and a logic in itself. Instead, each of the papers that is included in this dissertation is a stand alone paper that has its own focus. Needless to say, a major advantage of this approach is that it allows readers that are interested in some topics only to restrict themselves to reading the relevant parts. Nevertheless, in order to allow the reader to spot the connection between the 17 loosely allied papers that are presented in this dissertation, in this summary, I will try to direct attention to the main aim of the present dissertation. This main aim is to contribute to the debate whether or not religion causes intolerance. In order to shed a light on the religiosity-intolerance relation, in the first part of the present dissertation (The Structure of the Herd), a new

and more accurate way of measuring religiosity is introduced. This new approach to measuring religiosity should allow the provision of a more nuanced answer to the question whether and how and why religiosity relates to intolerance, which is the aim of the second part of this dissertation (<u>Separating the Sheep from the Goats</u>). In trying to do so, I decided to keep the scope of the second part of this dissertation as broad as possible in order to take into account several social and political attitudes such as racism, cultural conservatism and economic conservatism. Moreover, I also tried to pay attention to certain things that are considered as more crucial to the way in which people live their lives than the social and political attitudes they adhere to, such as personality traits, value orientations and cognitive functioning. Personality traits, value orientations, and cognitive functioning are all considered as being more fundamental to people's lives than the attitudes they adhere to, in the sense that these variables are thought to precede and even shape the social and political attitudes people adhere to. Finally, in the conclusion section at the end of this summary, I will try to highlight the general picture emerging from the different studies included in this dissertation. Possible theoretical and societal implications of these findings will also be discussed.

The Structure of the Herd

According to Wulff (1991, 1997), the various possible approaches to religion can be located in a two-dimensional space along the bipolar dimensions Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic. In this way four quadrants are defined, each covering a specific attitude towards religion, which Wulff labeled Literal Affirmation, Literal Disaffirmation, Symbolic Disaffirmation (or Reductive Interpretation) and Symbolic Affirmation (or Restorative Interpretation). Literal Affirmation represents a position in which the literal existence of the religious realm is affirmed. This position is most clearly embodied by religious fundamentalists, although elements of this posture also appear among those who are not particularly conservative. Literal Disaffirmation represents a position in which the existence of the religious realm is rejected and in which the possibility is lost out of sight that the religious language has a symbolic meaning. So, like in the first quadrant, religious language is understood in a literal way. The sole difference lies in the rejection of religion. If anything is considered absolute, it is the scientific method and rational principles of knowledge. Symbolic Disaffirmation (or Reductive Interpretation) represents a position in which the existence of the religious realm is rejected, and in which a privileged perspective on the hidden meaning of religion's myths and rituals is claimed. This quadrant is derived from the work of Ricoeur (1970), who proposed that in modern hermeneutics, in order to clear away from religious symbols the excrescence of idolatry and illusion, a reductive interpretation is necessary. Symbolic Affirmation (or Restorative Interpretation) represents a position in which the existence of the religious realm is affirmed, and in which one tries to encompass and transcend reductive interpretations in order

to find the symbolic meaning of the religious language. Again, this quadrant is derived from the work of Ricoeur (1970), who proposed that in modern hermeneutics, in order to make it possible for the object of suspicion to be restored to an object of understanding and faith, a restorative interpretation is needed. In this respect, Ricoeur introduced the concept of Second Naiveté.

Drawing on Wulff, Hutsebaut (1996, 1997) developed the Post-Critical Belief scale to measure individual differences in the dimensions of Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic in a secularized Christian context. However, an initial analysis of the internal structure in a mixed sample of adolescents, university students and adults (Hutsebaut, 1996) offered only partial support for Hutsebaut's contention that the Post-Critical Belief scale is a valid measure of Wulff's concepts. Factor analysis followed by VARIMAX rotation neither pointed to two bipolar factors referring to the two bipolar dimensions discerned by Wulff, nor to four unipolar factors referring to Wulff's four quadrants. Instead, three unipolar factors emerged. These were interpreted as Literal Affirmation (Orthodoxy), Literal Disaffirmation (External Critique) and Symbolic Affirmation (Historical Relativism).

The Post-Critical Belief Scale

In the first chapter of The Structure of the Herd, the internal structure of the Post-Critical Belief scale was re-investigated using multidimensional scaling (MDS). MDS represents psychological (dis)similarities between stimuli, in this case the Post-Critical Belief items, as points in a geometrical space in such a way that the distances between the points represent the observed (dis)similarities as well as possible. Results show that a two-dimensional MDS representation of the observed relationships between the items can be interpreted by means of both a dimensional and a regional interpretation. The first dimension can be interpreted as Exclusion vs. Inclusion of Transcendence, with the External Critique items having negative coordinates and the Orthodoxy and most of the Historical Relativism items having positive coordinates on this dimension. The second dimension can be interpreted in terms of Literal vs. Symbolic, with the Orthodoxy and External Critique items having negative coordinates and the Historical Relativism items having positive coordinates. This interpretation is compatible with the regional interpretation. The Orthodoxy items are situated in the upper left quadrant, the External Critique items are situated in the lower left quadrant, and most Historical Relativism items are situated in the upper right quadrant. However, some of the Historical Relativism items are situated in the lower right quadrant. A close inspection of the items reveals a difference in content between the items in the upper right and the lower right quadrant. The items in the upper right quadrant clearly imply an adherence to Christian religion, while the items in the lower right quadrant merely focus on the historical relativity of Christian religion without implying an adherence to it. Hence, both the position and the content of the items in the lower right quadrant indicate that these items are not suited to measure Symbolic Affirmation. Therefore, it

was decided to divide Historical Relativism into two parts. The upper right quadrant, implying Inclusion of Transcendence, was labeled Second Naiveté. The lower right quadrant, referring to a purely relativist stance, was labeled Relativism. Furthermore, the fact that the Relativism items had negative coordinates on the first dimension suggests that these items are measuring Symbolic Disaffirmation.

However, a discrepancy remained between the results obtained with MDS and the results obtained with principal component analyses (PCA). PCA is a variable reduction procedure that typically results in a relatively small number of components that account for most of the variance in a set of observed variables. Results show that, whereas MDS revealed two bipolar dimensions, thereby differentiating four approaches to religion, PCA revealed three predominantly unipolar factors. An explanation for this in terms of interindividual differences in response style was proposed and tested. Results show a high congruence between the first two components (after orthogonal procrustes rotation towards the two dimensional MDS solution) and the two bipolar dimensions. The first rotated component can be interpreted in terms of a bipolar Exclusion vs. Inclusion of Transcendence dimension and the second in terms of a bipolar Literal vs. Symbolic dimension. After this rotation, all items of the Post-Critical belief scale, even the ones with a clearly contradictory content, had a non-negative loading on the third component. Hence, the existence of interindividual differences in response style (i.e., acquiescence) offers a plausible interpretation of this additional component. Thus, the assumption of the presence of interindividual differences in acquiescence combined with the use of orthogonal Procrustes rotation led to a convergence between the results obtained with MDS and PCA. This convergence further supports the contention that the Post-Critical Belief scale is a valid measure of Wulff's concepts.

The Post-Critical Belief Scale Revisited

In the second chapter of The Structure of the Herd, another re-analysis of the internal structure of the Post-Critical Belief scale was done, using both MDS and PCA. For this purpose, all 16 samples that were gathered over time (at that point) were combined to investigate (1) whether two dimensions are sufficient to represent the empirical relationships between the Post-Critical Belief scale items, (2) whether these dimensions can be interpreted in terms of Wulff's (1991, 1997) dimensions Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic, and (3) whether this structure is stable across the four different versions of the Post-Critical Belief scale that have been used over time and across the various types of samples. However, since differences in response style can affect PCA, and since, in the first part of The Structure of the Herd, evidence was found for the existence of a response style (i.e., acquiescence), acquiescence was controlled for. In order to do this, the acquiescence level for each subject was estimated by computing its weighted mean score across all items. However, since the four approaches to religion are not represented by the same number of items in all versions, acquiescence was

estimated by a weighted mean score across all items (assigning the same weight to each of the four approaches irrespective of its number of items). This weighted mean score was then subtracted from the observed item scores for each subject. In this way, differences in acquiescence were removed. PCA's were then performed on these weighted-mean-corrected item scores.

Results of these analyses support the construct validity of the Post-Critical Belief Scale. First, both MDS on the average Euclidean distances between the standardized items across the 16 samples and PCA on the weighted-mean-corrected scores in each sample separately clearly point to a two-dimensional or a two-componential structure. Second, a high convergence between the empirical and the theoretical structure supports our interpretation of the empirical structure in terms of Wulff's (1991, 1997) dimensions Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic. Third, this two-dimensional and two-componential structure proves to be stable across the different versions of the Post-Critical Belief scale that have been used over time and across different samples. Hence, in the second part of The Structure of the Herd, it is shown that the Post-Criticial Belief scale provides direct measures of existing individual differences in both Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic. Measures of inter-individual differences in both Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic that are stripped from the disturbing impact of response styles such as acquiescence. In this way, the use of the Post-Critical Belief scale allows researchers to disentangle the pure effects of being religious or not from the pure effects of the way in which religion and religious contents are approached.

The Post-Critical Belief Scale Appendix

In this appendix, the Post-Critical Belief scale items are listed for the four subscales separately, i.e., Orthodoxy, External Critique, Relativism and Second Naiveté. For all items, the label by which they are referred to in this chapter and the version(s) in which they appeared are also given. Note that although all items were administered in Flemish, we present them in English. The translation was done according to the guidelines specified by the International Test Commission, using the translation back-translation procedure. Differences between the back-translated and the original version were minimal. A committee of four bilingual research assistants decided on the final English version of the test.

Separating the Sheep from the Goats

In the second part of this dissertation (Separating the Sheep from the Goats), the Post-Critical Belief scale was used to measure interindividual differences in religiosity and dealing with religion. However, since this dissertation consists of a collection of papers that were written over several years, different versions of this scale have been used and different statistical techniques have been applied to this scale. Roughly speaking, two different applications of the Post-Critical Belief scale have been used. These different applications

are reflected in, respectively, <u>The Post-Critical Belief Scale</u> and <u>The Post-Critical Belief Scale Revisited</u>. In the early application, scores for each of the quadrants of Wulff's model that are covered by the Post-Critical Belief scale are calculated by averaging the scores on the items belonging to that quadrant. In the renewed application, in order to represent interindividual differences in religiosity, scores are calculated for each of the two bipolar dimensions of the religiosity domain. There are two main reasons why the renewed application of the Post-Critical Belief scale is statistically superior to the early application. First, in the renewed application, the scores that are derived to represent an individual's position in Wulff's model are controlled for differences in acquiescence. Hence, in this application, the scores that are used to represent an individual's position in Wulff's model are no longer infected by interindividual differences in acquiescence. Second, in the renewed application, the scores that are derived to represent an individual's position in Wulff's model are calculated on (roughly speaking) four times the amount of items than the scores that were derived in the early application. Hence, in this renewed application, the scores that are derived to represent an individual's position in Wulff's model are more accurate and reliable.

The second part of this dissertation (<u>Separating the Sheep from the Goats</u>) tries to shed light on whether religiosity relates to intolerance. However, the scope of this part is rather broad. As a result, this part is divided into five chapters. Each chapter tries to provide an answer to different questions. The first chapter is limited to the relationship between religiosity and social and political attitudes. The second chapter is limited to the relationship between religiosity and authoritarianism. The third chapter focuses on the relationship between religiosity and value orientations and tries to answer the question whether measures of religiosity provide additional predictive power concerning social and political attitudes when differences in value orientations are controlled for. The fourth chapter focuses on the relationship between religiosity and cognitive functioning. Finally, the fifth appendix like chapter focuses on whether cognitive functioning relates to conservative beliefs and racism, and, if so, whether the effects of cognitive functioning on conservative beliefs and racism are mediated by authoritarianism.

The tale of the black sheep

In the first chapter of <u>Separating the Sheep from the Goats</u>, the relationship between religiosity and social and political attitudes is highlighted. This chapter consists of four different parts, which try to provide an answer to questions like "Are religious people more inclined to hold racist opinions?", "Are religious people more likely to provide help to a person in need?", and "Are religious people more conservative?".

Religion and Racism 1

In the first part of <u>The tale of the black sheep</u>, I tried to provide an answer to the question "Are religious people more inclined to hold racist opinions?" using the early application of the Post-Critical Belief scale. Both Orthodoxy and External Critique were expected to be positively related to racism because of the rather

fundamentalist closed-mindedness of these positions (Desimpelaere et al., 1999; Duriez, Fontaine & Hutsebaut, 2000). Relativism was expected to be negatively related to racism because the concept itself implies tolerance towards other opinions and cultures. Finally, although Second Naiveté turned out to be unrelated to racism in previous analyses (Duriez, Fontaine & Hutsebaut, 2000), theoretically speaking, it was expected to be negatively related to racism, because in this outlook the commandment of brotherhood should be taken seriously. Results show that Orthodoxy and External Critique are indeed positively related to racism, whereas Relativism is negatively related to racism. In line with previous analyses, Second Naiveté turned out to be unrelated to racism. However, results of a path analysis that included age, education, church attendance and belief salience as independent variables, Orthodoxy, External Critique, Relativism and Second Naiveté as mediation variables and racism as dependent variable show that this interpretation would partly have been a faulty one. Although Second Naiveté did not exercise a direct effect on racism, it did have an indirect effect in the expected direction. Results suggest that, although Second Naiveté doesn't lead to greater tolerance, it does inhibit racism.

Religion and Racism 2

In the second part of The tale of the black sheep, I reconsidered the question "Are religious people more inclined to hold racist opinions?" using the renewed application of the Post-Critical Belief scale. The Exclusion vs. Inclusion of Transcendence dimension, on the one hand, was expected to be unrelated to racism, since there is no intrinsic reason to assume such relation. The Literal vs. Symbolic dimension, on the other hand, was expected to relate strongly negatively to racism, because intolerance of ambiguity, which is characteristic of literal thinking (see Desimpelaere et al., 1999; Duriez, 2002c), was reported to be related to racism (Sidanius, 1985). Results show that racism is indeed negatively related to the Literal vs. Symbolic dimension and unrelated to the Exclusion vs. Inclusion of Transcendence dimension. Thus, when separating being religious or not from the way in which one is approaching religion, it becomes apparent that religiosity as such does not lead to racism. In contrast, the way in which religion is approached tells a lot about whether or not one is inclined to hold racist opinions. These results suggest that religious people are not more inclined to hold racist opinions.

Religion and Empathy

In the third part of The tale of the black sheep, I tried to provide an answer to the question " Are religious people more likely to provide help to a person in need?" using the renewed application of the Post-Critical Belief scale. Empathy was focused upon since it is considered fundamental to altruism and helping behavior. Results show that empathy is positively related to the Literal vs. Symbolic dimension and unrelated to the Exclusion vs. Inclusion of Transcendence dimension. Thus, when separating being religious or not from the way in which one is approaching religion, it becomes apparent that religiosity as such

has no connection whatsoever with empathy. In contrast, the way in which religion is approached tells a great deal about whether or not one is likely to experience feelings of empathy. These results suggest that religious people are not more likely to provide help to a person in need.

Religion and Conservatism

In the fourth part of The tale of the black sheep, I tried to provide an answer to the question "Are religious people more conservative?" using the renewed application of the Post-Critical Belief scale. For this purpose, a multidimensional approach to conservatism which distinguishes cultural from economic conservatism was used. This distinction became apparent in the work of prominent scholars (e.g., Eysenck, 1954; Lipset, 1981; Middendorp, 1978; Wilson, 1973). Cultural conservatism relates to the endorsement of traditional values and norms as opposed to the freedom to arrange life according to one's own insights. Economic conservatism relates to the endorsement of capitalist ideology, private initiative and unrestricted competition among individuals as opposed to favouring economic equality, trade unions and governmental intervention in the economic sphere. The Exclusion vs. Inclusion of Transcendence dimension was expected to relate positively to Cultural Conservatism and to be unrelated to Economic Conservatism, and the Literal vs. Symbolic dimension was expected to relate negatively to Cultural Conservatism and to be unrelated to Economic Conservatism. Results support these hypotheses, suggesting that the answer to the question "Are religious people more conservative?" is no when economic conservatism is considered, but yes when cultural conservatism is considered.

Do sheep need a leader?

In the second chapter of Separating the Sheep from the Goats, the relationship between religiosity and the personality trait authoritarianism is highlighted. Authoritarianism was focused upon since it is considered to be the most important prejudice disposition (McFarland, 2001). The three papers that constitute this chapter depart from a somewhat different angle than the other papers that are compiled in this dissertation. The first and the second paper address the differential relationship between authoritarian submission (or right-wing authoritarianism) and authoritarian dominance (or social dominance). Religiosity is but one of the variables that was included in these papers. The third paper addresses the differential relationship between right-wing authoritarianism and left-wing authoritarianism. Although religiosity was included in the study that is reported in this paper, this variable was not included in it. Therefore, an appendix was added to this paper, in which the relationship between religiosity and left-wing authoritarianism is considered.

Religion and Authoritarianism 1

In the first part of Do sheep need a leader?, we tried to identify variables that relate differentially to right-wing authoritarianism (RWA) and the social dominance orientation (SDO). Dependent variables that

were included are racism, value orientations, religiosity, cultural and economic conservatism, moral competence, age, and level of education. A strong positive relationship between RWA and SDO was found, and both variables showed strong positive relations with racism. Nevertheless, results support the idea that RWA and SDO refer to different kinds of dispositional prejudice. RWA, when corrected for SDO, was negatively associated with level of education, moral competence, relativism, and the value orientations hedonism, stimulation and self-direction, whereas positive correlations with age, cultural conservatism, orthodoxy, and the value orientations tradition, conformity and security were registered. In contrast, SDO, when corrected for RWA, was negatively associated with age, second naiveté and the value orientations universalism, benevolence and tradition, whereas economic conservatism, external critique, and the value orientations power, achievement, hedonism and stimulation showed positive relationships.

Of particular interest to this dissertation is that the results of this study, which uses the early application of the Post-Critical Belief scale, show that whereas RWA is positively related to Orthodoxy and negatively to Relativism, SDO is positively related to External Critique and negatively to Second Naiveté. These findings suggest that, whereas both stances are characterized by literal thinking about the religious realm, RWA is associated with Wulff's (1991, 1997) inclusion of transcendence, whereas SDO is not. This is clearly in line with Altemeyer's (1998) statement that religionism is typical of RWA but not of SDO, and with Van Hiel and Mervielde (in press) who found that for people high on RWA, the traditionalist Christian democrat party is a valid alternative for the rather a-religious fascist Vlaams Blok.

<div align="center">Religion and Authoritarianism 2</div>

In the second part of <u>Do sheep need a leader?</u>, it was investigated whether there are cross-cultural differences in the relationship between right-wing authoritarianism (RWA) and the social dominance orientation (SDO) and whether there are intra-cultural differences in these relations, and if such differences occur, whether the differential relationships with religiosity, value orientations and ideological attitudes that were identified in previous studies (see <u>Religion and Authoritarianism 1</u>) remain stable in spite of these differences. Both cross-cultural differences and intra-cultural differences in the RWA-SDO relation emerged. The cross-cultural differences can be attributed to differences in socio-political context, whereas the intra-cultural differences can be attributed to differences in political involvement. Although the external relationships were quite stable, important differences, which can also be attributed to differences in the socio-political context and differences in political involvement, did occur.

Of particular interest to this dissertation is that the results of this study, which reconsiders the relationship between religiosity and both RWA and SDO using the renewed application of the Post-Critical Belief scale, largely show that, although the Literal vs. Symbolic dimension relates negatively to both RWA and SDO, Exclusion vs. Inclusion of Transcendence relates positively to RWA but not to SDO. These findings

confirm the findings reported earlier. Although both RWA and SDO are characterized by literal thinking about the religious realm, RWA is connected to religiosity whereas SDO is not.

<u>Left-Wing and Right-Wing Authoritarianism</u>

In the third part of <u>Do sheep need a leader?</u>, the presence of left-wing authoritarianism as well as its relationship with RWA, ideology-free authoritarianism and various ideological variables (racism, cultural conservatism and economic conservatism) was tested. The present results suggest the presence of authoritarianism among adherents of left-wing extremist parties. The LWA scale not only proved useful to distinguish those adhering an extremist left-wing ideology (i.e., anarchists and communists) from those who don't, but also to distinguish those adhering an authoritarian left-wing ideology (i.e., communists) from those adhering an anti-authoritarian left-wing ideology (i.e., anarchists). At the same time, results suggest that there is a big difference between left-wing authoritarianism and authoritarianism as it is generally understood. Whereas authoritarians from the left seem prepared to submit themselves to authoritarian leaders only if these leaders adhere a left-wing ideology, right-wing authoritarians seem prepared to submit themselves to leaders adhering no matter what ideology, as long as their aim is to protect their culture from the influences of outsiders (i.e., immigrants) as well as people with deviating opinions and / or life-styles.

Of particular interest to this dissertation are the results that are presented in the appendix. These results, which consider the relationship between religiosity and both left-wing authoritarianism (LWA) and ideology-free authoritarianism (IFA) using the renewed application of the Post-Critical Belief scale, show that, although the Literal vs. Symbolic dimension relates negatively to both LWA and IFA, the Exclusion vs. Inclusion of Transcendence dimension relates positively to IFA but is unrelated to LWA. In sum, it seems that whereas the relation between the Exclusion vs. Inclusion of Transcendence dimension and authoritarianism is strongly dependent on how the concept of authoritarianism is operationalized, it seems that the Literal vs. Symbolic dimension is substantially related to authoritarianism no matter how this concept is operationalized. This seems to suggest that, whereas the relation between RWA and the Exclusion vs. Inclusion of Transcendence dimension is due to the RWA components relating to conventionality (cf. the results of the studies on the relation between religiosity and value orientations that are presented later on in this dissertation), the relation between RWA and Literal vs. Symbolic is primarily due to the cognitive rigidity implied in both RWA and approaching religiosity in a literal fashion (cf. the results of the studies on the relation between motivated cognition and cognitive rigidity on the one hand and authoritarianism and religiosity on the other hand that are presented later on in this dissertation).

The color of the grass

In the third chapter of <u>Separating the Sheep from the Goats</u>, the relationship between religiosity and value orientations is highlighted. Value orientations were focused upon since the papers presented in <u>Do sheep</u>

need a leader? have suggested that the relationship between religiosity and authoritarianism is partly due to their respective relationships with value orientations. Most notable, these papers have suggested that the Exclusion vs. Inclusion of Transcendence dimension relates to valueing conventionality. Whether this is indeed the case is investigated in the first and the second paper of this chapter. The third papers focuses on the question whether measures of religiosity provide additional predictive power concerning social and political attitudes when differences in value orientations are controlled for.

Religion and Values 1

In the first part of The color of the grass, the relationship between religiosity and value orientations is examined using the early application of the Post-Critical Belief scale. Based on Schwartz' (1992) value theory, Fontaine, Luyten and Corveleyn (2000) found that the value patterns associated with the religious attitudes that are captured in the Post-Critical Belief scale could largely be reduced to a combination of two theoretically meaningful value patterns: a Transcendence / mutual Care (TC) pattern and a Social order / Uncertainty avoidance (SU) pattern. In this paper, it was examined whether these findings could be replicated using a more recent version of the Post-Critical Belief scale.

Results show that the value pattern associated with Orthodoxy can best be understood in terms of the SU pattern. This supports the hypothesis that an Orthodox approach to religion is mainly characterized by striving for social safe environments and certainty. The TC pattern was only of minor importance. However, the correlations with the value orientations suggest that, whereas the transcendence perspective is important for Orthodoxy, mutual care is not. Results also show that the value pattern associated with External Critique can best be understood in terms of the reversed TC pattern. However, the correlations with the value orientations suggest that, whereas the anti-transcendence perspective that is important for External Critique, mutual care is not. The contribution of the SU pattern was only of minor importance. The absence of an association between the SU pattern and the External Critique value pattern might be due to the fact that people who score high on External Critique form a heterogeneous group that only share the rejection of transcendence and the value orientation implied by this rejection. Moreover, results show that the value pattern associated with Relativism can best be understood in terms of the TC pattern. However, the correlations with the value orientations suggest that, whereas mutual care is important for Relativism, the transcendence perspective is not. The reversed SU pattern also contributed to the value pattern associated with Relativism, but this contribution was less outspoken. Finally, results show that the value pattern associated with Second Naïveté can best be understood in terms of the TC pattern. However, the correlations with the value orientations suggest that, whereas the focus on transcendence is important for Second Naïveté, mutual care is not. The SU value pattern also contributed to the value pattern associated with Second Naïveté, but only to a minor extent. Neverthe-

less, the correlations with the value orientations suggest that Second Naïveté is characterized by a strive for certainty and predictability. These results were largely in line with the results of Fontaine et al. (2000), but suggest that it might be better to disentangle the Transcendence / mutual Care (TC) pattern into a strict Transcendence and a strict mutual Care pattern in order to get a better understanding of the value patterns associated with different types of religiosity.

<div align="center">Religion and Values 2</div>

In the second part of The color of the grass, the relationship between religiosity and value orientations was reconsidered using the renewed application of the Post-Critical Belief scale. Based on both a theological and a socio-psychological analysis, the goals of Roman Catholic religion were identified and translated in terms of Schwartz' (1992) value types. Depending on the theoretical perspective (theological-vertical, theological-horizontal or socio-psychological), Exclusion vs. Inclusion of Transcendence can be expected to relate to each of the major conflicts in the value domain (Hedonism vs. Tradition, Openness vs. Conservation and Self-Enhancement vs. Self-Transcendence). But since the Hedonism-Tradition conflict shares some characteristics with the other value conflicts, the Hedonism vs. Tradition pattern was expected to best describe the value priorities related to interindividual differences in Exclusion vs. Inclusion of Transcendence. Since Roman-Catholic theology encompasses a broad range of both literal and symbolical approaches to religion, little can be said about the Literal vs. Symbolic dimension from this perspective. The socio-psychological perspective, however, can easily be related to this dimension. In a literal mode of thinking only one correct answer to each question exists. In this way, certainty is created. In the symbolic mode, multiple interpretations are possible. This implies a tolerance for ambiguity as well as for interpretations that can be critical of the existing social order. Hence, from a socio-psychological perspective, the Literal vs. Symbolic dimension was expected to relate most clearly (i.e., negatively) to the Openness vs. Conservation conflict.

Results show that the value pattern associated with the Exclusion vs. Inclusion of Transcendence dimension corresponds closely to the Hedonism vs. Tradition pattern that was expected to be associated with this dimension from a vertical theological analysis. To a lesser extent, this pattern also shows substantial correspondence with the Openness vs. Conservation pattern that was expected from a socio-psychological analysis. Hence, the Hedonism vs. Tradition conflict rather than the Openness vs. Conservation conflict seems to be the central intra-personal conflict concerning religiosity. The value pattern associated the Exclusion vs. Inclusion of Transcendence dimension shows virtually no correspondence with the Self-Enhancement vs. Self-Transcendence pattern that was expected to be associated with this dimension from a horizontal theological analysis. Apparently, being religious does not make a person more sensitive for the well-being of others. Results also show that the value pattern associated with dif-

ferences in the Literal vs. Symbolic dimension shows virtually no correspondence with the Openness vs. Conservation pattern that was expected to be associated with this dimension from a socio-psychological analysis. Hence, the socio-psychological analysis appears to be inadequate to grasp the relation between the Literal vs. Symbolic dimension and value priorities. In contrast, the Self-Enhancement vs. Self-Transcendence pattern described the value pattern associated with Literal vs. Symbolic almost perfectly. These results suggest that differences in the Perspective Taking ability can account for the relationship between value priorities and the Literal vs. Symbolic dimension.

<p align="center">Religion, Values and Ideology</p>

In the third part of The color of the grass, the question whether measures of religiosity provide additional predictive power concerning social and political attitudes such as cultural and economic conservatism, nationalism and racism when differences in value orientations are controlled for was considered using the early application of the Post-Critical Belief scale. It has often been argued that religions influence political attitudes only indirectly by their influence on the value system of believers. This value system, in turn, is supposed to be used as a guideline in forming political attitudes. However, results show that, although value orientations hold greater predictive strength than religiosity towards political attitudes, religiosity does provide additional information in predicting political attitudes. These results suggest that the way in which religion is being dealt with still has its importance toward the formation of political attitudes. The most important value orientations and religious attitudes associated with political attitudes were identified. Results show that each of the political attitudes is predicted by a more or less unique pattern of religiosity attitudes and value orientations. Of particular interest to this dissertation is that the results of this study suggest (1) that economic conservatism is negatively related to religious attitudes that imply a reflection about the religious realm, (2) that both cultural conservatism and nationalism are associated with a tendency to conform to society and the religious framework society presents, and (3) that racism is associated with not being concerned about others, and with a preparedness to conform to society and, in an Orthodox way, to the religious framework society presents.

The fence around the meadow

In the fourth chapter of Separating the Sheep from the Goats, the relationship between religiosity and cognitive functioning is highlighted. Cognitive functioning was focused upon since the papers presented in Do sheep need a leader? have suggested that the relationship between religiosity and authoritarianism is partly attributable to their respective relationships with aspects of cognitive functioning. More specifically, these papers have suggested that the Literal vs. Symbolic dimension would relate to cognitive rigidity and to measures of motivated cognition such as moral competence, need for closure, intolerance of ambiguity, closed-mindedness, openness to experience and identity styles. Whether this is the case is investigated in

the last three papers of this chapter. The first paper, which also deals with the relationship between religiosity and cognitive functioning, is mainly important in the sense that the results that are presented in it convinced us years ago to revise the Post-Critical Belief scale (see The Structure of the Herd).

Religion and Psycho-Epistemology

In the first part of The fence around the meadow, the relationship between psycho-epistemological styles and religiosity was investigated using the earliest version of the Post-Critical Belief scale (Hutsebaut, 1996, 1997) which only differentiated between Orthodoxy, External Critique and Historical Relativism. The psycho-epistemological items that were used were based on the three factors (naive realism, logical inquiry and skeptical subjectivism) which Wilkinson and Migotsky (1994) found in an attempt to develop a comprehensive measuring device. Factor analysis on these items did reveal three factors, but those were interpreted as dualism, relativism and commitment (Perry, 1970). Results show that dualism correlates positively with both Orthodoxy and External Critique, and that both relativism and commitment correlate positively with Historical Relativism. These results suggest that both people high on Orthodoxy and people high on External Critique have the same underlying thought processes, but that, whereas people high on Orthodoxy make a choice in favor of the church, people high on External Critique accept the scientific skepticism. Based on later adaptations of the Post-Critical Belief scale (see The Structure of the Herd), it can be hypothesized that, whereas the correlation between Historical relativism and relativism is probably due to items refering to Symbolic Disaffirmation, the correlation between Historical relativism and commitment is probably due to items refering to Symbolic Affirmation. Unfortunately, these hypotheses could not be tested because we have no fucking clue what happened to the data.

Religion and Moral Competence

In the second part of The fence around the meadow, the relationship between religiosity and moral competence was investigated using the renewed application of the Post-Critical Belief scale. The Exclusion vs. Inclusion of Transcendence dimension was expected to be unrelated to both moral attitudes and moral competence since Kohlberg (1981) argued that religiosity and moral reasoning are inherently unrelated because they constitute two distinct areas of human concern. Moreover, because Wahrman (1981) argued that the apparent religiosity-morality relation can probably be explained by dogmatism, the Literal vs. Symbolic dimension, which is basically a cognitive dimension as becomes apparent from the other parts of The fence around the meadow, was expected to relate negatively to preference for lower moral stages and positively to preference for higher moral stages and moral competence. Results show that the Literal vs. Symbolic dimension is indeed negatively related to preference for lower moral stages and positively to preference for higher moral stages and moral competence. Moreover, at first sight, results show that being religious as such is unrelated to both moral attitudes and moral competence. However,

when taking a closer look, religiously affiliated subjects seem to exhibit low moral competence scores. Results show that theological grounds cannot account for this observation, and suggest that the Roman Catholic Church not only attracts persons that are highly religious but especially persons that are highly religious in a literal way.

Religion and Need for Closure

In the third part of The fence around the meadow, the relationship between need for closure and religiosity was investigated using the renewed application of the Post-Critical Belief scale. Because, according to Wulff (1991, 1997), one can dogmatically adhere to both atheism and religion, need for closure was expected to relate to the Literal vs. Symbolic dimension, rather than to the Exclusion vs. Inclusion of Transcendence dimension. However, although need for closure was expected to relate to the Literal vs. Symbolic dimension only, results also revealed a significant relation with the Exclusion vs. Inclusion of Transcendence dimension. However, whereas the former relation is due to the need for closure facets Discomfort with Ambiguity and Closed-Mindedness, the latter relation can be attributed to the facets Order and Structure and Predictability. Although, these results suggest that it is those who deal with religious content in a literal way who are incapable of dealing with alternative opinions, these results also suggest some instrumentality of religion, in the sense that religion, by offering a global worldview and a moral program, reduces the complexity of life and creates a psychologically safe environment.

Religion and Personality

In the fourth part of The fence around the meadow, the relationship between religiosity and the Five Factor Model of personality was investigated using the renewed application of the Post-Critical Belief scale. On the one hand, based on previous research concerning the relationship between personality and religiosity, a positive relationship can be expected between the personality factors Agreeableness and Conscientiousness on the one hand and the Exclusion vs. Inclusion dimension on the other hand. On the other hand, based on the theorizing of Wulff (1991, 1997) and McCrae (1999), a positive relationship between the personality factor Openness to Experience and the Literal vs. Symbolic dimension of the religiosity domain can be expected. However, although the relation between Openness to Experience and the Literal vs. Symbolic dimension was confirmed, results failed to confirm the relation between Agreeableness and Conscientiousness and the Exclusion vs. Inclusion of Transcendence dimension. Contrary to expectations, the Literal vs. Symbolic dimension was found to relate to Agreeableness. These results suggest that there is no relation whatsoever between any of the five personality factors and whether or not people believe in a transcendent reality or a personal God. In spite of this, Openness to Experience, and to a lesser extent Agreeableness, appears to be important in order to interpret religious phenomena because it is related to dealing with religious contents in an open, symbolical way.

In order to gain insight in the nature of the relation between Openness to Experience and the Literal vs. Symbolic dimension, it was also examined whether this relationship can be explained by the way people process both identity-relevant information and information of a religious nature. Contemporary personality and developmental research assumes that personality traits such as the ones presented in the Five Factor Model are not merely descriptions of static, enduring individual differences. Rather they should be considered dynamic, organizational constructs that influence how people organize their behaviour, process information and adapt to the social environment. Hence, given the assumption that issues of identity development and ways of processing these issues are of major importance during adolescence, it was hypothesized that the relation between Openness to Experience and the religiosity dimensions would be mediated by the identity styles late adolescents use. Moreover, the normative oriented identity style was expected to directly predict some of the variance in the Exclusion vs. Inclusion of Transcendence dimension. The proposed integrated model of relations between Openness to Experience, the identity styles and the religiosity dimensions which assumes that the identity styles will fully mediate the relationship between Openness to Experience and the Literal vs. Symbolic dimension, with the normative oriented identity style directly influencing the Exclusion vs. Inclusion of Transcendence dimension was found to fit the data well. The association between Openness to Experience and the Literal vs. Symbolic dimension turned out to be non-significant when identity styles were included as mediation variables. Hence, it can be concluded that identity styles fully mediate the relation between Openness to Experience and the Literal vs. Symbolic dimension. Moreover, an elaboration of our model suggested that, once Openness to Experience is taken into account, Agreeableness is no longer a significant predictor of the Literal vs. Symbolic dimension. From this it can be concluded that Openness to Experience is the only important personality factor towards the prediction of individual differences in religiosity.

Appendix

The fifth and last chapter of <u>Separating the Sheep from the Goats</u>, focuses on whether cognitive functioning relates to conservative beliefs and racism, and, if so, whether the effects of cognitive functioning on conservative beliefs and racism are mediated by authoritarianism. In this way, this chapter bridges the gap between the first, the second and the fourth chapter of <u>Separating the Sheep from the Goats</u>.

<u>Cognition, Authoritarianism and Ideology</u>

The present study aimed to replicate and extend the findings of Chirumbolo (2002), who has argued that the effects of need for closure on political party preferences are mediated by authoritarianism. More specifically, the present study aimed to investigate whether motivated cognition relates to conservative beliefs and racism, whether motivated cognition relates (differentially) to authoritarian submission (RWA, see <u>Do sheep need a leader?</u>) and authoritarian dominance (or SDO, see <u>Do sheep need a leader?</u>) and,

if so, whether the effects of motivated cognition on conservative beliefs and racism are mediated by RWA and SDO. In order to enhance the generalizability of our findings, a variety of indicators of motivated cognition (i.e., need for closure, need for cognition and dogmatism), conservative beliefs (i.e., cultural conservatism, economic conservatism and general conservatism) and racism (i.e., general racism, classic racism and symbolic racism) were used. The present results largely replicated Chirumbolo (2002) by showing that RWA mediated the effects of need for closure on conservative beliefs and racism. However, the present result also made clear that the mediating role of authoritarianism is not only limited to need for closure and RWA, but extends to motivated cognition and SDO. In particular, results show that the effects of dogmatism on conservative beliefs and racism were largely mediated by SDO instead of RWA. These results suggest that RWA and SDO based conservatism and racism each have another cognitive basis. Apparently, need for closure constitutes the cognitive basis for RWA based conservatism and racism, suggesting that individuals high on RWA exert little effort in information processing, which leads to overly simplified judgments. In contrast, dogmatism seems to constitute the cognitive basis for SDO based conservatism and racism, suggesting that individuals high in SDO do not think less, but simply decide to focus on pro-attitudinal information and to ignore, discredit or re-interpret counter-attitudinal information.

Conclusion

In this conclusion section, I will try to highlight the general picture emerging from the different studies included in this dissertation by summarizing the main findings of these studies. Moreover, I will also attempt to delineate how all this relates to the relationship between religiosity and intolerance. Finally, I will attempt to outline some more general theoretical and societal implications, and make some suggestions as to what can be done against intolerance.

The Post-Critical Belief Scale

According to Wulff (1991, 1997), the various possible approaches to religion can be located in a two-dimensional space along the bipolar dimensions Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic. In the first part of this dissertation, The Structure of the Herd, it was shown that the Post-Criticial Belief scale provides measures of existing interindividual differences in both Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic. Measures of interindividual differences in both Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic that are stripped from the disturbing impact of response styles such as acquiescence. In this way, the use of the Post-Critical Belief scale allows researchers to disentangle the pure effects of being religious or not (Exclusion vs. Inclusion of Transcendence) from the pure effects of the way in which religion and religious contents are approached (either literally or symbolically). The second part of this dissertation, Separating the Sheep from the Goats, tried

to shed light on whether religiosity relates to intolerance. However, the scope of this part was rather broad, and attention was paid to the relationships of both the Exclusion vs. Inclusion of Transcendence dimension and the Literal vs. Symbolic dimension with social and political attitudes (i.e., cultural and economic conservatism, empathy and racism), personality traits (i.e., authoritarianism and the five factors of personality), value orientations, and cognitive functioning (i.e., psycho-epistemological styles, moral competence, need for closure, openness to experience and identity styles). Now what were the majors findings that arose from these studies? In the remainder of this section, first, I will summarize these findings for both religiosity dimension separately. Second, I will try to delineate how all this relates to the relationship between religiosity and intolerance. Doing so, I will attempt to outline some more general implications. Finally, I will try to make some suggestions as to what can be done against intolerance.

Exclusion vs. Inclusion of Transcendence

The Exclusion vs. Inclusion of Transcendence dimension relates positively to religiosity measures such as church attendance, religious belief and religious involvement (see Hutsebaut, 2001), to political attitudes such as cultural conservatism, personality traits such as authoritarian submission, to conservation values, and to certain modes of cognitive functioning such as preference for order and structure, preference for predictability and a normative identity style. In contrast, this dimension was unrelated to social and political attitudes such as economic conservatism, empathy and racism, to personality traits such as authoritarian dominance, agreeableness, neuroticism, extraversion, conscientiousness and openness to experience, to self-transcendence values, and to measures of cognitive functioning such as dualism, moral competence, perspective taking, intolerance of ambiguity, closed-mindedness, openness to experience and both an informational and a diffuse / avoidant identity style. The general picture emerging from is that believing in a transcendent reality, or being religious, as such relates to cultural conservatism, authoritarian submission, conservation values, normativity, and preferring order, structure and predictability. This suggests that religious people have a desire to protect their culture and traditions from the influence of deviating opinions and life-styles. Not because they lack the cognitive capacities to deal with these differences, and not because they lack the empathic abilities to put themselves in the position of others, but simply because they adhere to values that are incompatible with what is perceived as conflicting with their religious beliefs and the cultural traditions that seem to be strongly connected to these beliefs.

Literal vs. Symbolic

The Literal vs. Symbolic dimension relates negatively to social and political attitudes such as cultural conservatism and racism and positively to social attitudes such as empathy, negatively to personality traits such as authoritarian submission, authoritarian dominance and positively to personality traits such as agreeableness and openness to experience, positively to self-transcendence values, and positively to certain modes

of cognitive functioning such as moral competence, perspective taking, openness to experience and an informational identity style and negatively to measures of cognitive functioning such as dualism, intolerance of ambiguity, closed-mindedness and a normative identity style. In contrast, this dimension was unrelated to social and political attitudes such as economic conservatism, to personality traits such as neuroticism, extraversion and conscientiousness, and to conservation values. The general picture emerging from this is that whether one approaches religion and religious contents in a literal or symbolical fashion has a major influence on one's social and political attitudes, irrespective of whether or not one believes in a transcendent reality. Approaching religion in a literal fashion relates to cultural conservatism, racism, authoritarianism, disagreeableness, dualism, intolerance of ambiguity, closed-mindedness and a normative identity style, and to a lack of empathy, perspective taking, openness to experience and moral competence. This suggests that people who deal with religion in literal fashion (whether or not they believe in a transcendent reality) are limited both in their cognitive functioning and their empathic abilities and, probably as a consequence of this, intolerant both towards deviating opinions and life-styles in general.

Religion and intolerance

How does all this relate to the main aim of this dissertation? Does religiosity relate to intolerance? The results of this dissertation, as they are summarized above, clearly point out that the answer to these questions is no. At least when racism is considered. Being religious or not is unrelated to being intolerant towards people of another race or culture. However, this is not the complete picture. Results also show that religious people have a desire to protect their culture and traditions from the influence of deviating opinions and life-styles. And although this desire seems to be color blind, from this point of view, religious people can indeed be characterized as rather intolerant and unprepared to allow other people to live according to another set of values. Not because they lack the cognitive capacities or the empathic abilities to handle these differences, but because they fundamentally disagree with these other opinions and life styles.

An interesting additional perspective on these results is offered by authoritarianism theory. In contemporary authoritarianism theory, a distinction is made between authoritarian submission and authoritarian dominance. One could argue that, methaporically speaking, people high on authoritarian dominance can be characterized as wolves and predators that consider the world to be a competitive jungle which is characterized by a ruthless, amoral struggle for power and resources in which the fit succeed and the unfit fail. The main interest of the authoritarian dominator is to gain as much power as possible. In contrast, methaporically speaking, people high on authoritarian submission can be characterized as sheep that (1) are prepared to submit themselves to authoritarian leaders advocating conservative, authoritarian values and politics, and (2) expect other people to do the same thing. The results presented in this dissertation make it clear that, from the point of view of this metaphor, on average, religious people have something in common with sheep

(at least when compared with a-religious people). Sheep amidst the wolves. Sheep that are prepared to submit themselves to no matter who fulfills their desire to protect their culture and traditions from the influence of deviating opinions and life-styles. Of course, this is a dangerous situation because there are wolves out there who might not be religious themselves but who would do almost anything to obtain the power that is needed to translate their intolerance into rules and regulations and who are prepared to misuse religion as a carrier of their message if it suits them. In the Flemish political context, a perfect example of this is demonstrated by the fascist Vlaams Blok. Although in itself an a-religious party, they decided to attract some prominent members (e.g., Alexandra Colen) whose target audience is people who consider themselves affiliated to the Roman Catholic Church. In this way, the Vlaams Blok tries to augment the sucking effect that the conservative values they promote already have on the religiously. Relatedly, this suggests that the answer to the question "What makes somebody crash an airplane into a symbolic building, knowing he is going to die as well?" is rather simple. There must be a wolf out there, who misuses religious language and the belief in an after-world to install a literal interpretation of these symbols into the mind of some religious sheep. Of course, the fact that this pilot is religious does not provide a ready-made explanation as such. What is crucially important is the way in which this person deals with religious contents and symbols. Something which might fairly easily be manipulated. And if one manages to present a certain interpretation of religious symbols as the only right way to interpret these symbols, people appear to mutate into dogmatic and intolerant little creatures.

In search of a cure against intolerance

What can be done against intolerance? How can it be cured? How can it be prevented? The results that were presented in this dissertation suggest that there are at least two pathways that seem promising. A first pathway is most likely to have an effect that is restricted to the religiously. It was argued that religion seems to threaten a pluralist society because, in general, religious persons have a desire to protect their cultural traditions from the influence of deviating opinions and life-styles. Hence, a lot seems to depend on how religion and the own cultural traditions are being perceived. This is where clergy, catechists and teachers come into play. If they consistently propose interpretations of religious contents and cultural tradition in an open way, and if they allow for and positively evaluate plenty of diversity in opinions and life-styles, this might affect the religiously, redirecting them towards a less conservative stance and a more open worldview. After all, listening to authority figures and religious leaders is one of their characteristics.

A second pathway is likely to have an effect on both religious and a-religious persons. The key feature is cognitive functioning. All cognitive rigidity measures that were included in this dissertation were found to relate to conservatism and racism (although not all of these results are presented in the current dissertation). Moreover, relevant theorizing suggests that cognitive functioning might be important in the formation of so-

cio-political attitudes. Hence, this suggests that interventions aimed at the alteration of people's mode of cognitive functioning towards less cognitive rigidity might transform people in more tolerant human beings. Plenty of research following this line of reasoning has already been conducted that focuses on moral development and how this can be promoted (e.g., Power, Higgins & Kohlberg, 1989; Reimer, Paolitto & Hersch, 1983). The essence of this is the assumption that moral development can be stimulated by discussion moral topics with people who have reached a more advanced level of moral reasoning. Building on this, researchers set out to develop educational programs that make use of so called Moral Dilemma Discussions (see Claypoole, Moody & Peace, 2000; Codd, 1975; Enright, Colby & McMullic, 1977; Schlaefli, Rest & Thoma, 1985). The aim of these discussions is to transform youngsters into morally competent people who can distinguish good arguments from bad arguments and who can translate moral principles into just solutions for existing problems, even when prejudice, authority and majority opinion interfere with making decisions that are based on moral principles. The educational program that is proposed by Lind (1993, 2000a, 2000b, 2002a, 2002b) is one of the most recent and best elaborated educational programs. The main aims of this program are (1) learning to organize your argument by discovering that there are good and not so good reasons, (2) learning to appreciate good reasons even when given by opponents, and (3) learning that discussions on serious matters develop the quality of human life. Results obtained with this educational program are promising (Lind, 2002a, 2002b) and suggest that, maybe, the answer to the question whether intolerance can be cured or prevented is yes (see also Duriez, 2002d). And of course, one should not be looking for the approach that can most effectively combat intolerance. Instead, one should try to apply all of the strategies, each of which prove to be efficient to some extent, at the same time.

THE STRUCTURE OF THE HERD

PART 1

The Post-Critical Belief Scale

Abstract

To measure religious attitudes in a secularized context, Hutsebaut (1996, 1997a) constructed the Post-Critical Belief scale, which was considered to contain three subscales (Orthodoxy, External Critique and Historical Relativism). In a first study it is demonstrated that the two bipolar dimensions of the model of Wulff (1991, 1997) (Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic) characterized the internal structure of the Post-Critical Belief scale. In a two-dimensional representation of the Post-Critical Belief scale, four instead of three subscales emerged (Orthodoxy, External Critique, Relativism and Second Naïveté). Each of these subscales relates to one of the four quadrants in Wulff's model. Based on these findings a revised Post-Critical Belief scale was constructed, in order to elaborate each of the four subscales. This revised version was put to the test in a second and third study. The internal structure was demonstrated to be stable and replicable. The consequences of the revision are illustrated via the relationships between the subscales and racism.

Introduction

In the past, many researchers attempted to measure religious attitudes. Each of the measures was, almost by definition, colored by the prevailing conceptions of religion and the normative views of these researchers on what was to be regarded as a mature form of religion (e.g., the "quest is best" debate between Batson and the proponents of Allport's scale (Batson, 1976a)). However, cultural contexts differ, time passes and conceptions of religion keep changing. Therefore, there is a constant need to adjust existing instruments or, if necessary, replace them by new ones. Measures that were produced in an American setting and that once proved fruitful in a Flemish-Belgian cultural setting as well, like the instrument of Allport and Ross (1967) measuring intrinsic-extrinsic dimensions of religiosity and Batson's (1976a) instrument measuring the quest dimension, currently seem outdated. In Flanders, the different dimensions that used to appear (e.g., extrinsic, intrinsic and quest) are nowadays highly positively related to one another, and are no longer differentially related to external variables (Heps & Wellemans, 1994; Hutsebaut, 1996). Flemish participants these days seem to simply agree or disagree to *all* religiously colored statements, regardless of their specific content, thus presenting themselves as either indiscriminately pro- or anti-religious. An explanation for this might be that, in highly secularized countries – like Belgium and most other European countries – religion no longer holds an important social function. In contrast to the USA, it is seen as a private matter (Dobbelaere, 1996). When there is no reason to be extrinsically religious, a strong relationship is to be expected between the intrinsic value of one's belief and subscribing to items expressing the social benefits of church attendance or the instrumentality of prayer. Furthermore, since it is no longer obvious to be religious in a secularized context, it is likely that people who intrinsically value their belief will also question it.

Recently, Hutsebaut (1996, 1997a) constructed the Post-Critical Belief scale. The Post-Critical Belief scale is a new multidimensional instrument for measuring religious attitudes in a secularized context. In the present article, we present three subsequent studies that shed a new light on the validity and the interpretation of the subscales of the Post-Critical Belief scale. Before introducing these studies, the Post-Critical Belief scale and its theoretical framework will be presented.

Framework

Hutsebaut (1996, 1997) based the construction of the Post-Critical Belief scale on Wulff's (1991, 1997) heuristic model - one of the dominant models in the psychology of religion nowadays - which integrates various approaches to religion into one comprehensive framework. In the epilogue of his book, Wulff (1991, 1997) argued that the various approaches to religion can be located in a two-dimensional space. The vertical axis specifies the degree to which the objects of religious interest are granted participation in a transcendent reality (exclusion vs. inclusion of transcendence). The horizontal axis indicates whether religion is interpreted literally or symbolically (literal vs. symbolic).

These two dimensions define four basic attitudes toward religion: Literal Affirmation, Literal Disaffirmation, Reductive Interpretation and Restorative Interpretation. Literal Affirmation represents a position in which the literal existence of the religious realm is affirmed. This position is most clearly embodied by religious fundamentalism, but elements of this posture also appear among those who are not particularly conservative. According to Wulff (1991, 1997), this position, which is partly reflected in scales like Barron's (1963) Fundamentalist Belief scale, can only be sustained by rejecting those who doubt the validity of the conservative view. Therefore, it should not be surprising that, according to Wulff (1991, 1997), literal believers tend to score higher on measures of prejudice and lower on cognitive development, and can be characterized as rigid and low in ability to adapt. Literal Disaffirmation represents a position in which the existence of the religious realm is rejected, but in which the possibility that religious language has a symbolic meaning is lost out of sight. So, like in the first quadrant, religious language is understood in a literal way. The difference, however, lies in the rejection of what is written or said. If anything is made absolute, it is rational, formal principles of knowledge, or scientific method. According to Wulff, this position is partly reflected in what is identified in the literature as the indiscriminately anti-religious orientation (Allport & Ross, 1967), and in Barron's (1963) Fundamentalist Disbelief scale. People occupying this quadrant tend to be less dogmatic and more intellectual than many of the religious subjects, but also less fair-minded, less capable to evaluate ideas, rather rigid and low in ability to adapt. Reductive Interpretation, represents a position in which the existence of the religious realm is rejected, and in which a privileged perspective of the true but hidden meaning of religion's myths and rituals is claimed. This quadrant is derived from the work of Ricoeur (1970), who argued that in modern hermeneutics, in order to clear away from religious symbols the excrescence of idolatry and illusion, a Reductive Interpretation is necessary. In this respect, he refers to the so-called Masters of Suspicion (Marx, Freud & Nietzsche). Wulff (1991, 1997) draws on findings obtained with closely related scales, such as Batson's (1976a) Quest scale and Barron's (1963) Enlightenment Disbelief scale, to fill out a portrait of persons in this quadrant, and concludes that these persons are complex, socially sensitive and insightful, relatively unprejudiced and original. Restorative Interpretation, represents a position in which the existence of the religious realm is affirmed, but in which one tries to encompass and go beyond all possible reductive interpretations in order to find the symbolic meaning of the religious language. Again, this quadrant is derived from the work of Ricoeur (1970), who argued that in modern hermeneutics, in order to make it possible for the object of suspicion to be restored to an object of understanding and faith, a Restorative Interpretation is necessary. In this respect, Ricoeur introduced the concept of Second Naïveté. According to Wulff (1991, 1997), characterizing persons who occupy this position is more difficult, for until recently, they have been largely neglected in empirical research. Moreover, given its profoundly individual character, this quadrant is probably the most difficult to operationalize with standardized questionnaires.

Nevertheless, this posture might be represented by Fowler's (1981) fifth stage (conjunctive faith). Research with scales designed to operationalize this stage might therefore cast light on this position.

Construction

Inspired by the ideas of Ricoeur (1970) and Wulff's integrative framework on the various approaches to religion (Wulff, 1991), Hutsebaut (1996) formulated 24 statements which were assumed to capture the various approaches to religion within a Roman Catholic (but secularized) context. Especially the concept of Second Naïveté was focused on, since it plays a central role in Wulff's model, but had been barely empirically investigated. When these statements were presented to a sample of adult subjects, three predominantly unipolar factors emerged after applying factor analysis followed by a VARIMAX rotation. The three rotated factors were called Orthodoxy, External Critique and Historical Relativism. Based on the item content and the external relationships of the factors, Orthodoxy was interpreted as a measure of Literal Affirmation, External Critique as a measure of Reductive Interpretation and Historical Relativism as a of measure Restorative Interpretation. For instance, Orthodoxy correlated positively with literal thinking and religious certainty, Historical Relativism correlated positively with quest belief and openness for complex questions, and External Critique correlated positively with autonomy and negatively with religious certainty. In subsequent studies, factor analysis confirmed the existence of these three factors (Hutsebaut, 1997; Desimpelaere et al., 1999) and supported the interpretation of Orthodoxy and Historical Relativism. The findings of Desimpelaere et al. (1999), however, raised doubt about the interpretation of External Critique. Both Orthodoxy and External Critique were found to be positively related to Perry's (1970) psycho-epistemological style of Dualism. This style is characterized by a preference for unambiguity: There is only one solution for each problem. These findings suggested that both Orthodoxy and External Critique are rooted in a literal mode of thinking and that the External Critique items, in terms of Wulff's model, were measuring Literal Disaffirmation instead of Reductive Interpretation.

Perspectives and problems

Based on the empirical research, we can conclude that the Post-Critical Belief scale is a promising scale for the measurement of religious attitudes in a secularized context. The three dimensions of this scale are empirically distinguished and are differentially related to external variables. The empirical research, however, also indicated two problems that form the focus of the present research. First, the internal structure of the Post-Critical Belief scale does not fit Wulff's model very well. According to Wulff (1991, 1997), the domain of religion is characterized by two bipolar dimensions (Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic) that give rise to four approaches to religion. Instead of two bipolar dimensions, three unipolar factors are identified in the Post-Critical Belief scale. This raises doubts about the use of Wulff's model for the interpretation of the three dimensions of the Post-Critical Belief scale. Second, alt-

hough the items of the External Critique dimension were constructed to measure Reductive Interpretation, external correlations suggest that this dimension actually measures Literal Disaffirmation.

The internal structure

In the present investigation, we dealt with the first problem by extensively investigating the internal structure of the Post-Critical Belief scale. This was the focus of the first study. In this study, we applied various methods of analysis in order to get a better view on the internal structure of this scale and its possible relation to Wulff's model. These led to a revision of the Post-Critical Belief scale. In order to represent more fully the religious attitude domain, several new items were constructed. The validity of the revised version of the Post-Critical Belief scale is investigated in the second and the third study.

The relation with racism

The problem of the interpretation of External Critique is being investigated by focusing on the relation between religious attitudes and racism. This concept was chosen as a marker for the discriminant validity of the subscales of the Post-Critical Belief scale, because the relation between religiosity and racism is probably the most important paradox within the psychology of religion. Whereas all world religions proclaim brotherly love, history is littered with moments in which religion has provided a justification for, or has given cause to, all kinds of atrocities directed towards people from a different race or culture. A number of historians and theologians concluded from this that religion should contrarily be considered as a catalyst for prejudice, racism, etc., and a lot of psychological and sociological research has been carried out to investigate whether this is true (for a recent overview: see Duriez & Hutsebaut, 2000). If the Post-Critical Belief scale can be interpreted in terms of Wulff's model (1991, 1997), straightforward predictions can be made with regard to the relation with racism. Orthodoxy, characterized by a rather fundamentalist closed-mindedness, should relate positively to racism. Historical Relativism, characterized by both an open and symbolic approach and an adherence to the core value of universal brotherly love that is been proclaimed by Christianity, should relate negatively to racism. The correlation with External Critique, though, depends on its position in Wulff's framework. If External Critique measures Reductive Interpretation, which is related to social sensitiveness and insightfulness (Wulff, 1991, 1997), then a negative relation to racism is to be expected. However, if External Critique measures Literal Disaffirmation, a positive relation to racism is to be expected. Intolerance for ambiguity, which is characteristic of literal thinking, is related to a higher susceptibility to racism (Sidanius, 1985). Thus, a negative relation between External Critique and racism would support Hutsebaut's (1996, 1997) original interpretation while a positive relation would support the interpretation of Desimpelaere et al. (1999). Whether and to which extent the relations between the dimensions of the Post-Critical Belief scale and racism support the interpretation of the internal structure of the Post-Critical Belief scale is investigated in all three studies.

STUDY 1

In a first study, we probed the internal structure of the original 24-item version of the Post-Critical Belief scale. Furthermore, we focused on the relationships between the subscales of this Post-Critical Belief scale and racism.

Method

Sample

The questionnaire was distributed by undergraduate students of the Faculty of Psychology of the Katholieke Universiteit Leuven (Belgium) in (Roman Catholic) schools and via organizations, relatives and friends. In total, they distributed 1500 questionnaires, of which 77% were returned. Some of them, however, were only partially filled out. All respondents were Flemish speaking Belgians; 56.5% were female. The age groups were as follows: 16-18 (21.9%), 19-25 (23.4%), 26-35 (7.8%), 36-45 (10.4%), 46-65 (26.7%) and 65+ (9.8%). The highest educated group of people (18.6%) consisted of people who had obtained a university degree or were university students, the second group of people (31.1%) had obtained a higher non-university degree or were attending higher non-university studies, the third group of people (29.9%) quit studying after completing secondary school or were currently last-year secondary school students, the fourth group of people (7.7%) quit after having completed a technical education (TSO), the fifth group of people (4.2%) quit after having completed a vocational education (BSO), and the lowest educated group of people (5.8%) consisted of people whose highest diploma was a primary school diploma. The level of Sunday mass attendance was high compared to that of the Flemish population: Whereas in the general population only about 10% regularly attend (Office of Church Statistics Brussels, personal communication, September 2000), 44.2% persons indicated to attend weekly or at least often, 29.3% indicated to attend on special occasions only, and 24.9% indicated to never attend.

Measures

Participants filled out the original Post-Critical Belief scale (Hutsebaut, 1996), consisting of 24 items which are to be rated on a 7-point Likert scale (1=completely opposed, 4=neutral, 7=completely in agreement). Of the 24 items, 8 items try to capture Orthodoxy (O0 and O1-O7), 8 items try to capture External Critique (E0 and E1-E7), and 8 items try to capture Historical Relativism (H1-H8) (the items can be found in Appendix). Participants also filled out a racism scale (Billiet & De Witte, 1991) which consisted of 9 items. The items are to be rated on a 5-point Likert scale (1=completely opposed, 3=neutral, 5=completely in agreement). For practical reasons, we presented this scale only to a subsample of the total sample ($\underline{N}$ = 518). The internal consistency (Cronbach alpha) of this scale was .88 (*Mean*=2.51,

SD=1.37).[1]

Results

Multidimensional Scaling

We analyzed the internal structure of the Post-Critical Belief scale via multidimensional scaling, which unveils the "hidden structure" of items (or stimuli in general) by representing them as points in a geometrical space in such a way that the distances between the points reflect the psychological dissimilarities between the items as well as possible (Borg & Groenen, 1997; Davison, 1983; Kruskal & Wish, 1978).

We carried out a non-metric multidimensional scaling [2] on the dissimilarity data between the 24 items of the original Post-Critical Belief scale.[3] As a dissimilarity measure, we used the Euclidean distances between the standardized items. The two-dimensional solution had a Kruskal stress of .09, explained 96% of the variance in the optimally transformed dissimilarities, and can be said to fit the data well (Borg & Groenen, 1997, p. 38).[4] One way to interpret a configuration generated by multidimensional scaling is the neighborhood interpretation (Kruskal & Wish, 1978, p. 43). In this interpretation one looks for regions within the configuration that contain a distinguishable type of items. In a two-dimensional representation of the 24 Post-Critical Belief items, three regions could be identified, each of them containing items supposed to belong to one single subscale (see Figure 1). The upper left quadrant, quadrant 1, encompasses the Orthodoxy items (except for item O0). The lower left quadrant, quadrant 2, encompasses the External Critique items (except for item E0). Both the upper and the lower right quadrants, quadrants 3 and 4, encompass the Historical Relativism items. The Historical Relativism items are spread out over the two right quadrants. A content analysis of the items indicated interpretative differences for the items that are situated in the upper right quadrant, quadrant 4, and the items situated in the lower right quadrant, quadrant 3 (see Figure 1 and Appendix). The items of quadrant 4 clearly capture an inclusion of transcendence, while the items in quadrant 3 capture a more relativist stance. Therefore, conceptually, the items of quadrant 4 can be interpreted in terms of Restorative In-

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[1] Billiet and De Witte (1991) argued that this scale is comprised of two subscales. The first would 'merely' measure xenophobia (a negative attitude towards immigrants). The second would actually measure racism: The negatively perceived characteristics of the immigrants are attributed to biological differences. However, both subscales correlated .70, nearly as high as their internal consistencies (.80 and .86 respectively). Furthermore, they yielded one robust principle components factor suggesting that the items tap a single dimension, and they were almost perfectly similarly related to the subscales of the Post-Critical Belief scale. For these reasons, only one general racism dimension was retained.

[2] We also carried out a metric multidimensional scaling analysis (Kruskal & Wish, 1978). This analysis yielded (almost) identical results with coordinates correlating over .98 for the two analyses.

[3] In previous research with the Post-Critical scale (Hutsebaut, 1996; 1997; Desimpelaere et al., 1999), two items have been inversed before the analyses (O0 and E0). In order to stay close to the data, we analyzed all items as they have been responded to.

[4] The Kruskal stress declined from .21 over .09, .06, .05, .04 to .04 for respectively a one-dimensional up to a six-dimensional solution. These different solutions explained respectively 86%, .96%, .98%, .98%, .98% and .98% of the variance in the optimally transformed dissimilarities. The two dimensional solution was retained because this solution was theoretically well interpretable and already accounted for nearly all of the variance.

terpretation and can be seen as an measuring what Ricoeur (1970) called Second Naïveté. Taking a relativistic stance towards religion fits the Reductive Interpretation in Wulff's model. Because of the content of the items in quadrant 3 we will refer to this quadrant as Relativism. The two items that were reversed in the original use of the Post-Critical Belief scale (item O0 and item E0) (Hutsebaut, 1996, 1997; Desimpelaere et al., 1999) emerged opposite of the other items belonging to the same subscales. This could be expected, since we decided to stay close to the data and did not reverse these items. Because these items emerged in a meaningful part of the configuration without reversion, it is meaningful to consider them to belong to a different Post-Critical Belief subscale: Item O0 can be considered to belong to External Critique, whereas item E0 can be considered to belong to Historical Relativism.

Figure 1   *Two-dimensional configuration of the 24 Post-Critical Belief items (study 1)*
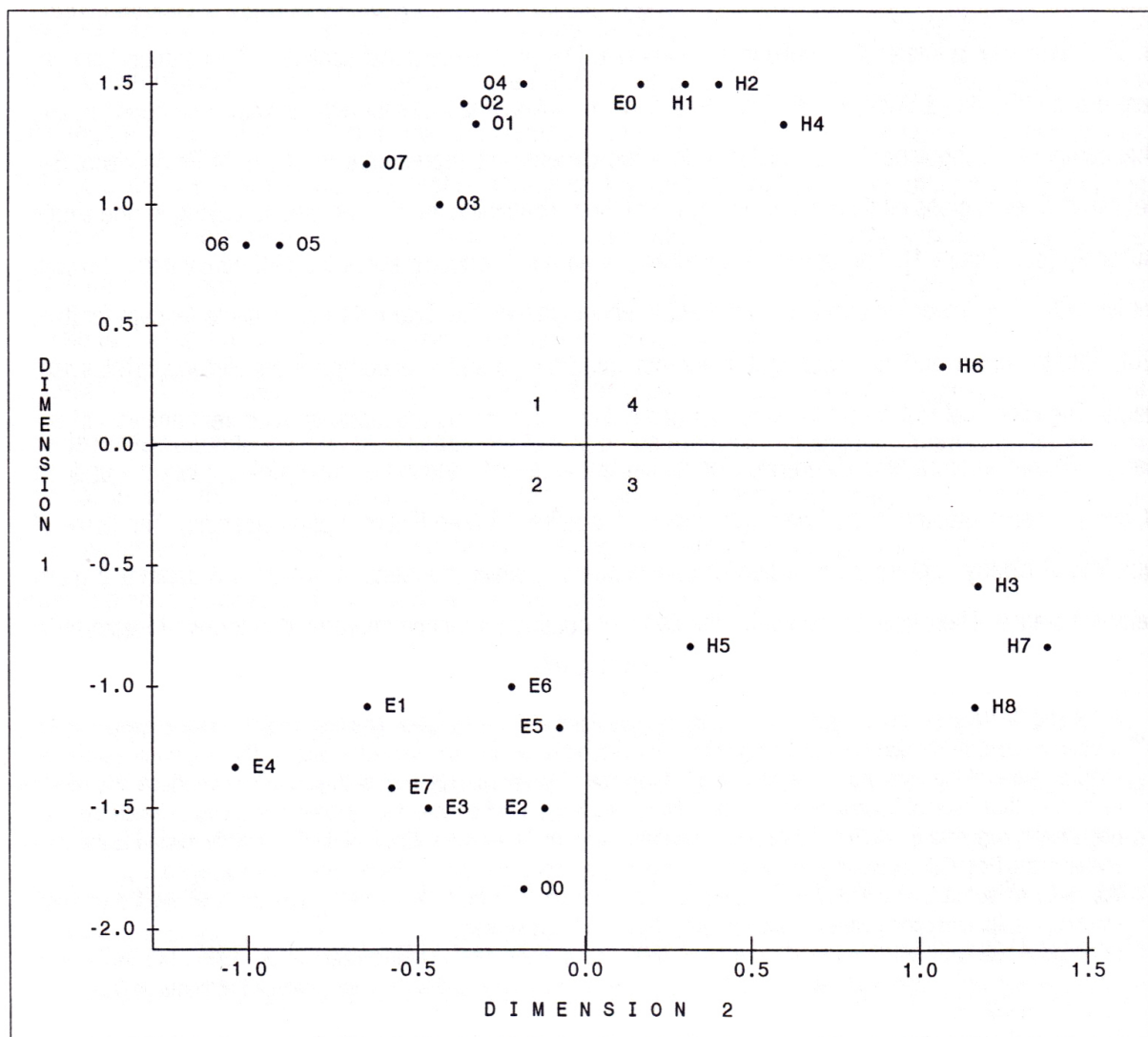
If External Critique constitutes an operationalization of Literal Disaffirmation, as hypothesized by Desimpelaere et al. (1999), the dimensions of the two-dimensional representation can be interpreted perfectly in terms of Wulff's model. The first bipolar dimension can be interpreted as Exclusion vs. Inclusion of Transcendence (see Figure 1): The items that were intended to measure the affirmation of the transcendent realm and the items that were intended to measure disaffirmation get clearly separated in this dimension. The second bipolar dimension can clearly be interpreted as Literal vs. Symbolic (see Figure 1): The items measuring literal (dis)affirmation of the transcendent realm and the items measuring symbolic (dis)affirmation get separated in this dimension. The present two-dimensional representation is considered as a point of reference for the internal structure analyses throughout this article.

Principal Component Analysis

The discrepancy between the results of the multidimensional scaling revealing two bipolar dimensions as predicted by the model of Wullf (1991, 1997) and the discovery of three (predominantly) unipolar factors by factor analyses after VARIMAX rotation (Hutsebaut, 1996, 1997; Desimpelaere et al., 1999) calls for an explanation. Therefore, we subjected the responses to the 24-item Post-Critical Belief scale to a principal component analysis. In line with the original outlook on the Post-Critical Belief scale, Cattell's scree test (Cattell, 1966) pointed to three components.[5] A three-componential solution accounted for 45% of the total variance. In order to investigate the relationship with the two-dimensional solution of the multidimensional scaling, the three-component solution was rotated towards the two-dimensional solution using an orthogonal Procrustes rotation (Schönemann, 1966; see also McCrae et al., 1996). After doing this, two bipolar components and one unipolar component showed up (see Table 1).

Table 1 Component loadings in Study 1 for the original version of the Post-Critical Belief scale with three components after Orthogonal Procrustes Rotation to the reference configuration (= the two-dimensional representation of items in Study 1)

Item	C1	C2	C3	Item	C1	C2	C3	Item	C1	C2	C3
O0	-.54	.04	.12	E0	.67	.25	.25	H1	.63	.32	.28
O1	.53	-.26	.34	E1	-.46	-.29	.45	H2	.52	.40	.31
O2	.59	-.27	.27	E2	-.54	-.13	.33	H3	-.20	.46	.41
O3	.38	-.31	.44	E3	-.60	-.24	.27	H4	.70	.43	.23
O4	.69	-.14	.28	E4	-.49	-.45	.17	H5	-.25	.17	.56
O5	.30	-.42	.38	E5	-.37	-.07	.44	H6	.11	.27	.44
O6	.29	-.52	.37	E6	-.38	-.07	.45	H7	-.29	.50	.21
O7	.41	-.39	.32	E7	-.54	-.26	.26	H8	-.33	.39	.26

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[5] The eigenvalues for the first six components, after extraction, were 5.51, 2.96, 2.32, 1.08, 1.02 and 0.90 respectively.

The first component could be interpreted as Exclusion vs. Inclusion of Transcendence: Both the Ortho-doxy items and the Second Naïveté items loaded positively onto this dimension, whereas both the External Critique items and the Relativism items loaded negatively onto this dimension. The second component could be interpreted as Literal vs. Symbolic: Both the Orthodoxy items and the External Critique items loaded negatively onto this dimension whereas both the Relativism items and the Second Naïveté items loaded positively onto this dimension. Tucker's Phi indices suggested high congruence between the first two components and the two dimensions found by multidimensional scaling: .99 for Exclusion vs. Inclusion of Transcendence and .95 for Literal vs. Symbolic. All items loaded positively on the third component.

Post-Critical Belief subscales

For each of the original subscales, scale scores were computed by averaging the item scores of the items theoretically belonging to these subscales.[6] Estimates of internal consistency (Cronbach alpha's) were .79 for Orthodoxy (Mean=2.69, SD=1.29) (8 items), .79 for External Critique (Mean=3.78, SD=1.32) (8 items), and .62 for Historical Relativism (Mean=4.24, SD=1.09) (8 items). Orthodoxy was negatively relat-ed to External Critique ($\underline{r}$=-.26, $\underline{p}$<.0001) and positively to Historical Relativism ($\underline{r}$=.19, $\underline{p}$<.0001). External Critique and Historical Relativism were slightly negatively related ($\underline{r}$=-.15, $\underline{p}$<.0001).

Based on the multidimensional scaling and the principal component analysis, Historical Relativism was split into two subscales: Relativism and Second Naïveté. Estimates of internal consistency (Cronbach alpha's) were .55 for Relativism (Mean=4.57, SD=1.28) (4 items), and .73 for Second Naïveté (Mean =3.92, SD=1.58) (4 items). The latter rose up to .82 when item H6 was left out of the analysis. We de-cided to do so. Relativism related negatively to Orthodoxy ($\underline{r}$=-.23, $\underline{p}$<.0001), positively to External Cri-tique ($\underline{r}$=.31, $\underline{p}$<.0001) and slightly positively to Second Naïveté ($\underline{r}$=.07, $\underline{p}$<.05). Second Naïveté related positively to Orthodoxy ($\underline{r}$=.46, $\underline{p}$<.0001) and negatively to External Critique ($\underline{r}$=-.51, $\underline{p}$<.0001).

Relationships with racism

Racism was positively related to both Orthodoxy ($\underline{r}$=.35, $\underline{p}$<.0001) and External Critique ($\underline{r}$=.14, $\underline{p}$<.005), and was slightly negatively related to Historical Relativism ($\underline{r}$=-.10, $\underline{p}$<.05). However, taking into account the results of the previous analyses, it became apparent that the slightly negative correlation between Historical Relativism and racism was due to the existence of a negative correlation between Relativism and racism ($\underline{r}$=-.16, $\underline{p}$<.0005). Second Naïveté and racism were unrelated ($\underline{r}$=-.03, n.s.).[7]

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6   Item O0 and item E0 were reversed as was done in the original scale.

7   The relationships between the four religiosity scales and racism are not affected by the educational level of the subjects. In regression analyses with the religiosity scales, educational level and the interaction effects between the religiosity scales and educational level as predictors and racism as criterion, all interaction effects turned out to be non-significant: t(502)=1.80, n.s., for the interaction between Orthodoxy and educational level; t(502)=-0.83, n.s., for the interaction be-tween External Critique and educational level; t(502)=1.57, n.s., for the interaction between Relativism and educational level; and t(502)=-0.43, n.s., for the interaction between Second Naïveté and educational level.

Conclusion

Two bipolar dimensions were identified that could be interpreted in terms of Wulff's model of Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic (Wulff, 1991, 1997). This representation sheds new light on the Post-Critical Belief subscales. Contrary to the original interpretation (Hutsebaut, 1996, 1997), External Critique is situated at the literal side of the second dimension. Furthermore, Historical Relativism appears to be comprised of the subscales Second Naïveté [8] and Relativism, which correspond to Wulff's Restorative and Reductive Interpretation respectively.[9] The stability of the configuration was supported via method convergence. After orthogonal Procrustes rotation of the component solution to the multidimensional scaling solution, the first two components were highly similar to the two dimensions. However, the third component cannot be interpreted in terms of any religious attitude dimension. After orthogonal Procrustes rotation all items loaded positively onto this third component, even items with a clearly contradictory content (e.g., E1 and H1). The existence of differences between subjects in response style, especially acquiescence, forms a plausible explanation for the emergence of this component. If there exist systematic differences between subjects in the tendency to endorse items, irrespective of their specific content, this will exert a systematic bias on the correlations between the items (see also Green, Goldman & Salovey, 1993): Positive correlations will become more positive and negative correlations will be suppressed. Multidimensional scaling is only marginally affected by a response style that systematically influences all correlations since it represents the pattern of relations between the items and not the absolute size of these relations. Factor analysis, on the contrary, does represent the absolute size of these relations and, hence, will be affected by a response tendency. A VARIMAX-rotation will then produce unipolar factors, which represent the positive correlations. However, if the factor structure is rotated to a structure that is unaffected by this response tendency - as is done here by a rotation to the two-dimensional representation - an extra factor, representing interindividual differences in the systematic response tendency, should show up.

The renewed interpretation of External Critique is supported by its positive relation to racism. The differential relation between Second Naïveté and racism on the one hand and Relativism and racism on the other hand supports the distinction between both aspects of Historical Relativism. Even though the Relativism scale is far less reliable than the Second Naïveté scale, a negative relation was found between Relativism and Racism, whereas no relation was found between Second Naïveté and racism. Results thus provide support for the interpretation of the Post-Critical Belief scale in terms of Wulff's model (Wulff, 1991, 1997).

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[8]   In previous research, this dimension was also labeled Historical Awareness (Duriez, Hutsebaut & Roggen, 1999) and Symbolic Belief (Fontaine et al., 2000; Luyten et al., 1998). We prefer the term Second Naiveté, because it explicitly points to the concept of Ricoeur (1965) which we tried to operationalize.

[9]   This interpretation receives support from the relations with frequency of Sunday mass attendance. These were .48 (p<.0001) for Orthodoxy, -.48 (p<.0001) for External Critique and .36 (p<.0001) for Historical Relativism. However, these relations were -.08 (p<.01) for Relativism and .57 (p<.0001) for Second Naiveté.

STUDY 2

The renewed interpretation of External Critique and the disentanglement of Historical Relativism in Relativism and Second Naïveté rise questions about the construct representation of the 24 items of the original Post-Critical Belief scale. Relativism, for instance, was constituted of four items only and appeared to have low internal consistency. Therefore, a revised 33-item version of the Post-Critical Belief scale was developed. First, we decided to change the formulation of item O0 because some of the participants of the first study reported difficulties filling out this item. Probably this was due to the unintended complexity of this item. The renewed formulation of this item can be found in the Appendix (O8). Second, for similar reasons we decided to change some of the External Critique items (E0, E5 and E6). Probably, the difficulty with these items was that they did not clearly enough capture a stance of unbelief. We decided to substitute them by a couple of new items (E8-E11, see Appendix). In this way we also aimed to broaden the range of the concept. Third, we found it necessary to further elaborate both Relativism and Second Naiveté. Concerning Relativism, we decided to include extra items (R5-R8, see Appendix), further elaborating what we thought was typical of this position. To avoid confusion, we relabeled the original Relativism items (see Appendix). Concerning Second Naiveté, we decided to leave out item H6, relabel the retained items (see Appendix) and elaborate the scope of the concept's operationalization by including some new items (S5-S9, see Appendix) so that it would more closely resemble the concept of Ricoeur (1970). Empirical evidence for the validity of this revised version, based on internal structure analyses and the relationship with racism, is presented in this second study.

Method

Sample

The questionnaires were distributed by undergraduate students. In total, they distributed 300 questionnaires, of which 76% were returned. Some of them, however, were only partially completed. All respondents were Flemish-speaking Belgians; 52.2% were female. The age groups were: 16-18 (4.4%), 19-25 (52.6%), 26-35 (7.0%), 36-45 (8.3%) and 46-65 (27.7%). The highest educated group (89.5%) consisted of people who had obtained a university degree or were either university students, the second group (6.6%) consisted of people who had completed or were attending a non-university higher education. The level of Sunday mass attendance was comparable to that in our first study: 40.1% claimed to attend weekly or at least often, 33.3% claimed to attend on special occasions only and 25.9% claimed to never attend.

Measures

Participants completed the renewed Post-Critical Belief scale. Of the 33 items, 8 try to capture Ortho-

doxy (O1-O8), 9 try to capture External Critique (E1-E4, E7-E12), 8 try to capture Relativism (R1-R8), and 8 try to capture Second Naïveté (S1-S3, S5-S9) (see Appendix). Participants also completed the racism scale. The internal consistency (Cronbach alpha) of this scale was .84 (*Mean*=2.04, *SD*=0.93).

Results

Multidimensional Scaling

A non-metric multidimensional scaling on the Euclidean distances between the 33 standardized items of the revised Post-Critical Belief scale was performed. The two-dimensional solution (see Figure 2) fitted the data well. This two-dimensional solution had a Kruskal stress of .11 and explained .94% of the variance in the optimally transformed dissimilarities.[10] In order to optimally compare the internal structure of the revised version of the Post-Critical Belief scale to the internal structure of the original version, an orthogonal Procrustes rotation (Schönemann, 1966) towards the internal structure of this original version was applied. After rotation, Tucker's Phi indices indicated a high congruence for both dimensions: .96 for Exclusion vs. Inclusion of Transcendence and .92 for Literal vs. Symbolic.[11]

As in Study 1, the four quadrants of the two-dimensional representation could straightforwardly be interpreted (see Figure 2). The upper left quadrant, quadrant 1, encompasses the Orthodoxy items. The lower left quadrant, quadrant 2, encompasses the External Critique items and one of the supposed Relativism items (R8). The lower right quadrant, quadrant 3, encompasses the Relativism items (except R4 and R8) and one of the supposed Second Naiveté items (S9). Finally, the upper right quadrant, quadrant 4, encompasses the Second Naiveté items (except for S9) and one of the Relativism items (R4). Thus, in total, 30 items emerged in the hypothesized quadrant whereas 3 items emerged in a quadrant adjacent to the hypothesized quadrant.

Principal Component Analysis

The revised 33-item Post-Critical Belief scale was also subjected to a principal component analysis. Cattell's scree test pointed to three components.[12] A three-componential solution accounted for 37% of the total variance. After on orthogonal Procrustes rotation (Schönemann, 1966) towards the dimensional structure generated by multidimensional scaling in the first study, again two bipolar and one unipolar component showed up (see Table 2). Tucker's Phi indices suggested high congruence between the two

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[10]   The Kruskal stress declined from .28 over .11, .08, .06, .05 to .04 for respectively a one-dimensional up to a six-dimensional solution. These different solutions explained respectively 76%, .94%, .96%, .98%, .98% and .98% of the variance in the optimally transformed dissimilarities. The two dimensional solution was retained because this solution was theoretically well interpretable and already accounted for nearly all of the variance.

[11]   The congruence with the configuration of the first study was computed on the basis of 19 items that were common in both the original and the revised version of the Post-Critical Belief scale.

[12]   The eigenvalues for the first six components, after extraction, were 6.49, 3.61, 2.16, 1.43, 1.30 and 1.18 respectively.

bipolar components and the dimensions found in the first study: .97 for Exclusion vs. Inclusion of Transcendence and .91 for Literal vs. Symbolic.

Figure 2   Two-dimensional configuration of the 33 Post-Critical Belief items (study 2)
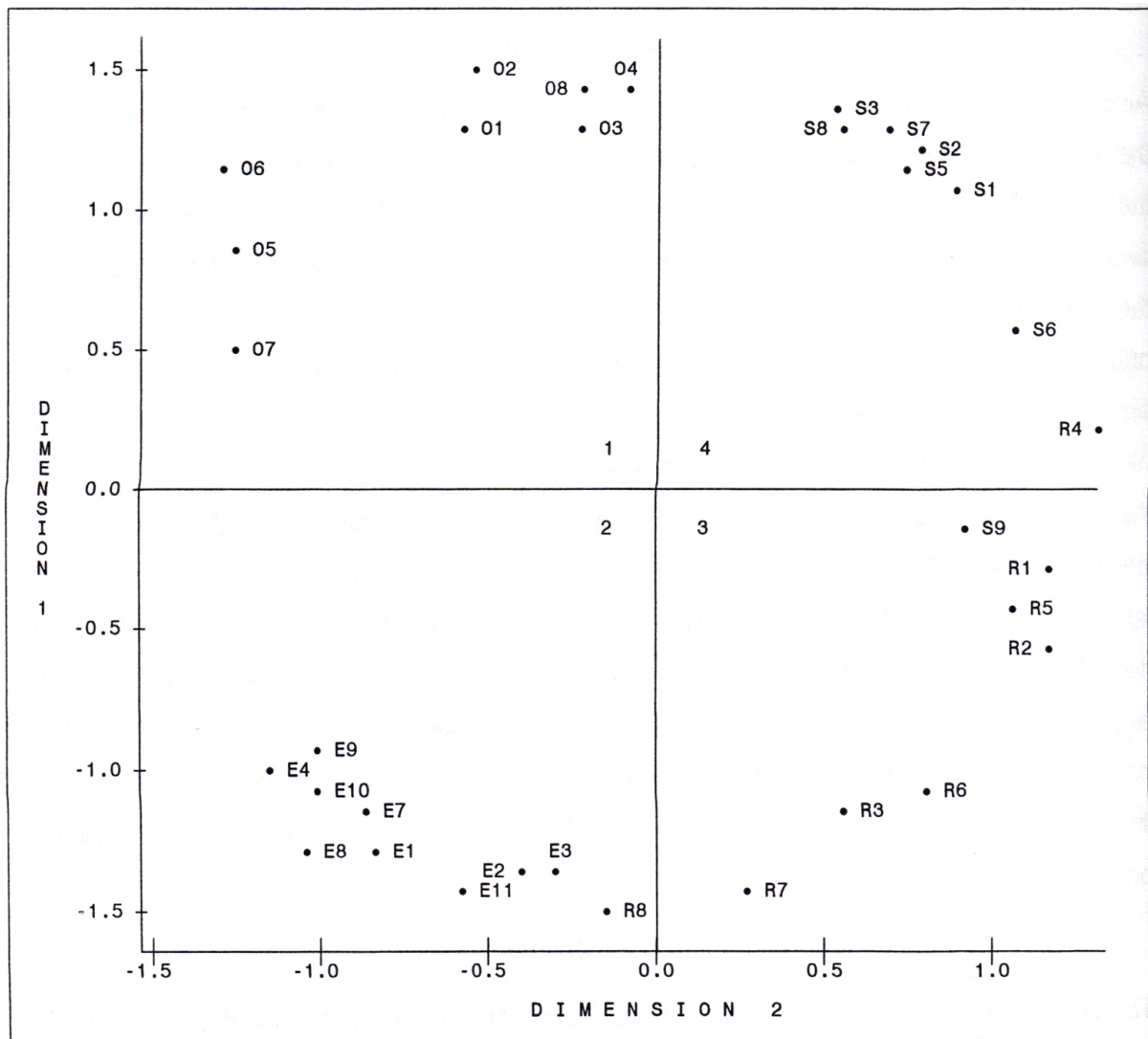
Post-Critical Belief subscales

For each subscale, scale scores were computed by averaging the scores of all of the items theoretically belonging to the subscales of the revised Post-Critical Belief scale.[13] Estimates of internal consistency (Cronbach alpha's) were .76 for Orthodoxy (Mean=2.18, SD=1.00) (8 items), .84 External Critique (Mean=5.04, SD=0.92) (9 items), .65 for Relativism (Mean=5.08, SD=0.93) (8 items), and .87 for Sec-

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13   The items falling into a wrong quadrant (R4, R8 and S9) were also included for the subscale construction. The decision to include these items was taken because study 3 showed that these mismatches are due to sampling fluctuations.

ond Naiveté (Mean=4.65, SD=1.37) (8 items). Orthodoxy was negatively related to External Critique ($r=$ -.35, $p<.0001$) and Relativism ($r=-.49$, $p<.0001$) and was positively related to Second Naiveté ($r=.34$, $p<.0001$). External Critique was positively related to Relativism ($r=.30$, $p<.0001$) and was negatively related to Second Naiveté ($r=-.62$, $p<.0001$). Relativism and Second Naiveté were unrelated ($r=.10$, n.s.).

Table 2   *Component loadings in Study 2 for the revised version of the Post-Critical Belief scale with three components after Orthogonal Procrustes Rotation to the reference configuration (= the two-dimensional representation of items in Study 1)*

Item	C1	C2	C3	Item	C1	C2	C3
O1	.55	-.23	.35	E1	-.58	-.39	.25
O2	.58	-.23	.07	E2	-.58	-.09	.24
O3	.47	-.19	.37	E3	-.64	-.06	.20
O4	.67	-.12	.27	E4	-.45	-.42	.29
O5	.23	-.44	.25	E7	-.46	-.30	.25
O6	.37	-.49	.02	E8	-.62	-.48	.06
O7	.21	-.43	.32	E9	-.40	-.37	.26
O8	.58	-.18	.32	E10	-.48	-.31	.30
				E11	-.64	-.22	.09
Item	C1	C2	C3	Item	C1	C2	C3
R1	-.15	.48	.46	S1	.47	.46	.15
R2	-.25	.52	.37	S2	.47	.48	.15
R3	-.45	.34	.09	S3	.70	.45	.14
R4	.02	.42	.24	S5	.47	.39	.26
R5	-.15	.36	.45	S6	.14	.48	.27
R6	-.36	.45	.10	S7	.61	.52	.14
R7	-.40	.20	.11	S8	.69	.40	.19
R8	-.60	.08	.03	S9	-.07	.30	.57

Relationships with racism

Again, we expected both Orthodoxy and External Critique to be positively related to racism (Hypothesis 1 and 2). Based on our previous findings, we expected Relativism to be negatively related to racism (Hypothesis 3) and Second Naiveté to be unrelated to racism (Hypothesis 4). Results supported hypotheses 1, 3 and 4. Racism was positively related to Orthodoxy ($r=.35$, $p<.0001$), negatively related to Relativism ($r=-.21$, $p<.005$), and unrelated to Second Naiveté ($r=-.05$, n.s.). Hypothesis 2 received no support. Racism and External Critique were unrelated ($r=.04$, n.s.).

Conclusion

Based on the congruence measures between the internal structure of the 33-item revised Post-Critical Belief scale and the 24-item original version, we can conclude that the internal structures are (almost)

identical. The two dimensions fit Wulff's Exclusion vs. Inclusion of Transcendence dimension and Literal vs. Symbolic dimension (Wulff, 1991, 1997). Again, Orthodoxy measured Literal Affirmation, External Critique measured Reductive Interpretation, Relativism measured Reductive Interpretation and Second Naiveté measured Restorative Interpretation.[14] But although the internal structure of the revised version is highly similar to the original version, the revised version can appeal to a better construct representation of the four separate quadrants.

The relationships with racism, where in line with the findings of the first study for three of the four Post-Critical Belief subscales. Again, a positive relationship with Orthodoxy, a negative relationship with Relativism and no relationship at all with Second Naïveté was found. However, the expected positive relationship between External Critique and racism was not observed. Nevertheless, despite the failure to observe a direct relationship between External Critique and racism, a well interpretable internal structure, which strongly relates to the structure in Study 1, was revealed in this second study.

STUDY 3

In this third study, we tried to replicate the results of study 2. Our main question is how stable the two bipolar religious attitude dimensions are. Furthermore, it is investigated whether the failure to find a relationship between External Critique and racism is generalizable to other samples. This could point to specific effects of the newly constructed External Critique items.

Method

Sample

Participants were 338 first year psychology students at the Katholieke Universiteit Leuven (Belgium), ranging in age from 17 to 24 years old (*Mean*= 18). All of them were Flemish speaking Belgians; 82% were female. Participation was obligatory and all participants received course credit. Full confidentiality and anonymity were guaranteed. Of all participants, 9% indicated to attend Sunday mass weekly or at least often, 67.2% indicated to attend only at special occasions, and 23.3% indicated to never attend.

Measures

Participants completed the revised 33-item Post-Critical Belief scale as presented in Study 2. Participants also completed the racism scale. The Cronbach alpha of this scale was .84 (*Mean*=1.96, *SD*=0.61).

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[14] Correlations with frequency of Sunday mass attendance were .49 (p<.0001) for Orthodoxy, -.66 (p<.0001) for External Critique, -.21 (p<.005) for Relativism and .63 (p<.0001) for Second Naiveté.

Results

Multidimensional Scaling

A non-metric multidimensional scaling analysis on the Euclidean distances between the standardized items of the 33-item revised Post-Critical Belief scale was carried out. A two-dimensional solution (see Figure 3) was adequate to represent the internal structure.[15] This solution had a Kruskal stress of .13 and explained 90% of the variance in the optimally transformed dissimilarities. After an orthogonal Procrustes rotation (Schönemann, 1966) towards the dimensional structure of the original version, Tucker's Phi indices suggested high congruence for both dimensions: .97 for Exclusion vs. Inclusion of Transcendence and .93 for Literal vs. Symbolic. This configuration was also highly similar to the configuration in Study 2 (Tucker's Phi of .90 for Exclusion vs. Inclusion of Transcendence and of .93 for Literal vs. Symbolic).[16] As in Study 1 and 2, the quadrants of the two-dimensional representation could straightforwardly be interpreted (see Figure 3). The upper left quadrant, quadrant 1, encompasses the Orthodoxy items (except 08). The lower left quadrant, quadrant 2, encompasses the External Critique items. The lower right quadrant, quadrant 3, encompasses the Relativism items (except R7). Finally, the upper right quadrant, quadrant 4, encompasses the Second Naiveté items, one of the Orthodoxy items (O8) and one of the Relativism items (R7). Thus, in total, 31 out of the 33 items emerged in the hypothesized quadrant. The two items shifting to an adjacent quadrant are different items than the items shifting to an adjacent quadrant in the previous study. This suggests that these small shifts are resulting from sampling fluctuation.

Principal Component Analysis

Again, the Post-Critical Belief scale was subjected to a principal component analysis. Cattell's scree test pointed to a three-componential solution, which accounted for 45% of the total variance.[17] When orthogonally rotating this solution to the two-dimensional solution of study 1, the two bipolar components and the unipolar component showed up (see Table 3). Tucker's Phi indices suggested high congruence between the first two components and the dimensions generated by multidimensional scaling in study 1: .97 for Exclusion vs. Inclusion of Transcendence and .93 for Literal vs. Symbolic. If the three-componential solution of the present study is rotated to the two-dimensional scaling solution of study 2, the congruence is even higher (.99 for Exclusion vs. Inclusion of Transcendence and .96 for Literal vs. Symbolic).

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[15] The Kruskal stress declined from .34 over .13, .09, .07, .06 to .05 for a one-dimensional up to a six-dimensional solution. These different solutions explained respectively 66%, .90%, .94%, .96%, .96% and .98% of the variance in the optimally transformed dissimilarities. The two dimensional solution was retained because this solution was theoretically well interpretable and already accounted for most of the variance.

[16] The congruence with the configuration of the first study was computed on the basis of 19 items that were common in both the original and the revised version of the Post-Critical Belief scale. The congruence with the configuration of the second study was computed on the basis of all 33 items of the revised version.

[17] The eigenvalues for the first six components after extraction were 8.07, 4.04, 2.24, 1.52, 1.33, 1.17.

Figure 3   *Two-dimensional configuration of the 33 Post-Critical Belief items (study 3)*
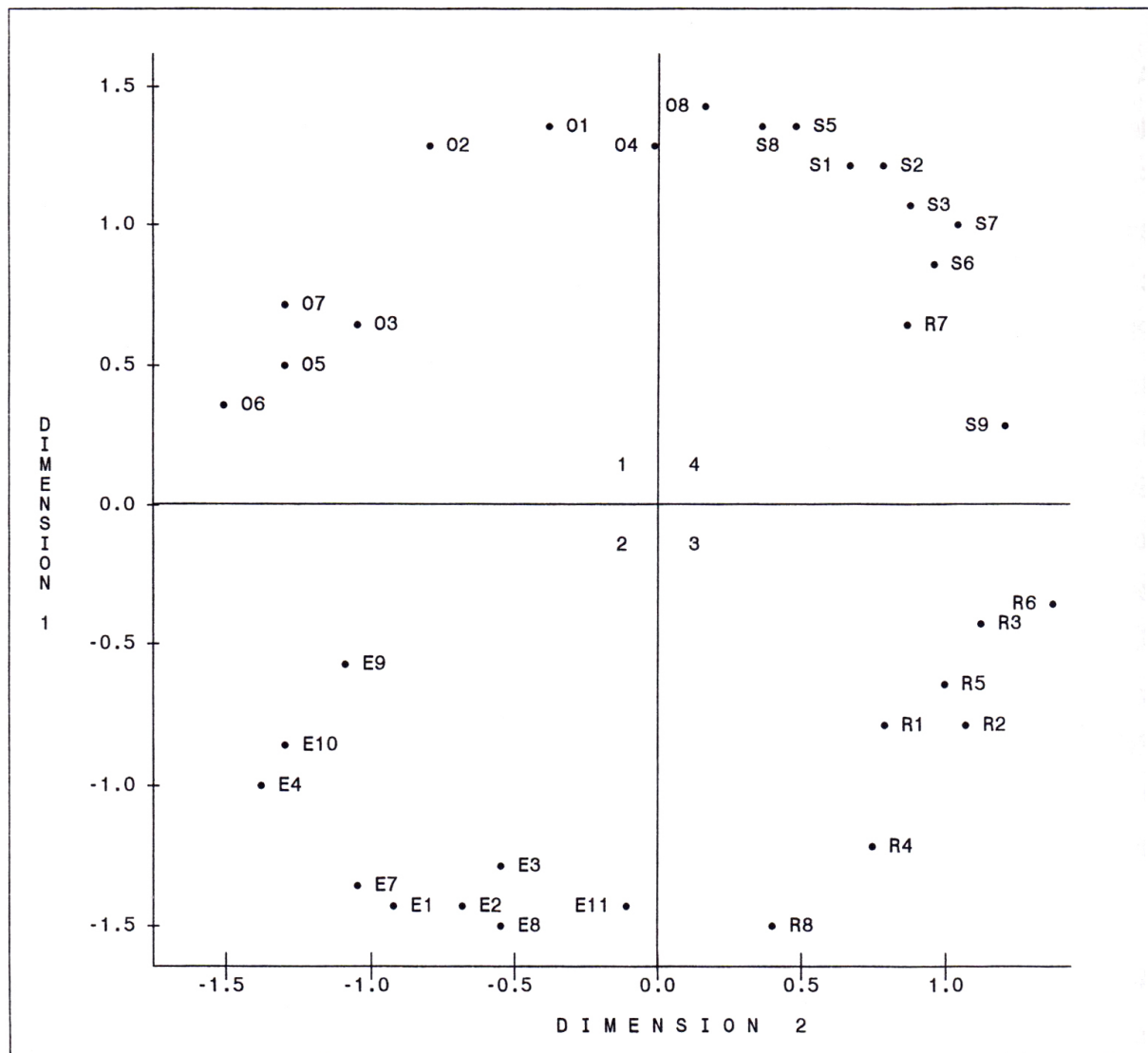
Post-Critical Belief subscales

As in the previous study, scale scores were computed by averaging the item scores of all of the items theoretically belonging to the subscales of the revised Post-Critical Belief scale. Estimates of internal consistency (Cronbach alpha's) were .70 for Orthodoxy (Mean=2.19, SD=0.82) (8 items), .78 External Critique (Mean=3.72, SD=0.93) (9 items), .62 for Relativism (Mean=4.94, SD=0.69) (8 items), and .82 for Second Naiveté (Mean=4.16, SD=1.11) (8 items). Orthodoxy was negatively related to both External Critique (r= -.20, p<.0005) and Relativism (r=-.32, p<.0001) and was positively related to Second Naiveté (r=.33, p<.0001). External Critique was positively related to Relativism (r=.12, p<.05) and negatively to Second Naiveté (r=-.60, p<.0001). Relativism and Second Naiveté were positively related (r=.17, p<.005).

Table 3   *Component loadings in Study 3 for the revised version of the Post-Critical Belief scale with three components after Orthogonal Procrustes Rotation to the reference configuration*

Item	C1	C2	C3	Item	C1	C2	C3
O1	.54	-.16	.15	E1	-.54	-.29	.22
O2	.44	-.29	.06	E2	-.52	-.22	.35
O3	.27	-.46	.40	E3	-.34	-.07	.28
O4	.61	-.03	.31	E4	-.43	-.58	.17
O5	.22	-.45	.25	E7	-.54	-.41	.14
O6	.20	-.55	.22	E8	-.59	-.19	.32
O7	.27	-.46	.26	E9	-.18	-.28	.54
O8	.62	.07	.22	E10	-.25	-.36	.32
				E11	-.43	.04	.31

Item	C1	C2	C3	Item	C1	C2	C3
R1	-.25	.32	.33	S1	.53	.41	.20
R2	-.21	.46	.28	S2	.42	.33	.11
R3	-.12	.42	.26	S3	.55	.56	.16
R4	-.27	.29	.27	S5	.64	.27	.18
R5	-.19	.39	.34	S6	.35	.46	.19
R6	-.19	.53	.18	S7	.47	.57	.06
R7	.25	.31	.25	S8	.69	.18	.12
R8	-.41	.20	.15	S9	.11	.38	.25

Relationships with racism

Again, we expected both Orthodoxy and External Critique to be positively related to racism (Hypothesis 1 and 2), Relativism to be negatively related to racism (Hypothesis 3) and Second Naiveté to be unrelated to racism (Hypothesis 4). Results supported all hypotheses. Racism was positively related to both Orthodoxy ($\underline{r}$=.29, $\underline{p}$<.0001) and External Critique ($\underline{r}$=.18, $\underline{p}$<.0005) and negatively related to Relativism ($\underline{r}$=-.16, $\underline{p}$<.005). No relationship with Second Naïveté was found ($\underline{r}$=-.10, n.s.).[18]

Conclusion

Again, a two-dimensional representation of the revised Post-Critical Belief items could be interpreted perfectly in terms of Wulff's (1991, 1997) model. Orthodoxy measured Literal Affirmation, External Critique measured Reductive Interpretation, Relativism measured Reductive Interpretation and Second Naiveté measured Restorative Interpretation.[19] This time the relationships with racism clearly supported this interpretation. Racism was negatively related to Relativism, but was not related at all to Second Naïveté. Fur-

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[18] A 10-item version of the Marlowe-Crowne Social Desirability scale (Crowne & Marlowe, 1960) was also included in this study. Results showed that the relationships between racism and the different dimensions of the Post-Critical Belief scale largely remained unaltered when controlling for socially desirable answering: .32 ($\underline{p}$<.0001) for Orthodoxy, .17 ($\underline{p}$<.005) for External Critique, -.17 ($\underline{p}$<.005) for Relativism, and -.10 (n.s) for Second Naiveté.

[19] Correlations with frequency of Sunday mass attendance were .26 ($\underline{p}$<.0001) for Orthodoxy, -.38 ($\underline{p}$<.0001) for External Critique, -.03 (n.s.) for Relativism and .39 ($\underline{p}$<.0001) for Second Naiveté.

thermore, racism was positively related to both Orthodoxy and External Critique. This last finding shed some light on the results of the second study, where this relationship was not found. An explanation in terms of the newly constructed External Critique items is unlikely in the light of the relationship found in the present study. Therefore, the absence of this relationship in the second study is probably due to sample characteristics.

General Discussion

Across the studies presented in this article, the internal structure of both the original and the revised Post-Critical Belief scale is highly stable and replicable. This conclusion is supported by the congruence measures between the solutions of the various studies. Very few items shift to adjacent quadrants, and since the shifting of items occurred randomly across the three studies, this phenomenon has to be attributed to sampling fluctuation. The better construct representation of the religious attitude domain distinguishes the original version from the revised version. Concerning the internal structure, method convergence was observed. After orthogonal Procrustes rotation, the first two components of a three-component solution turned out to be highly related to the two dimensions of the geometrical representation. The difference is the emergence of a general component with all items loading positively on it in the principal component analyses. This component did not emerge as a dimension in the multidimensional scaling. As explained earlier, interindividual differences in a response style, such as acquiescence, form a plausible explanation.

In the present research, we investigated whether responses to the items of the Post-Critical Belief scale can be interpreted in terms of Wulff's model (Wulff, 1991, 1997). Responses to these items can indeed be interpreted in terms of Wulff's two dimensions (Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic). Orthodoxy consistently measured Literal Affirmation. External Critique consistently measured Literal Disaffirmation, as was suggested by Desimpelaere et al. (1999). Furthermore, it was consistently found that Historical Relativism needed to be split op into two different dimensions: Relativism, which forms an operationalization of the Reductive Interpretation, and Second Naïveté, which forms an operationalization of Restorative Interpretation. The renewed interpretation of the Post-Critical Belief subscales has important consequences. Lack of differentiation, as was the case in the original version, leads to partly meaningless and even faulty interpretations of the relationships between religiosity and racism. Contrary to what we previously thought, we could not find any evidence for the existence of an explicit belief stance that truly counters racism. Apparently, religion cannot be said to provide a real antidote for racism in Flanders (for a more thorough discussion: see Duriez & Hutsebaut, 2000). Recent research indicates that the renewed outlook on the Post-Critical Belief scale is also relevant for the investigation of the relationship between religiosity and other concepts like value orientations (Duriez, Fontaine & Luyten, 2001; Fon-

taine, Luyten & Corveleyn, 2000; Fontaine et al., 2002), authoritarianism and social dominance orientation (Duriez & Van Hiel, 2002), and economic and cultural conservatism (Duriez, Luyten, Snauwaert & Hutsebaut, 2002) (see Chapter 2).

We can conclude that there clearly is validity evidence for a multidimensional conceptualization of religious attitudes in the Flemish secularized context. Interindividual differences in religious attitudes can be interpreted in terms of Wulff's (1991, 1997) theoretical framework. The present conclusion is supported by extensive analyses of the internal structure of the Post-Critical Belief scale as well as by the external relationships between the various subscales of this Post-Critical Belief scale and racism. Therefore, the Post-Critical Belief scale offers new perspectives for the empirical study of interindividual differences in religiosity. However, further research should point out whether and to which extent this scale can be generalized to other cultural groups and religious denominations.

PART 2

The Post-Critical Belief Scale Revisited

Abstract

According to Wulff (1991, 1997), the various approaches to religion can be located in a two-dimensional space along the bipolar dimensions Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic. Drawing on Wulff, Hutsebaut and his colleagues (Hutsebaut, 1996, 1997; Duriez, Fontaine & Hutsebaut, 2000) developed the Post-Critical Belief scale to measure interindividual differences in these dimensions. In this article, results from multidimensional scaling and principal component analyses in 16 samples (N = 4648) gathered in Flanders (Belgium) are presented which support the interpretation of the relationships between the Post-Critical Belief scale items in terms of Wulff's dimensions.

Introduction

In the late nineties, Hutsebaut (1996, 1997) developed the Post-Critical Belief scale to measure interindividual differences in the four approaches towards religion which Wulff (1991) described in his seminal "Psychology of religion. Classic and contemporary views". According to Wulff (1991, 1997), these approaches can be organized along two theoretical bipolar dimensions, i.e., Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic. Since its construction, four different versions of the Post-Critical Belief scale were administered to a total of 16 different samples ($\underline{N}$ = 4648). Results from most of these studies, which, in general, supported the validity of the Post-Critical Belief scale, have been described elsewhere (see further). In the present article, all 16 samples were combined to investigate (1) whether two dimensions are sufficient to represent the empirical relationships between the Post-Critical Belief scale items, (2) whether these dimensions can be interpreted in terms of Wulff's (1991, 1997) dimensions Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic, and (3) whether this structure is stable across the four different versions of the Post-Critical Belief scale that have been used over time and across the various types of samples. We will start this article with a presentation of Wulff's (1991, 1997) theoretical model, followed by an overview of the development of the Post-Critical Belief scale and results from previous studies using this scale.

Wulff's theoretical framework

Wulff (1991, 1997) argued that the various possible approaches to religion can be located in a two-dimensional space. The vertical axis in this space, the Exclusion vs. Inclusion of Transcendence dimension, specifies the degree to which the objects of religious interest are granted participation in a transcendent reality. The horizontal axis, the Literal vs. Symbolic dimension, indicates whether religion is interpreted literally or symbolically. In this way four quadrants are defined, each covering a specific attitude towards religion, which Wulff labeled Literal Affirmation, Literal Disaffirmation, Reductive Interpretation, and Restorative Interpretation (see Figure 1). Literal Affirmation represents a position in which the literal existence of the religious realm is affirmed. This position is most clearly embodied by religious fundamentalists, although elements of this posture also appear among those who are not particularly conservative. According to Wulff, this position, which is partly reflected in scales like Barron's (1963) Fundamentalist Belief scale, can only be sustained by rejecting those who doubt the validity of the conservative view. Therefore, it should not be surprising that literal believers tend to score higher on measures of prejudice and lower on measures of cognitive development, and can be characterized as rather rigid and low in ability to adapt (see Wulff, 1991, 1997). Literal Disaffirmation represents a position in which the existence of the religious realm is rejected, but in which the possibility is lost out of sight that the religious language has a symbolic meaning. So, like in the first quadrant, religious lan-

guage is understood in a literal way. The difference lies in the rejection of what is written or said. If any-thing is considered absolute, it is the scientific method and rational principles of knowledge. According to Wulff (1991, 1997), this position is partly reflected in the indiscriminately anti-religious orientation (Allport & Ross, 1967) as well as in the Fundamentalist Disbelief scale (Barron, 1963). People occupying this quadrant tend to be less dogmatic and more intellectual than many of the religious subjects, but also less fair-minded, less capable to evaluate ideas, rather rigid and low in ability to adapt (see Wulff, 1991, 1997). Reductive Interpretation represents a position in which the existence of the religious realm is rejected, and in which a privileged perspective on the hidden meaning of religion's myths and rituals is claimed. This quadrant is derived from the work of Ricoeur (1970), who proposed that in modern hermeneutics, in order to clear away from religious symbols the excrescence of idolatry and illusion, a reductive interpretation is necessary. Wulff (1991, 1997) draws on findings obtained with the Quest scale (Batson, Schoenrade & Ventis, 1993a) and the Enlightenment Disbelief scale (Barron, 1963) to fill out a portrait of persons in this quadrant, and concludes that these persons are complex, socially sensitive and insightful, rather unprejudiced and original. Restorative Interpretation represents a position in which the existence of the religious realm is affirmed, and in which one tries to encompass and transcend reductive interpretations in order to find the symbolic meaning of the religious language. Again, this quadrant is derived from the work of Ricoeur (1970), who proposed that in modern hermeneutics, in order to make it possible for the object of suspicion to be restored to an object of understanding and faith, a restorative interpretation is needed. In this respect, Ricoeur introduced the concept of Second Naiveté. According to Wulff (1991, 1997), it is difficult to characterize subjects in this quadrant, for they have largely been neglected in empirical research. Moreover, Wulff argued that, given its profoundly individual character, this quadrant is probably difficult to measure with standardized questionnaires.

The Post-Critical Belief scale

Inspired by Wulff (1991, 1997), Hutsebaut (1996) developed the Post-Critical Belief scale. This scale originally consisted of 24 items capturing the four approaches to religion discerned by Wulff within a secularized Christian context (see Appendix). Especially the concept of Second Naiveté was focussed upon, since it played a central role in Wulff's model, but had barely been investigated.

<ins>Initial analysis of the internal structure</ins>

An initial analysis of the internal structure of the Post-Critical Belief scale, in a mixed sample of adolescents, university students and adults (Hutsebaut, 1996), offered only partial support for Hutsebaut's contention that the Post-Critical Belief scale was a valid measure of Wulff's concepts. Factor analysis followed by VARIMAX rotation neither pointed to two bipolar factors referring to the two bipolar dimensions discerned by Wulff, nor to four unipolar factors referring to Wulff's four quadrants. Instead, three unipolar

factors emerged. Items referring to the acceptance of Christian beliefs (e.g., item O2, see Appendix) had a positive loading on the first factor. This factor could easily be interpreted in terms of what Wulff called Literal Affirmation and was labeled Orthodoxy. Items that had a significant loading on the second factor referred either to the meaningfulness of Christian religion (e.g., item S1, see Appendix) or to its historical relativity (e.g., item R1, see Appendix). This factor was described by Hutsebaut (1996) as consistent with what Wulff called Restorative Interpretation and was labeled Historical Relativism. Items designed to measure either what Wulff called literal disaffirmation (e.g., item E4, see Appendix) or what Wulff called reductive interpretation (e.g., item E1, see Appendix) had a positive loading on the third factor. Therefore, this factor was considered to measure Exclusion of Transcendence and was labeled External Critique. The existence of three factors was supported in subsequent studies (Hutsebaut, 1997; Desimpelaere et al., 1999). However, the results of Desimpelaere et al. (1999) allowed a refinement of the interpretation of External Critique. They found that both External Critique and Orthodoxy were positively related to Perry's (1970) psycho-epistemological style of Dualism, which is characterized by a preference for unambiguity and by the assumption that there exists only one right answer for each problem. This finding suggested that External Critique, like Orthodoxy, is rooted in a literal mode of thinking, implying External Critique was measuring what Wulff called Literal Disaffirmation. In sum, these initial studies revealed only three instead of four of the approaches to religion described by Wulff (1991, 1997), i.e., Literal Affirmation (Orthodoxy), Literal Disaffirmation (External Critique), and Restorative Interpretation (Historical Relativism).

Re-analyses of the internal structure

Duriez, Fontaine and Hutsebaut (2000) re-investigated the internal structure of the Post-Critical Belief scale using multidimensional scaling in three different samples.[20] Multidimensional scaling (MDS) (Borg & Groenen, 1997; Davison, 1983; Kruskal & Wish, 1991) represents psychological (dis)similarities between stimuli, in this case the Post-Critical Belief items, as points in a geometrical space in such a way that the distances between the points represent the observed (dis)similarities as well as possible. An MDS configuration can be interpreted in two ways (Borg & Groenen, 1997; Davison, 1983; Kruskal & Wish, 1991). First, a dimensional interpretation interprets the dimensions by looking at the coordinates of the stimuli on the dimensions. Second, a regional interpretation looks for bounded regions within the geometrical representation containing a specific type of stimuli.

A two-dimensional MDS representation of the observed relationships between the items of the Post-Critical Belief scale could be interpreted by means of both a dimensional and a regional interpretation

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[20]   As a dissimilarity measure, Duriez, Fontaine and Hutsebaut (2000) used the Euclidean distances between the standardized Post-Critical Belief items. In this way, a positive correlation between two items is represented as a small distance. A negative correlation is represented as a large distance.

(see Figure 1 for a schematic representation). The first dimension could be interpreted as Exclusion vs. Inclusion of Transcendence, with the External Critique items having negative coordinates and the Orthodoxy and most of the Historical Relativism items having positive coordinates on this dimension. The second dimension could be interpreted in terms of Literal vs. Symbolic, with the Orthodoxy and External Critique items having negative coordinates and the Historical Relativism items having positive coordinates. This interpretation was compatible with the regional interpretation (see Figure 1). The Orthodoxy items were situated in the upper left quadrant, the External Critique items were situated in the lower left quadrant, and most Historical Relativism items were situated in the upper right quadrant. However, some of the Historical Relativism items were situated in the lower right quadrant.

A close inspection of the items revealed a difference in content between the items in the upper right and the lower right quadrant. The items in the upper right quadrant clearly implied an adherence to Christian religion, while the items in the lower right quadrant merely focused on the historical relativity of Christian religion without implying an adherence to it. Hence, both the position and the content of the items in the lower right quadrant indicated that these items were not suited to measure Restorative Interpretation. Therefore, Duriez, Fontaine and Hutsebaut (2000) decided to divide Historical Relativism into two parts. The upper right quadrant, implying Inclusion of Transcendence, was labeled Second Naiveté.[21] The lower right quadrant, referring to a purely relativist stance, was labeled Relativism. Furthermore, the fact that the Relativism items had negative coordinates on the first dimension suggested that these items were measuring Reductive Interpretation. Apparently, it seems that Reductive Interpretation is characterized by taking a relativist stance towards religion rather than by an explicit rejection of religion.

Thus, an MDS-representation of the internal structure of the Post-Critical Belief scale (1) supported the interpretation of the Post-Critical Belief scale in terms of Wulff's bipolar dimensions Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic and (2) indicated the presence of two different aspects within what was formerly labeled Historical Relativism (namely Second Naiveté and Relativism). The Orthodoxy items refer to a Literal Affirmation of religious statements, the External Critique items refer to a Literal Disaffirmation of religious statements, and both the Relativism items and the Second Naiveté items refer to a symbolic approach of religion. However, the latter two approaches differ with respect to whether or not religion is seen as a privileged and guiding framework in one's life. Contrary to those high on Second Naiveté, those high on Relativism do not grant special status to the religious framework: It is merely seen as one possible source of meaning in life among so many others. In sum, the use of MDS led to new insights into the structure of the Post-Critical Belief scale.

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[21] In previous research, this dimension was also labeled Historical Awareness (Duriez et al., 1999) and Symbolic Belief (Fontaine et al., 2000; Luyten et al., 1998). However, we prefer the term Second Naiveté because it explicitly points to Ricoeur's concept (1970) (cf. Duriez, Fontaine & Hutsebaut, 2000; Duriez & Hutsebaut, 2000; Duriez et al., 2002; Duriez & Van Hiel; 2002).

Figure 1   Integration of Hutsebaut's religiosity dimensions in Wulff's (1991, 1997) theoretical model
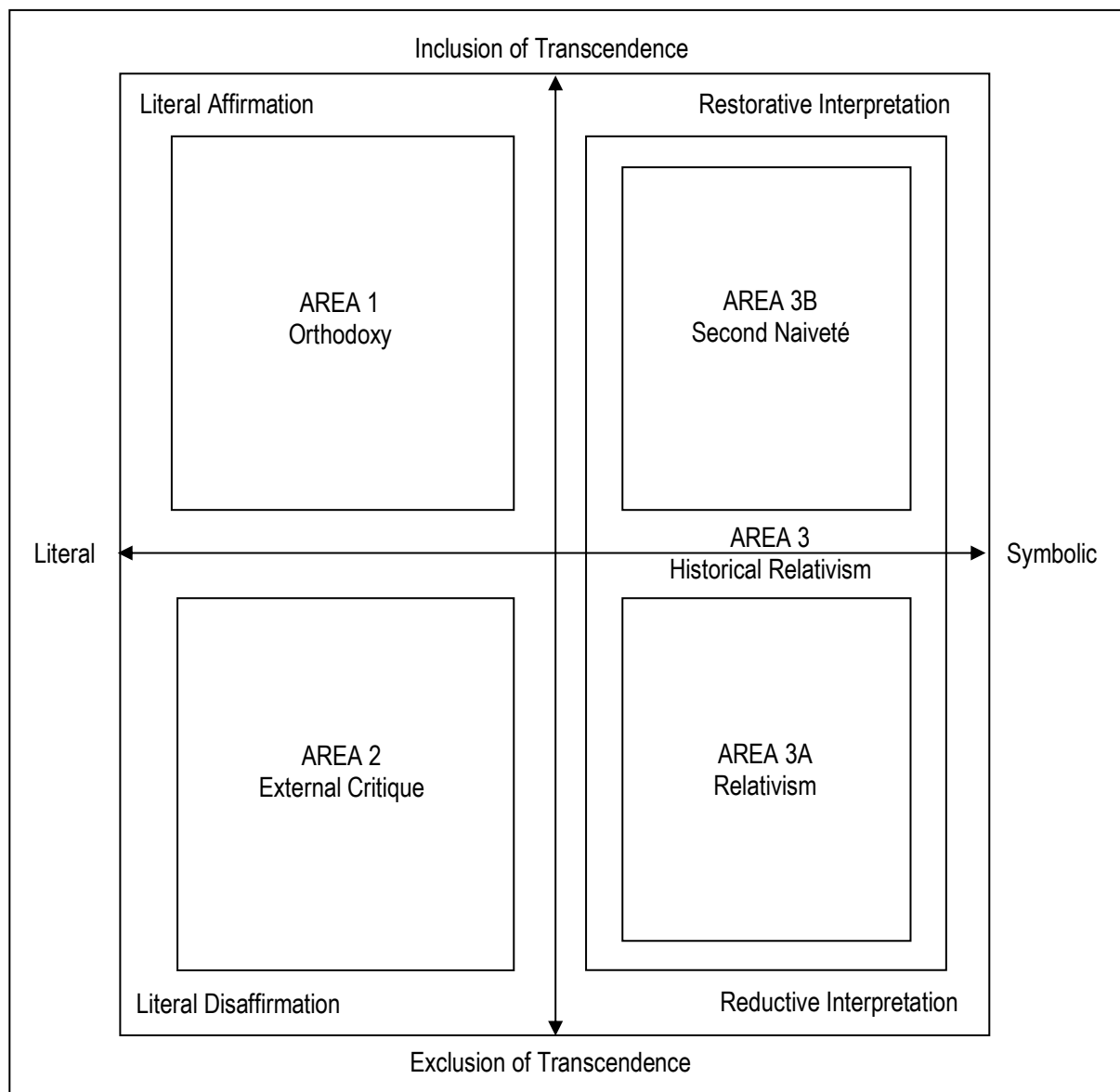
However, there was a discrepancy between the results obtained with MDS and factor analysis. Whereas MDS revealed two bipolar dimensions, differentiating four approaches to religion, factor analysis revealed three predominantly unipolar factors. Duriez, Fontaine and Hutsebaut (2000) proposed an explanation for this in terms of differences in response style, i.e., the tendency to endorse or reject the items irrespective of the item content. Green, Goldman and Salovey (1993) have demonstrated that interindividual differences in such a response style mask bipolarity in factor analysis. The tendency to endorse or reject items irrespective of item content leads to an increase of positive correlations and suppresses the size of negative correlations, which tends to produce unipolar factors when applying factor analysis. MDS, however, is only marginally affected by such systematic influences on the correlations between

the items, since, contrary to factor analysis, MDS represents the pattern of relations instead of the absolute size of correlations. Contrary to the absolute size of correlations, the pattern of relations is only marginally affected by interindividual differences in response style. In line with this explanation, when the three-componential PCA solution was rotated towards the bipolar MDS configuration using orthogonal Procrustes rotation (Schonemann, 1966; see also McCrae et al., 1996), Duriez, Fontaine and Hutsebaut (2000) found a high congruence between the first two rotated components and the two bipolar dimensions. The first rotated component could be interpreted in terms of a bipolar Exclusion vs. Inclusion of Transcendence dimension and the second in terms of a bipolar Literal vs. Symbolic dimension. Furthermore, after this rotation, all items of the Post-Critical belief scale, even the ones with a clearly contradictory content such as items E2 and S2 (see Appendix), had a non-negative loading on the third component. Hence, the existence of interindividual differences in response style (i.e., acquiescence) offers a plausible interpretation of this component. Thus, the assumption of the presence of interindividual differences in acquiescence combined with the use of orthogonal Procrustes rotation led to a convergence between the results obtained with MDS and factor analysis. This convergence further supported the results concerning the internal structure of the Post-Critical Belief scale obtained with MDS.

Adaptations of the Post-Critical Belief scale

Results from the abovementioned analyses, using MDS and factor analysis, together with feedback from subjects responding to the Post-Critical Belief scale, led to three subsequent revisions of the original 24 item Post-Critical Belief scale, resulting in a 33 item version (see Appendix) (see also Duriez, Fontaine & Hutsebaut, 2000). This revised version offers a better construct representation of the different approaches to religion that are measured. In several studies of adolescents, university students and adults, the validity of the four subscales, including the distinction between Second Naiveté and Relativism, received support by showing differential relations with a number of variables such as racism (Duriez, Fontaine & Hutsebaut, 2000; Duriez & Hutsebaut, 2000; Duriez et al., 2002; Duriez et al., 1999), economic and cultural conservatism (Duriez et al., 2002), authoritarianism and social dominance (Duriez & Van Hiel, 2002), mental health (Luyten et al., 1998), religious emotions (Duriez & Hutsebaut, 2001) and values (Duriez, Fontaine & Luyten, 2001; Fontaine et al., 2000).

Method

Samples

In total, a version of the Post-Critical Belief scale was administered to 16 different samples ($\underline{N}$ = 4648) in Flanders (Belgium). In a first validation study, the Post-Critical Belief scale was administered to a large

sample of adolescents, university students and adults ($\underline{N}$ = 1162), ranging in age from 16 to 92 with an average of 39.[22] In order to obtain a heterogeneous sample, the Post-Critical Belief scale was distributed by undergraduate students in schools and various organizations, and by relatives and friends of these students, who were asked to hand out questionnaires to their neighbors. Subsequently, the Post-Critical Belief scale was administered in an adolescent sample (aged less than 18) (sample 2), in five student samples (samples 3 to 7), and eight adult samples (samples 8 to 16). Table 1 lists some descriptive statistics of these 16 samples, including number of participants, sex and mean age of the participants. All 4648 participants had Belgian nationality and belonged to the Flemish-speaking part of the country. Subjects from the adolescent sample were pupils from a secondary school who were contacted by an undergraduate student. All subjects from the student samples followed a psychology course at a large Belgian university. Participation was obligatory and they received full course credit. Subjects from the adult samples were gathered by undergraduate students who asked their neighbors to complete the Post-Critical Belief scale, except for sample 15 and 16. Sample 15 was gathered among highly religious subjects and sample 16 was gathered among political activists. All subjects having over two missing values were excluded from further analyses. In total, only 2.3% ($\underline{N}$ = 95) of the subjects needed to be removed across the 16 samples. For the subjects with less than three missing values, these missing values were replaced by the sample-specific mean of the item. In total 284 missing values were replaced (less than 0.25% of the individual scores included in this research).

Table 1   Description of the samples

Sample	Type	N	Sex	Mean Age
1	General	1162	44% male	39; SD=19
2	Adolescent	183	36% male	16; SD=02
3	Student	210	42% male	22; SD=02
4	Student	389	20% male	18; SD=01
5	Student	113	40% male	21; SD=03
6	Student	338	18% male	18; SD=01
7	Student	376	20% male	18; SD=01
8	Adult	251	35% male	42; SD=17
9	Adult	161	69% male	31; SD=08
10	Adult	365	47% male	41; SD=13
11	Adult	228	48% male	32; SD=13
12	Adult	240	38% male	35; SD=15
13	Adult	87	53% male	40; SD=15
14	Adult	176	55% male	39; SD=15
15	Adult	301	35% male	45; SD=13
16	Adult	68	74% male	39; SD=15

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[22] For reasons of consistency with previously published articles using this sample, we left this sample intact.

Measures

All 4648 participants completed one of four different versions of the Post-Critical Belief scale. The original 24 item version (version 1) of this scale was presented to sample 1.[23] A slightly adapted 23 item version (version 2) was presented to sample 3. A 31 version (version 3) was presented to samples 4, 5, and 8 to 10. The most recently revised 33 item version (version 4) (see Duriez, Fontaine & Hutsebaut, 2000) was presented to samples 2, 6, 7, and 11 to 16. All items were scored on a 7-point Likert scale (1=completely opposed, 4=neutral, 7=completely in agreement). In the Appendix, items are listed by subscales (Orthodoxy, External Critique, Relativism and Second Naiveté). Each item is given a label which allows its identification in the tables and figures presented throughout this article.

Analyses procedures

To investigate whether the relation between the Post-Critical Belief items could be accounted for by two underlying dimensions, and whether these dimensions can be interpreted in terms of Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic, we used both multidimensional scaling (MDS) and principal component analysis (PCA). As explained in the introduction, MDS has the advantage that it can represent the internal structure of the Post-Critical Belief scale, being only marginally influenced by interindividual differences in acquiescence. Furthermore, it offers the possibility to represent an average internal structure for complex data, as is the case here: Since different versions of the Post-Critical Belief scale have been used over time, we have no information about the relationships between items that are specific to a single version. A data structure with information lacking for some item pairs does not pose a problem for MDS. A disadvantage, however, is that MDS does not offer a measurement model for individual differences: It only represents the observed relationships between the items. PCA, in contrast, does offer a measurement model for interindividual differences. However, PCA is likely to be affected by acquiescence. Hence, a combination of both MDS and PCA was appropriate.

To investigate whether the dimensions of an average two-dimensional structure across all samples could be interpreted in terms of Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic, and whether this structure is stable across samples, we relied on orthogonal Procrustes rotations (McCrae et al., 1996; Schonemann, 1966). For this purpose, the average two-dimensional configuration across the samples was orthogonally rotated towards a theoretical configuration. In this theoretical two-dimensional configuration, the Orthodoxy items and the Second Naiveté items are situated at the positive end of Exclusion vs. Inclusion of Transcendence whereas the External Critique items and the Relativism items

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[23] The original scale consisted of 24 items (see Duriez, Fontaine & Hutsebaut, 2000). However, one Orthodoxy item and one External Critique item were reversely formulated. Since the impact of reversed formulation could not be investigated extensively with only two reversed items, and since these items have not been included in the more recent versions of the Post-Critical Belief scale that were used in the 15 other samples, we excluded these items from the present analyses.

are situated at the negative end on this dimension. On the second Literal vs. Symbolic dimension, the Orthodoxy items and the External Critique items are situated at the negative end whereas the Relativism items and the Second Naiveté items are situated at the positive end (see Table 2). To investigate the stability of the average two-dimensional structure across each of the samples, the sample-specific configurations were orthogonally rotated towards the average (theoretically rotated) configuration. The congruence was quantified by means of the Tucker's Phi, which can range from 0 to 1, with a value of .90 or higher pointing to substantial congruence (Van de Vijver & Leung, 1997).

Results

Multidimensional scaling

Number of dimensions

In order to investigate the dimensionality that is needed to represent the empirical relations between the items of the Post-Critical Belief scale, without being affected (too much) by random sampling fluctuation and sample-specific information, average Euclidean distances between the standardized items across the samples were used as dissimilarity measure. These Euclidean distances were represented in a one- up to a six-dimensional configuration by means of non-metric MDS. The scree test of both the Kruskal stress and the fit of each dimensionality clearly pointed to a two-dimensional representation.[24] The Kruskal stress declined from .31 over .12, .08, .06, .05 to .05 for a one-dimensional up to a six-dimensional solution respectively. These different solutions accounted for respectively 70%, 92%, 94%, 96%, 98% and 98% of the variance in the optimally transformed dissimilarities. Thus, on average, a two-dimensional representation adequately represents the empirical relations between the Post-Critical Belief scale items.

Interpretation of the two-dimensional MDS structure

The two-dimensional representation of the average Euclidean distances across the samples was orthogonally rotated towards the theoretical structure (see Table 2 for both this theoretical structure and the rotated solution). Tucker's Phi indices indicated good congruence for both dimensions: .93 for Exclusion vs. Inclusion of Transcendence and .90 for Literal vs. Symbolic. Furthermore, a regional interpretation of the two-dimensional configuration allowed for the identification of four bounded regions with 38 of the 39 items of the Post-Critical Belief scale being situated in the predicted region (see Figure 2). All Orthodoxy items are situated in the upper left quadrant, all External Critique items are situated in the lower left quadrant, all Second Naiveté items are situated in the upper right quadrant, and all Relativism items (except for

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[24]   It has to be noted that the scree test functions differently for MDS than for PCA. For MDS the adequate dimensionality is situated at the elbow, while for PCA the adequate componentiality is situated just above the elbow (Davison, 1983).

item R4) are situated in the lower right quadrant. One relativism item (item R4) was situated in the Second Naiveté region.

Figure 2   *Integration of the two-dimensional consensus representation of the Post-Critical Belief scale items in Wulff's (1991, 1997) theoretical model.*
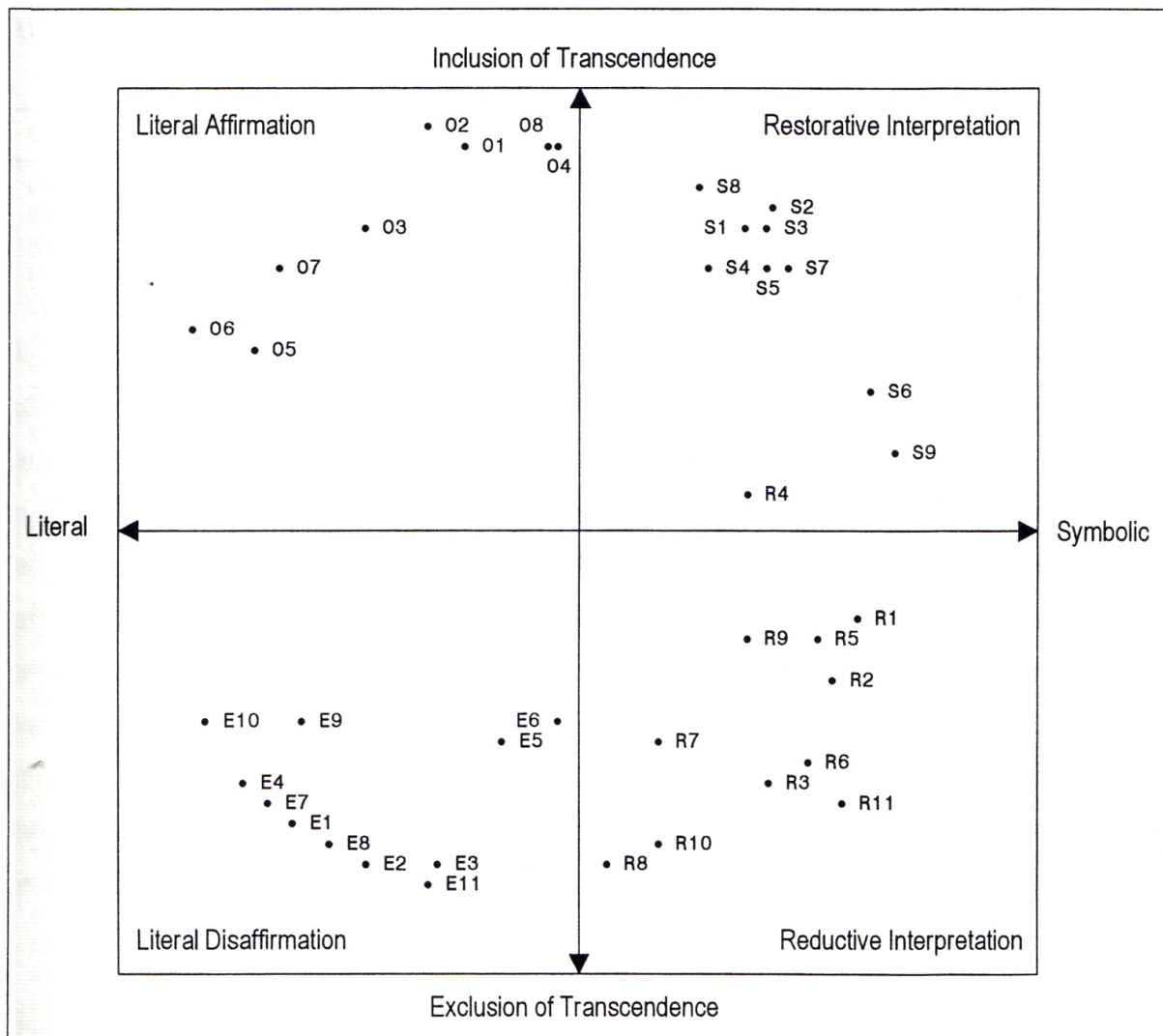
Stability of the two-dimensional MDS-structure

In order to investigate the stability of the average two-dimensional structure in each of the samples, a two-dimensional MDS was performed on the observed Euclidean distances between the standardized items in each sample. On average, a two-dimensional representation had a Kruskal stress of .14 and accounted for .88% of the variance in the optimally transformed dissimilarities (see Table 3). The sample-specific configurations were then orthogonally rotated towards the average two-dimensional MDS structure (McCrae et al., 1996; Schonemann, 1966) (see Table 2). For the dimension Exclusion vs. In-

clusion of Transcendence, Tucker's phi's ranged from .90 to .98 with an average of .95 (see Table 3). For the dimension Literal vs. Symbolic the Tucker's phi's ranged from .89 to .98 with an average of .94 (see Table 3). Thus, the two-dimensional MDS appears to be stable in all samples.

Table 2   Post-Critical Belief scale items, a priori pattern (A1, A2), coordinates in a two-dimensional representation (D1, D2), and average component pattern (C1, C2) for Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic per subscale

Subscale	Label	A1	A2	D1	D2	C1	C2
Orthodoxy	O1	1	-1	1.56	-0.44	.48	-.29
	O2	1	-1	1.63	-0.60	.47	-.29
	O3	1	-1	1.23	-0.87	.32	-.38
	O4	1	-1	1.59	-0.10	.50	-.14
	O5	1	-1	0.74	-1.28	.17	-.52
	O6	1	-1	0.81	-1.55	.20	-.56
	O7	1	-1	1.12	-1.20	.31	-.49
	O8	1	-1	1.62	-0.12	.59	-.16
External Critique	E1	-1	-1	-1.14	-1.13	-.44	-.42
	E2	-1	-1	-1.30	-0.85	-.46	-.28
	E3	-1	-1	-1.30	-0.55	-.51	-.17
	E4	-1	-1	-1.01	-1.36	-.39	-.51
	E5	-1	-1	-0.87	-0.31	-.43	-.12
	E6	-1	-1	-0.78	-0.06	-.39	-.01
	E7	-1	-1	-1.11	-1.26	-.33	-.44
	E8	-1	-1	-1.24	-1.00	-.53	-.36
	E9	-1	-1	-0.76	-1.12	-.33	-.34
	E10	-1	-1	-0.76	-1.49	-.32	-.46
	E11	-1	-1	-1.40	-0.60	-.52	-.15
Relativism	R1	-1	1	-0.35	1.17	-.26	.36
	R2	-1	1	-0.62	1.06	-.34	.36
	R3	-1	1	-0.99	0.81	-.35	.31
	R4	-1	1	0.20	0.68	.01	.27
	R5	-1	1	-0.41	1.02	-.29	.37
	R6	-1	1	-0.88	0.96	-.41	.41
	R7	-1	1	-0.87	0.36	-.35	.14
	R8	-1	1	-1.37	0.11	-.40	.14
	R9	-1	1	-0.42	0.69	-.29	.34
	R10	-1	1	-1.27	0.37	-.39	.14
	R11	-1	1	-1.09	1.10	-.28	.14
Second Naiveté	S1	1	1	1.28	0.72	.37	.39
	S2	1	1	1.30	0.80	.30	.36
	S3	1	1	1.22	0.78	.48	.50
	S4	1	1	1.05	0.57	.30	.39
	S5	1	1	1.12	0.82	.25	.29
	S6	1	1	0.62	1.20	.02	.42
	S7	1	1	1.10	0.89	.41	.52
	S8	1	1	1.41	0.48	.52	.27
	S9	1	1	0.36	1.29	.00	.32

Table 3   *Kruskal stress (K), proportian of variance accounted for by a two-dimensional MDS representation (R²), and Tucker's Phi congruence measures (T1, T2) with respect to the average two-dimensional structure of the Post-Critical Belief scale per sample*

Sample	K	R²	T1	T 2	Sample	K	R²	T1	T 2
1	.09	.96	.96	.92	9	.14	.90	.97	.95
2	.17	.85	.91	.92	10	.13	.90	.96	.98
3	.15	.88	.96	.89	11	.11	.94	.98	.97
4	.14	.90	.98	.95	12	.14	.88	.96	.97
5	.18	.83	.97	.90	13	.17	.85	.92	.94
6	.13	.90	.92	.97	14	.13	.90	.97	.96
7	.13	.90	.91	.94	15	.20	.77	.90	.90
8	.12	.92	.98	.98	16	.13	.90	.90	.94

Principal component analyses

As already discussed, interindividual differences in acquiescence can affect PCA. Since, in previous research, Duriez, Fontaine and Hutsebaut (2000) found evidence for the existence of a response style, acquiescence was controlled for. In order to do this, the acquiescence level for each subject was estimated by computing its weighted mean score across all items. Acquiescence means that a subject prefers a specific score level irrespective of the content of an item. Thus, a tendency to use the same score level across items can be interpreted as acquiescence. However, since the four approaches to religion are not represented by the same number of items in all versions, acquiescence was estimated by a weighted mean score across all items (assigning the same weight to each of the four approaches irrespective of its number of items). This weighted mean score across all items was then subtracted from the observed item scores for each subject. In this way, interindividual differences in acquiescence were removed. PCA's were then performed on these weighted-mean-corrected item scores.

Number of components

Since PCA requires information about the relationships between all item pairs included in the analysis and since we have no information about the relationships between version-specific items, PCA cannot be applied on the average relationships across the samples. Therefore, the adequate number of components was investigated in each sample separately. Cattell's scree test (Cattell, 1966) pointed to a two-componential solution for all samples (see Table 4 for the Eigenvalues of the first six components). A two-componential solution accounted, on average, for 35% of the total variance in each sample (see Table 4).

Interpretation of the two-componential PCA-structure

Our aim was to investigate whether the average two-componential solution corresponds to the theoretical expectations. However, since the presence of four different versions of the Post-Critical Belief scale did not

allow a straightforward computation of an average structure, we estimated this average structure by means of a two-step procedure. First, for each sample, we rotated the two-componential configuration orthogonally towards the average two-dimensional configuration generated by MDS. Second, average loadings (after Fisher-z transformation) were computed for each item on each of the two components across the samples. These average loadings were considered a reasonable estimate of an average two-componential structure. This estimated average structure was then orthogonally rotated towards the theoretical structure (see Figure 3 and Table 2 for the rotated solution). Tucker's Phi indices indicated good congruence for both components: .93 for Exclusion vs. Inclusion of Transcendence and .92 for Literal vs. Symbolic.

Figure 3   Integration of the two-componential consensus representation of the Post-Critical Belief scale items in Wulff's (1991, 1997) theoretical model.
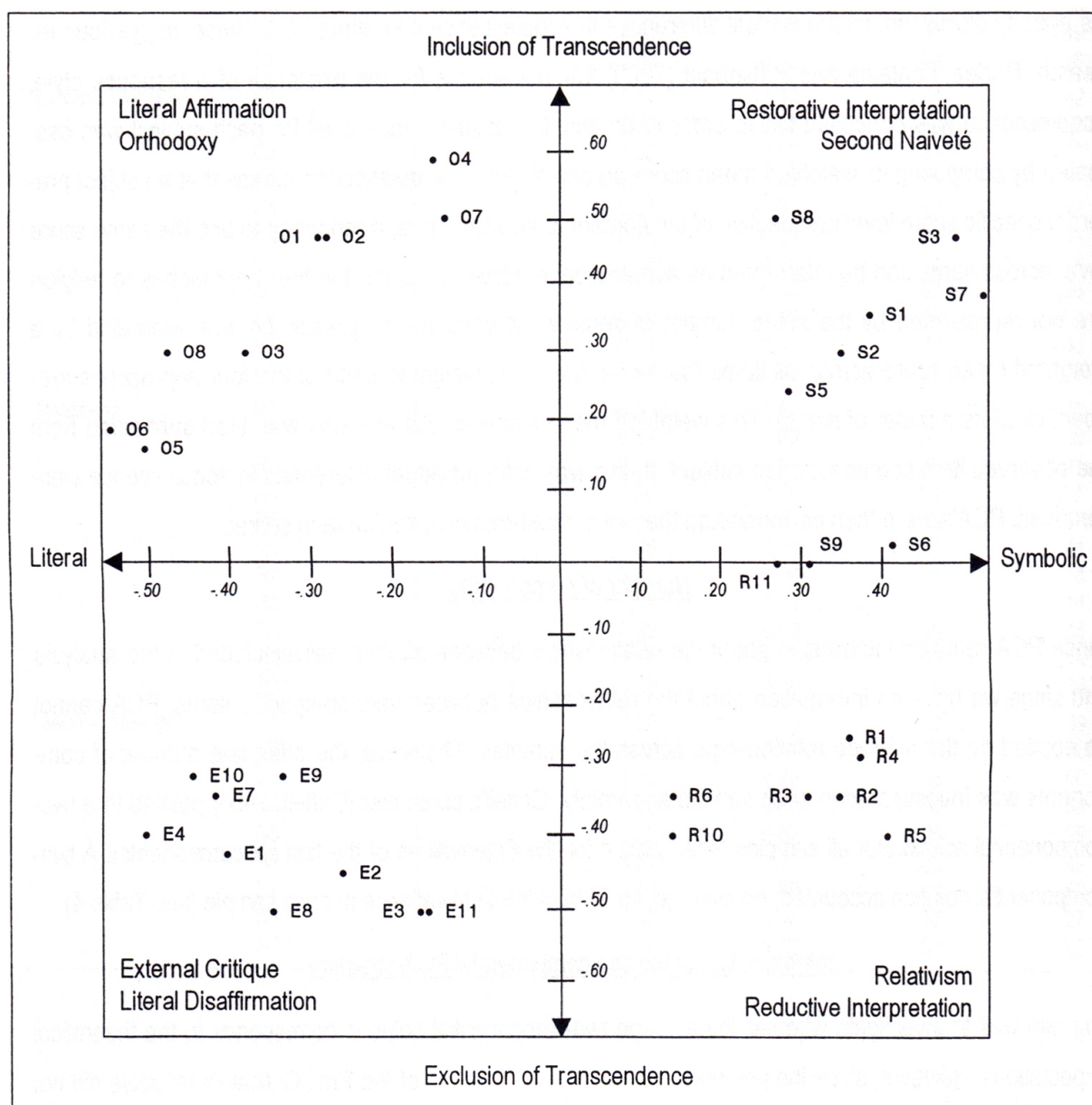
Table 4   *Eigenvalues for the first 6 components (E1-E6), proportion of variance accounted for by a two-componen-*
tial solution (R²), and Tucker's Phi congruence measures after orthogonal Procrustes rotation towards the
average component structure (T1, T2) per sample

Sample	E1	E2	E3	E4	E5	E6	R²	T1	T2
1	5.32	2.95	1.28	1.17	1.02	0.94	.38	.96	.98
2	6.10	4.14	1.63	1.53	1.48	1.28	.31	.92	.94
3	5.10	3.07	1.72	1.42	1.23	1.01	.36	.98	.92
4	6.18	2.97	1.61	1.34	1.31	1.22	.30	.97	.96
5	7.31	2.97	1.71	1.68	1.54	1.40	.33	.97	.93
6	6.84	3.80	1.51	1.44	1.25	1.18	.32	.94	.98
7	7.35	4.21	1.43	1.29	1.24	1.12	.35	.92	.96
8	7.56	3.68	1.50	1.34	1.20	1.17	.36	.98	.98
9	7.50	3.74	1.68	1.38	1.33	1.22	.36	.98	.97
10	7.13	4.79	1.51	1.44	1.28	1.08	.38	.99	.96
11	8.53	4.11	1.84	1.49	1.33	1.24	.38	.99	.97
12	6.63	3.87	1.78	1.53	1.32	1.27	.32	.97	.98
13	7.97	4.52	2.21	1.69	1.64	1.28	.38	.93	.98
14	8.13	4.20	1.85	1.40	1.21	1.16	.37	.91	.98
15	4.60	3.81	1.97	1.56	1.43	1.34	.25	.90	.94
16	8.43	5.67	1.86	1.59	1.48	1.38	.43	.92	.96

Stability of the two-componential PCA-structure

In order to investigate the stability of the average estimated two-componential structure in each of the samples, each two-componential configuration was orthogonally rotated towards the average estimated two-componential structure. For both Exclusion vs. Inclusion of Transcendence and Literal vs. symbolic, Tucker's phi's ranged from .90 to .99 with an average of .96 (see Table 4), supporting the stability of this average two-componential structure.

Discussion

The present analyses lend considerable support for the construct validity of the Post-Critical Belief Scale. First, MDS on the average Euclidean distances between the standardized items across the 16 samples and PCA on the weighted-mean-corrected subject scores in each sample separately clearly pointed to a two-dimensional or a two-componential structure. Second, a high convergence between the empirical and the theoretical structure supported our interpretation of the empirical structure in terms of Wulff's (1991, 1997) dimensions Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic. Third, this two-dimensional and two-componential structure proved to be stable across the different versions of the Post-Critical Belief scale that have been used over time and across the different samples.

Although the scope of the present article was limited to the investigation of the internal structure of the Post-Critical Belief scale, studies that yield support for its external validity have already been conducted as well. Results of these studies show that the dimensions Exclusion vs. Inclusion of Transcendence and Literal vs.

Symbolic relate in a theoretically meaningful way to a number of external variables. The Exclusion vs. Inclusion of Transcendence dimension relates to unidimensional religiosity measures such as church attendance, religious belief and religious involvement (Hutsebaut, 2001) and known correlates such as authoritarianism and conservatism, preference for order and structure, preference for predictability, and conservation values (Duriez, in press B, 2002c; Fontaine et al., 2002). The Literal vs. Symbolic dimension relates positively to cognitive variables such as moral competence, openness to experience, perspective taking, empathy, tolerance of ambiguity, open-mindedness and identity styles (Duriez, in press A, in press B, 2002b; Duriez & Soenens, 2002) and to self-transcendence values (Fontaine et al., 2002), and negatively to known correlates such as racism, social dominance, authoritarianism and conservatism (Duriez, 2002a, in press B; Duriez, Van Hiel & Kossowska, 2002). Results have also shown that these relationships are stable across the different versions of the Post-Critical Belief scale that were used over time (Duriez, 2002a; Duriez, Van Hiel & Kossowska, 2002). Hence, in reconciling Wulff's (1991, 1997) comprehensive theoretical framework with the empirical measurement of religion, the present results offer important perspectives for further research on antecedents, concomitants, and consequences of interindividual differences in both the two religiosity dimensions and the four approaches to religion discerned by Wulff. However, since until now the Post-Critical Belief scale was almost exclusively administered in Flanders (Belgium), an important topic for future research concerns the generalizability of both the internal structure of this scale and its relations to external variables across cultural and religious groups. In this respect, data gathered in Germany yielded promising results (Duriez, Appel & Hutsebaut, 2002), and data are currently being gathered in Australia, the Netherlands, Peru, Poland, Romania, and the USA.

PART 3

The Post-Critical Belief Scale Appendix

Abstract

In this appendix, all items of the Post-Critical Belief scale are listed for the four subscales separately, i.e., Orthodoxy, External Critique, Relativism and Second Naiveté. For all items, the label by which they are referred to in this chapter and the version(s) in which they appeared are also given. Note that although all items were administered in Flemish, we present them in English. The translation was done according to the guidelines specified by the International Test Commission (Hambleton, 1994), using the translation back-translation procedure (Brislin, 1980). Differences between the back-translated and the original version were minimal. A committee of four bilingual research assistants decided on the final English version of the test (Van de Vijver & Leung, 1997).

Label	Version	Item

Orthodoxy

O0	1	It is not compulsory to believe in order to live a meaningful life ....
O1	1,2,3,4	God has been defined for once and for all and therefore is immutable ....
O2	1,2,3,4	Even though this goes against modern rationality, I believe Mary truly was a virgin when she gave birth to Jesus..
O3	1,2,3,4	Only the major religious traditions guarantee admittance to God ....
O4	1,2,3,4	Religion is the one thing that gives meaning to life in all its aspects...........................
O5	1,2,3,4	Only a priest can give an answer to important religious questions ....
O6	1,2,3,4	I think that Bible stories should be taken literally, as they are written............................
O7	1,2,4	Ultimately, there is only one correct answer to each religious question..........................
O8	2,3,4	You can only live a meaningful life if you believe...

External Critique

E0	1	I know that the testimony of my belief is sometimes weak and vulnerable, but I still want to go on talking about my belief...
E1	1,2,3,4	Faith is more of a dream, which turns out to be an illusion when one is confronted with the harshness of life..
E2	1,2,3,4	Too many people have been oppressed in the name of God in order to still be able to have faith..
E3	1,2,3,4	God is only a name for the inexplicable ....
E4	1,2,3,4	A scientific understanding of human life and the world has made a religious understanding superfluous..
E5	1,2	I sometimes find it hard to believe, because you can never attain real certainty ....
E6	1,2	I experience God as an impersonal power somewhere..
E7	1,2,4	The world of Bible stories is so far removed from us, that is has little relevance ....
E8	3,4	In the end, faith is nothing more than a safety net for human fears................................
E9	3,4	In order to fully understand what religion is all about, you have to be an outsider..........
E10	3,4	Faith is an expression of a weak personality ....
E11	3,4	Religious faith often is an instrument for obtaining power, and that makes it suspect.....

Relativism

H3	1,2,3,4	See R1 ....
H5	1,2,4	See R4 ....
H7	1,2,3,4	See R2 ....
H8	1,2,3,4	See R3 ....

Label	Version	Item
R1	1,2,3,4	Each statement about God is a result of the time in which it was made...........................
R2	1,2,3,4	Official Church doctrine and other statements about the absolute will always remain relative because they are pronounced by human beings at a certain period of time........
R3	1,2,4	God grows together with the history of humanity and therefore is changeable ....
R4	1,2,4	Ultimately, religion means commitment without absolute guarantee...............................
R5	3,4	The manner in which humans experience their relationship to God, will always be colored by the times they live in ....
R6	3,4	I am well aware my ideology is only one possibility among so many others ....
R7	3,4	Secular and religious conceptions of the world give valuable answers to important questions about life..
R8	4	There is no absolute meaning in life, only giving directions, which is different for every one of us ....
R9	3	Through contact with people with a different ideology, I learn to put my own beliefs into perspective ....
R10	3	The world would be a lot less interesting if everyone held the same beliefs ....
R11	3	I have totally no problem with other people holding other beliefs....................................

Second Naiveté

Label	Version	Item
H1	1,2,3,4	See S1 ....
H2	1,2,3,4	See S2 ....
H4	1,2,3,4	See S3 ....
H6	1,2	See S4 ....
S1	1,2,3,4	The Bible holds a deeper truth which can only be revealed by personal reflection ....
S2	1,2,3,4	The Bible is a guide, full of signs in the search for God, and not a historical account........
S3	1,2,3,4	Despite the fact that the Bible has been written in a completely different historical context from ours, it retains a basic message ....
S4	1,2	For me, God is neither necessary nor useful, but significant..
S5	3,4	Because Jesus is mainly a guiding principle for me, my faith in him would not be effected, if it would appear that he never actually existed as a historical individual ....
S6	3,4	The historical accuracy of the stories from the Bible is irrelevant for my faith in God ....
S7	3,4	Despite the high number of injustices Christianity has caused people, the original message of Christ is still valuable to me ....
S8	3,4	I still call myself a Christian, even though a lot of things that I cannot agree with have happened in the past in name of Christianity,...
S9	3,4	If you want to understand the meaning of the miracle stories from the Bible, you should always place them in their historical context..

SEPARATING THE SHEEP FROM THE GOATS

The Tale of the Black Sheep

PART 1

Religion and Racism 1

Abstract

The relation between religion and racism has often been studied, but summarizing these studies provides a fragmented picture. Generally, American research concludes there is a positive relation, whereas research in the Low Countries concludes this relation is negative. However, the conclusions of the latter research tradition might be premature, because inaccurate religiosity measures were used. The results of this study suggest that both frequency of church attendance and belief salience are no longer significantly related to racism. Four religious attitudes are described, based on individual's inclusion or exclusion of transcendence, and preference for symbolic or literal interpretation. Orthodoxy (literal, transcendent) and External Critique (literal, non-transcendent) were significantly positively related to racism, whereas Relativism (symbolic, non-transcendent) was significantly negatively related to it. Second Naiveté (symbolic, transcendent) at first sight turned out not to be significantly related to racism. However, a path analysis – in which some important background variables such as age and education were included – suggested the existence of an indirect negative relation.

Introduction

All world religions proclaim universal brotherly love. Yet, ethnicity and religiosity are strongly interwoven (Snauwaert et al., 1999) and history is littered with moments in which religion has provided a justification for, or has given cause to, all kinds of atrocities directed towards people of different race or culture: The Crusades, slavery, the Holocaust, etc. From this a considerable number of historians and theologians concluded religion should contrarily be considered as a catalyst for anti-Semitism, racism, etc. (e.g., Flannery & Oesterreicher, 1985; Poliakov, 1974; Salemink, 1995). Plenty of research has been carried out to investigate whether this is true. When one tries to make an overview of these attempts, a very fragmented picture is obtained. There are two main reasons for this. One is that there is no consensus on how one should measure religion in order to obtain meaningful results. Another is that there are two main directions in which one can look for an explanation of the observed relation: One can choose to use religious factors (and try to find an explanation in terms of 'what do people believe' or 'how do people believe') or one can choose to turn to non-religious factors. The direction in which one decides to look for an explanation will effect the conclusions that are drawn.

We will begin by giving a short overview of relevant literature. This will allow us to contrast the conclusions of the American research with those of the research in the Low Countries. The aim of our study will then be to try to gather evidence for the claim that the researchers in the Low Countries, although taking a valuable step in the direction of finding a solution for the problem at hand, might be missing out on something. The reason for this is suggested to be that, out of dissatisfaction with the existing measuring devices for 'religion', they turned back to an inaccurate measure. Next, we will introduce a new measure for 'religion' and argue why we think this is necessary. Finally, we will present the results of our research and discuss whether or not we could back up our claim.

Previous research

America

Allport and Kramer (1946) were among the first to examine this problem empirically. They concluded that Christians and Protestants were more prejudiced than those who were not involved in any church. This conclusion led to massive research and soon it became generally accepted that religion and intolerance, prejudice, etc. were strongly associated (especially regarding white middle-class Christians). Batson et al. (1993b) summarized 38 studies concerning the relationship between religious involvement and intolerance. From this, they extracted 47 findings of which 37 gave evidence of a positive correlation while only 2 pointed in the opposite direction. Of course, these findings were painful for religious leaders as well as for a number of researchers. This prompted Adorno et al. (1950) and Allport et al. (1950) to argue that it is insufficient to examine religious involvement or to search for an explanation of

the findings in the belief system itself. According to them, if one wants to understand the relation between religion and prejudice, one should focus on how people believe. In this way, a number of conceptual dichotomies came into existence - of which Allport's distinction of extrinsic vs. intrinsic religiousness is the most widespread (e.g., Allport & Ross, 1967) - which all stated a distinction should be made between giving importance to religion because of its instrumentality or out of conviction (cf. extrinsic vs. intrinsic motivation). As a consequence, the notion that religion is associated with intolerance was replaced with the notion that this only applies to extrinsic believers. Intrinsic believers – a small minority – would score low on prejudice and related measures. Batson et al. (1993b) summarized 32 studies concerning the relationship between intrinsic vs. extrinsic belief and intolerance. From this, they extracted 41 relevant findings, of which 39 gave evidence in favor of this hypothesis. The linear relation between church involvement and prejudice was readjusted to a quite generally accepted curvilinear relation when using a more refined measure of church involvement (frequency of church attendance). Research could, however, not provide evidence in favor of Allport's statement that intrinsic belief would foster tolerance (Donahue, 1985). Batson et al. (i.e. 1978, 1982, 1993b) even repudiate the conclusion that intrinsic belief would relate to rather low prejudice scores. According to Batson et al., this only appears to be true because intrinsic believers are more concerned about what is socially desirable. Consequently, this attitude would not provide a true indication of tolerance. Batson's Quest-dimension was introduced to resolve this difficulty, but with mixed success.

Low Countries

Eisinga et al. (1988 :66) argued that the measurement of intrinsic belief is so sensitive to socially desirable answering because it is antiquated (cf. Strickland & Cone Weddell, 1972). Because of this, like other researchers (e.g., Bahr et al., 1971), they returned to what they perceive to be the core of Allport's extrinsic vs. intrinsic belief distinction: Belief salience (= the degree to which belief is considered important for daily life). As an indicator of this belief salience, Eisinga et al. (1989) decided to use frequency of church attendance. Moreover, they concluded that, in order to be able to give a truly theoretical explanation for the relation between religion and racism (including ethnocentrism and related constructs), it is necessary to focus on nonreligious aspects such as anomia, localism, cultural conservatism and authoritarianism instead of on religion itself. Their extensive research in the Netherlands (Eisinga et al., 1989, 1990, 1991, 1993; Scheepers et al., 1989) points out that the influence of religion on racism – which appeared to reveal itself in a curvilinear relation – does indeed disappear when these nonreligious aspects are taken into account. In some of the research, however, Christian belief continued to have a direct effect on racism, but only for core church members. In order to find an explanation for this, they refer to the (strictly religious) standards of core church members compared to those of

marginal church members who would primarily be concerned about tradition and the instrumentality of their acts (cf. intrinsic vs. extrinsic belief).

Billiet et al. (1995) put the most important American and Dutch findings on trial in Flanders, which is, religiously speaking, more or less monopolized by the Roman Catholic Church (Dobbelaere, 1995). Like Eisinga et al., they measured belief salience through frequency of church attendance. The results and the conclusions they arrive at are more or less in line with the Dutch research, except for the finding that, although the frequency of church attendance had a countering effect on racism, Christian belief as such did not seem to have any effect at all. Therefore, Billiet seems to be more inclined towards an explanation in terms of humanistic values (cf. 'pillarization' and social-cultural Christianity (Billiet, 1988)) than in terms of strictly religious values and conformism.

Summary

In contrast to most researchers in America, the researchers in the Low Countries hold the conviction that one can only give a meaningful interpretation to the relation between religion and racism when one starts focussing on non-religious factors instead of on religion itself. This difference in focus also manifests itself in the conclusions that have been drawn. Whereas the final conclusion of the American research seems to be that religion in general may stimulate racism (for all except a small minority), the final conclusion of the research in the Low Countries seems to be that when this relation is stripped from its nonreligious aspects, the only real influence religion exerts is to counter racism.

Out of dissatisfaction with the existing religiosity measures, the researchers in the Low Countries turned back to frequency of church attendance as an index of how people believe. Although we agree with the claim of Eisinga et al. (1988) that the instruments designed in America to measure the possible different ways believing are too outdated (or plain inappropriate) for usage in our cultural setting, we are convinced that frequency of church attendance is a bad religiosity measure (provided that ones aim is to understand the relation between religion and other variables). It is unlikely to reflect the cognitive aspects of religiosity (beliefs) with any precision.

Frequency of church attendance

A doubtful measure of intrinsic vs. extrinsic belief

In 1966 Allport wrote: 'While most extrinsics are casual churchgoers, a few are ideological extremists. With equal fervor they embrace some political nostrum along with the tenets of some religious (usually fundamentalist) sect' (Allport, 1966 :455). Doing so, he warned us not to use frequency of church attendance to distinguish between intrinsic and extrinsic believers. Despite the fact that the 'ideological extremists' are regular churchgoers, they should be regarded as extrinsic believers. Allport's distinction can thus not be captured by looking at observable behavior only. Similarly, these 'ideological extremists'

shall regard their religious belief system as important, and are likely to obtain high scores on no matter what measure of belief salience. It thus also seems inappropriate to reduce Allport's distinction to belief salience. Nevertheless, Allport himself seems to have reduced his distinction in this way when trying to operationalize the concepts of extrinsic and intrinsic religiosity (Allport & Ross, 1967).[1]

A doubtful measure of belief salience

Eisinga et al. (1988) assume irregular church attendance results from conformism, while regular attendance results from regarding religion as truly important. If this assumption is true, church attendance can be used as an index of belief salience. But times are changing fast, secularization may still be spreading, and religion increasingly becoming an individual matter (cf. Dobbelaere, 1995). Most of the people – whether or not they believe in God – have stopped attaching importance to church attendance. This is manifested in a sharp decline in church attendance, which is not limited to the younger cohorts, and which is not accompanied by a sharp decline in the number of people that indicate they believe in God (see Dobbelaere, 1995). Consequently, we do suggest that regular church attendance results from attaching importance to religion, but we are not convinced that irregular church attendance results from conformism, and that not going to church is an indication of unbelief. Therefore, if one wants to meaningfully study the relation between religion and racism in times when the individualization of giving meaning is widespread, it becomes increasingly important to look at how people believe. However, the religiosity measures mentioned so far, are no longer suited to classify people according to how they believe. The different dimensions that used to appear (e.g., extrinsic vs. intrinsic religiousness vs. quest) are highly positively related nowadays (Heps & Wellemans, 1994; Hutsebaut, 1996). Most participants thus present themselves as either indiscriminately pro- or anti-religious. Hence, we wish to present a recently developed measure of different possible religious styles, which not only pays attention to different possible forms of belief, but also to different forms of unbelief.

Introducing a new religiosity measure

Wulff (1991) argued that the various possible approaches to religion could roughly be located in a two-dimensional space. The vertical axis specifies the degree to which the objects of religious interest are granted participation in a transcendent reality or, to the contrary, are limited to processes immanent within the mundane world (inclusion vs. exclusion of transcendence). The horizontal axis indicates whether the expressions of religion are interpreted literally or symbolically (literal vs. symbolic). The two dimensions define four basic attitudes toward religion. According to Wulff (1991), 'the upper left quad-

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[1]   Probably, 'ideological extremists' obtained high scores on both extrinsic and intrinsic belief. It looks like as if the failure to clearly operationalize the concepts, has forced Allport and Ross (1967) to introduce a third type: the indiscriminately pro-religious (who obtained the highest prejudice scores).

rant represents affirmation of the literal existence of religious objects, a position most clearly embodied by religious fundamentalism'. The lower left quadrant represents a position in which people 'no longer belief in what they assume to be the literal referents of religious words' and in which 'they lose sight of the possibility that these words refer to truths for which there is no literal language' (Campbell, 1975 in Wulff, 1991). The lower right quadrant represents a position in which people deny 'reality to the transcendent referent of religious language and practice' and in which they go 'beyond this merely negative stance to claim a privileged perspective on what is considered to be the true, hidden, and wholly mundane meaning of religion's myths and rituals' (Wulff, 1991). The upper right quadrant represents a position which 'posits the transcendent realm as real, as literal affirmation tends to do, but searches instead for the symbolic meaning that resides within and ultimately points beyond these objects'. This second Naiveté (Wulff, 1991), in which one tries to encompass and go beyond all possible reductive interpretations, 'engages the inner life as a whole' (Wulff, 1991).

Building further on this, Hutsebaut (1996) designed a questionnaire – the Post-Critical Belief scale – that tried to capture three different ways of dealing with Roman Catholic religion: Orthodoxy, External Critique and Historical Relativism. Orthodoxy was comparable to Wulff's Literal Affirmation. External Critique was comparable to Wulff's Reductive Interpretation. Historical Relativism was comparable to Wulff's Restorative Interpretation. Several factor analyses confirmed the existence of these dimensions (Hutsebaut, 1996, 1997a, 1997b; Desimpelaere et al., 1999). Recently, however, a multidimensional scaling analysis (Kruskal & Wish, 1978) involving the Pearson correlations between the Post-Critical Belief items indicated that this scale does not consist of three but of four dimension which can be situated in Wulff's (1991) two-dimensional space: Orthodoxy, External Critique, Relativism and Second Naiveté (Duriez, Fontaine & Hutsebaut, 2000). The Orthodoxy items would measure Literal Affirmation, but the External Critique items would measure Literal Disaffirmation instead of Reductive Interpretation. Reductive Interpretation would be measured by the Relativism items. Finally, the Second Naiveté items would measure Restorative Interpretation.

Hypotheses

First, based on the literature, we can expected frequency of church attendance to be strongly related to belief salience (Hypothesis 1). However, as described, we are not convinced this is true. Secondly, based on both the American research tradition and the research tradition of the Low Countries, we expect both the frequency of church attendance as well as a measure of belief salience to be curvilinearly related to racism (Hypotheses 2 & 3). However, we also expect the effects of both measures on racism to disappear when the religious styles, as measured by the Post-Critical Belief scale, are taken into account (Hypothesis 4). Finally, we hypothesize the following relationship between these religious styles

and racism. We expect Orthodoxy to be positively related to racism because of the rather fundamentalist closed-mindedness of this position (Hypothesis 5). Since previous research has shown that External Critique has the same underlying thought processes as Orthodoxy (Desimpelaere et al., 1999; Duriez, Fontaine & Hutsebaut, 2000), we expect External Critique also to be positively related to racism (Hypothesis 6). We expect Relativism to be negatively related to racism because the concept itself implies tolerance towards other opinions, cultures, etc. (Hypothesis 7). Hypothesis 5, 6 and 7 received support from previous analyses (Duriez, Fontaine & Hutsebaut, 2000). Finally, although Second Naiveté turned out to be unrelated to racism in these analyses, theoretically speaking, we did expect it to be negatively related to racism, because in this outlook the commandment of brotherhood should be taken seriously (Hypothesis 8).

Method

Sample

525 questionnaires were distributed by undergraduate students of the Faculty of Psychology of the Catholic University Leuven (Belgium) in (Roman Catholic) schools and via organizations, relatives and friends. Refusal rates were very low (< 3%). In total we received 517 completed questionnaires.[2] All participants were Flemish-speaking persons of Belgian nationality. Among the participants were 230 men (44.5%) and 287 women (55.5%). Mean age was 34,79 years (SD=18.02, range=16-92). 17% of the sample were university-educated. 24% attended church weekly, compared to about 10% in the general Flemish population. The sample was thus slightly younger, better educated and more religiously active than the general Flemish population was.

Measures

Our questionnaire consisted of questions in a 7 point Likert scale format (1=completely opposed, 4= neutral, 7=completely in agreement). To measure belief salience, a 7 item scale based on Jackson's religion / spiritual life subscale (Jackson, 1981) was included. This scale contains items such as 'When I meet new people, it is important to me that they know I am religious', 'Being religious is important to me' and 'Whenever I can, I seek out situations in which I can express myself religiously'. To measure racism, a 9 item scale was included (see Duriez, Fontaine & Hutsebaut, 2000). To measure different religious styles, the 24 item Post-Critical Belief scale, consisting of four subscales, was included. For each scale, responses were subjected to an iterative exploratory factor analysis using multiple squared correlations as prior communality estimates. The principal components method was used to extract the factors. These analyses pointed to a single factor solution for each scale. Estimates of internal consistency

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2   We checked all questionnaires for three kinds of response biases: acquiescence (yeah saying), denial (no saying) and avoidance (sticking to the neutral point). No participants needed to be excluded on any of these grounds.

(Cronbach alpha's) were .88 (Mean = 3.51, SD = 1.52), .89 (Mean = 2.54, SD = 1.37), .78 (Mean = 2.55, SD = 1.33), .77 (Mean = 3.79, SD = 1.36), .60 (Mean = 4.58, SD = 1.32) and .85 (Mean = 3.90, SD = 1.88) for Belief Salience, Racism, Orthodoxy, External Critique, Relativism and Second Naiveté respectively.

Results

Initial correlation analysis

To test our hypotheses we first of all carried out a correlation analysis (see Table 1). Concerning Hypothesis 1, this analysis shows that frequency of church attendance and belief salience were strongly related. Concerning Hypothesis 2 and 3, the results of the correlation analysis are not very informative. This analysis shows us that both frequency of church attendance and belief salience are virtually unrelated to racism. However, a (strong) curvilinear relation might still exist. Therefore, we carried out two one-way ANOVA analyses (between-groups-design) using frequency of church attendance and belief salience as grouping variables. These analyses demonstrated that neither frequency of church attendance nor belief salience had predictive value concerning racism (respectively $F(3, 507)=0.09$, n.s. and $F(2,514)=1.04$, n.s.), indicating that our results did not provide any evidence for the existence of a curvilinear relationship. As a result of this, Hypothesis 4 turned out to be a pointless one: The effects of both measures on racism simply could not disappear when the religious styles were taken into account, because there was no effect of either of both measures. Concerning the remainder of our hypotheses, Racism turned out to be positively related to Orthodoxy, slightly positively related to External Critique, slightly negatively related to Relativism (all significantly so), but virtually unrelated to Second Naiveté (see also Duriez, Fontaine & Hutsebaut, 2000). These findings support hypothesis 5, 6 and 7, but seem to lead us to reject hypothesis 8. However, a pathway analysis suggested some support for hypothesis 8.

Table 1   Correlations between the scales

	Orthodoxy	External Critique	Relativism	Second Naiveté	Belief Salience	Church Attendance
External Critique	-.25 ***					
Relativism	-.20 ***	.27 ***				
Second Naiveté	.44 ***	-.56 ***	.14 *			
Belief Salience	.49 ***	-.64 ***	-.15 **	.64 ***		
Church Attendance	.41 ***	-.49 ***	-.03	.57 ***	.63 ***	
Racism	.34 ***	.13 *	-.15**	-.03	.01	.01

* $p<.005$, ** $p<.001$, *** $p<.0001$

Towards a theoretical model

Next, with the aid of path analysis (LISREL 8, Jöreskog & Sörbom, 1993) we set out to generate a model that fits our data and is interpretable. In this model, a number of identification variables, traditionally appearing to be related to racism (age and level of education), were also adopted.[3] The explanatory variables are divided in endogenous variables (the religious styles) and exogenous variables (the 'objective' characteristics) on theoretical grounds: The religious styles were expected to mediate the influence of frequency of church attendance and belief salience (and to a lesser extent also the influence of age and education) on racism. We therefore started off with a model in which paths were specified from all exogenous variables to all endogenous variables, from all exogenous variables to racism and from all endogenous variables to racism. This way we could test whether or not the paths from the exogenous variables to racism would turn out non-significant, as we were expecting.

The standardized Root Mean Square Residual, which represents the average value across all standardized residuals, and which should be .05 or less, suggested this model fitted the data reasonably well (standardized RMR=.05). The Goodness-of-Fit Index, which basically compares the hypothesized model with no model at all, and which should be close to 1.00, suggested a good fit (GFI=.95). The adjusted Goodness-of-Fit Index, which also takes the degrees of freedom into account, however, suggested a poor fit (AGFI=.59). The Normed Fit Index, which compares the hypothesized model with the independence model, and which should exceed .90, also indicated a rather poor model fit (NFI=.89). The same can be said regarding the Comparative Fit Index, which takes the sample size into account (CFI=.89), and regarding the Incremental Fit Index, which takes the degrees of freedom into account (IFI=.89). The Root Mean Square Error of Approximation, which takes into account the error of approximation in the population, was high (RMSEA=.24), indicating that the model fitted the data poorly (values less than .05 indicate good fit, and values as high as .08 to .10 represent reasonable errors of approximation). Finally, chi-square, the traditional closeness of fit measure, was excessively high ($\chi^2(6)$=193.95, p=.00), indicating this model was unlikely and should be rejected. Most goodness of fit statistics thus showed this model did not fit the data well (for an overview of these statistics, see Byrne, 1998).

As a next step, we decided to let ourselves be guided by the modification indices that accompanied the output, and decided to allow error covariances between four pairs of religious styles (between Relativism and External Critique and between Second Naiveté and all other religious styles). This implies that a common aspect, which was not adopted in the model, influenced these pairs. Obviously, we cannot be certain to identify these common aspects precisely, but, theoretically speaking, we have a fair notion of what they could be. Relativism and External Critique are both mainly expressions of disbelief. Second

Naiveté and Orthodoxy are both belief affirming stances. Second Naiveté and External Critique are both epitomized by the "Masters of Suspicion" (Freud, Marx & Nietschze), but while External Critical persons stick to a reductive interpretation of religion, the Second Naiveté believers try both to encompass and to go beyond it (Wulff, 1991). Finally, Second Naiveté and Relativism are both characterized by a consciousness of the strictly personal character of the own ideological outlook. The standardized RMR (=.01), the GFI (=1.00), the AGFI (=.92), the NFI (=1.00), the CFI (=1.00) and the IFI (=1.00) all suggested our adapted model fitted the data extremely well. However, the RMSEA (=.08) indicated a mediocre model fit, and chi-square was still too high ($\chi^2(2)=8.49$, p=.01).

Since the output was still accompanied by a theoretically meaningful suggestion, we adapted the model once again by specifying a path from Second Naiveté to Orthodoxy. The standardized RMR (=.00), the GFI (=1.00), the AGFI (=1.00), the NFI (=1.00), the CFI (=1.00), the IFI (=1.00), the RMSEA (=.00) and chi-square ($\chi^2(1)=0.12$, p=.73) all suggested this model fitted the data extremely well. However, as Jöreskog (1993) and McCallum (1995) have noted, models might be overfitted. In that case, one can eliminate some parameters from the model without significantly altering its fit to the data, thus simplifying the model and augmenting the chance of cross-validation. Therefore, in a last step, we decided to remove all non-significant paths (thus freeing certain formerly fixed parameters). Of course, the goodness of fit detoriated, but only slightly. Chi-square ($\chi^2(7)=7.46$, p=.39), the RMSEA (=.01), the standardized RMR (=.01), the GFI (=.99), the AGFI (=.98), the NFI (=1.00), the CFI (=1.00) and the IFI (=1.00) all suggested our final model still fitted the data extremely well. Moreover, the chance that the model cross-validates across similar-sized samples from the same population, as measured by the Expected Cross-Validation Index (ECVI), increased. ECVI coefficients can take on any value, so there is no appropriate range of values. Its application assumes a comparison of models whereby an ECVI is computed for each model, after which all ECVI values are placed in rank order. The model with the smallest ECVI value exhibits the greatest potential for replication. The ECVI-value of this simplified model was .16, in comparison to .17 for the non-simplified model. Quite similar indices, the Akaike Information Criterion and the Consistent Akaike Information Criterion, pointed in the same direction: The simplified model had a AIC of 83.42 and a CAIC of 282.84, whereas the non-simplified model had a AIC of 88.12 and a CAIC of 319.03 (for an overview of these statistics, see Byrne, 1998). The final model provides an overview of the strength of direct as well as indirect relations between the explanatory variables and the dependent variable racism (see Figure 1 & Table 2). The model accounted for 19% of the variance in racism.

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3   The correlation analyses had already shown that, in this study, age correlated positively (r(517)=.23, p<.0001) and education correlated negatively (r(517)=-.26, p<.0001) with racism.

Figure 1   Causal model explaining the influence of religion on racism in Flanders
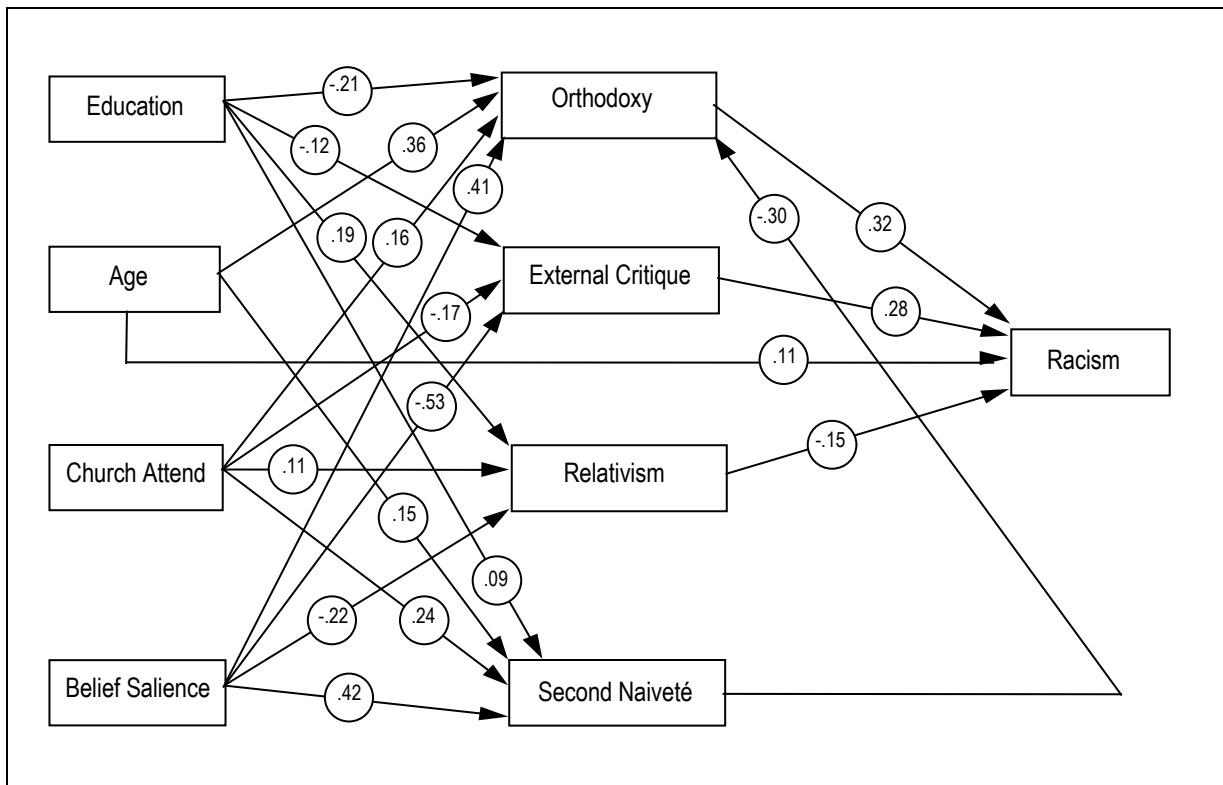
Table 2   Lisrel estimates of the Standardized Effect Parameters (Lambda)

| | Direct effects* on** | | | | Effects on Racism | | |
	O	E	R	2	Direct	Indirect	Total
Education	-.21 (-.24)	-.12	.19	.09		-.13	-.13
Age	.36 (.31)			.15	.11	.10	.21
Church Attendance	.16 (.09)	-.17	.11	.24		-.04	-.04
Belief Salience	.41 (.28)	-.53	-.22	.42		-.02	-.02
Orthodoxy					.32		.32
External Critique					.28		.28
Relativism					-.15		-.15
Second Naïveté	-.30					-.10	-.10
R²	.32	.43	.07	.47			.19

Note: *Total effects are between brackets if they are different from the direct effects. All effects are significant at the .05 level. O= Orthodoxy, E= External Critique, R= Relativism, 2= Second Naïveté*

As far as the endogenous variables are concerned, Orthodoxy and External Critique had more or less the same stimulating effect on racism. The (direct) effect of Relativism and the (indirect) effect of Second Naiveté was a lot smaller. As far as the exogenous variables are concerned, age had, as expected, the most significant stimulating effect on racism, both directly and indirectly. Although the strength of this

total effect was smaller than that of Orthodoxy and External Critique, it was still stronger than that of Relativism and Second Naïveté. Education had, as expected, a restraining effect on racism. This, however, appeared to work entirely indirectly through the influence on the religious styles. Frequency of church attendance as well as belief salience had no significant direct effect on racism. However, they had a slightly indirect restraining effect through their influence on the religious styles.

Discussion

The hypothesis that belief salience and frequency of church attendance would be strongly positively correlated (Hypothesis 1) was confirmed. However, the correlation was not so strong as to conclude that actually the same thing is being measured. This implies one has to be reluctant to use church attendance as a measure of belief salience, for it only provides a rough indication. This does not necessarily imply that the other researchers in the Low Countries working on this topic did not measure what they thought they were measuring. As we noted in our description of the sample, our sample was in some ways not representative of the Flemish population. The results we obtained could be an artifact of that.[4] Alternatively, even if the correlation we found does mean that both measures do not measure the same thing, this can be a recent evolution due to an acceleration in the privatization of religion. And even if these measures were not measuring exactly the same thing, at least they measure something quite closely associated. However, it is advisable to stop using a measure of church attendance as an indication of belief salience without further investigation.

The hypotheses that belief salience and church attendance would be curvilinearly related to racism (Hypotheses 2 & 3) were not confirmed. Again, we cannot exclude the possibility that the absence of these relations was due to sample characteristics, but in line with what we have advocated before, we believe it is more reasonable to search for an explanation of these findings in terms of the privatization of religion. Likely, both the irregular church attenders and the meaning of attaching only moderate importance to religion have changed. A consequence of these findings was that we could not check Hypothesis 4, which stated that the effects of church attendance and belief salience on racism would disappear when religious styles are taken into account. But maybe this hypothesis has stopped making sense. This would be the case if it is truly so that church attendance and belief salience are nowadays unrelated to racism, and possibly also to other social attitudes. Further research is required to examine this. If this research supports our findings, the conclusion would be that knowing how often people attend church and/or knowing how important people consider their religion to be, is really no longer informative.

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4   However, since education was found to be significantly related to racism (as could be predicted), and since our sample was even more distorted according to education than according to church attendance, this would be rather unlikely.

An initial correlation analysis yielded evidence in favor of hypotheses 5, 6 and 7. Orthodoxy and External Critique were indeed positively related to racism, whereas Relativism was negatively related to racism. It should nevertheless be noted that, although these relations were substantial, they were not very strong. At the same time, this analysis seemed to suggest that we have to reject hypothesis 8. Second Naiveté turned out to be unrelated to racism. However, the results of our path analysis show that this interpretation would partly have been a faulty one. Although it is true that Second Naiveté did not exercise a direct influence on racism, it appeared to hold an indirect influence in the expected direction. We can conclude that, although Second Naiveté does not seem to lead to greater tolerance, it does inhibit racism. Our research thus does provide evidence that there exists a way of dealing with Roman Catholic religion that, generally speaking, counters racism, but does not provide any evidence that there exists a way of dealing with religion that fosters tolerance. On the other hand, there does appear to exist a way of rejecting Roman Catholic religion that, generally speaking, is associated with tolerance.

The path analysis largely confirmed the effect of the explanatory factors age and education, as revealed in past studies in the Low Countries. Yet, contrary to Billiet's research (1995b), education maintained an indirect effect only, whereas age continued to influence racism directly. Consequently, a combination of both theoretical frameworks seems suitable in order to obtain a view on why these effects take place. Possibly, the effect of age should be considered in terms of authoritarianism, to which we did not pay attention. The effect of age is not so much in terms of belief-related value orientations, since this effect seemed to limit itself to a non-differentiated positive influence on the typically belief affirming religious styles. The effect of education should mainly be considered in terms of the facilitation of non-dogmatic (religio-)cognitive styles, to which Billiet did not pay attention. We should, however, be careful when drawing conclusions from our path analyses. We are aware of the fact that the construction of our model was data-driven, and that it might have been obtained to some extent by capitalizing on chance (Jöreskog, 1993). Moreover, the LISREL-output indicated a Critical N goodness of fit statistic of 1279, suggesting our sample (N = 517) was not sufficiently large to allow for an adequate fit of the model. Therefore, before basing strong claims on it, it should be tested again (strictly confirmatory).

A last point we need to address is that, for practical reasons, no measurement of social desirability was included in our study. However, the absence of this kind of measurement may not be problematic. First of all, if religion truly has become privatized, as our results seem to suggest, there is no longer a need to give socially desirable answers to belief-related items. In the light of the current era, we cannot image what could be gained from pretending to be more religious than one actually is. Nor can we imagine what could be gained from pretending to be less religious than one actually is. In future research, however, we will explicitly pay attention to this.

PART 2
Religion and Racism 2

Abstract

According to Wulff (1991, 1997), the various approaches to religion can be located in a two-dimensional space along the bipolar dimensions Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic. Previous research has suggested that these dimensions are differently related to racism. Racism would be unrelated to the Exclusion vs. Inclusion of Transcendence dimension, whereas it would be negatively related to the Literal vs. Symbolic dimension. Results of the present study, using the Post-Critical Belief scale (Duriez, Fontaine & Hutsebaut, 2000; Fontaine et al., in press) as a measure of Wulff's concepts in 7 different samples (total N = 2314) gathered in Flanders (Belgium), support these hypotheses.

Introduction

The religiosity-racism relation is probably the most important paradox within the psychology of religion. Whereas all world religions proclaim brotherly love, history is littered with moments in which religion has provided a justification for, or has given cause to, atrocities directed towards people from a different race or culture. A number of historians and theologians concluded from this that religion should be considered as a catalyst for prejudice, racism, etc., and a lot of psychological and sociological research has been carried out to investigate whether this is true (for a recent overview: see Duriez & Hutsebaut, 2000).

Recently, Wulff (1991, 1997) provided a new and interesting perspective on religiosity. According to Wulff, all possible attitudes to religion can be summarized along two dimensions. The Exclusion vs. Inclusion of Transcendence dimension specifies whether the objects of religious interest are granted participation in a transcendent reality. The Literal vs. Symbolic dimension indicates whether religious expressions are interpreted literally or symbolically. Building further on this, Fontaine et al. (in press) have shown that the Post-Critical Belief scale (Duriez, Fontaine & Hutsebaut, 2000) provides direct measures of existing interindividual differences in both Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic. In this way, the effects of being religious or not (Exclusion vs. Inclusion of Transcendence) can be disentangled from the way in which religion and religious contents are approached (either in a literal or in a symbolical way). This allows one to shed new light on the religiosity-racism relation. The Exclusion vs. Inclusion of Transcendence dimension, on the one hand, is expected to be unrelated to racism, since there is no intrinsic reason to assume such relation. The Literal vs. Symbolic dimension, on the other hand, is expected to relate strongly negatively to racism, because intolerance of ambiguity, which is characteristic of literal thinking (see Desimpelaere et al., 1999; Duriez, 2002c), was reported to be related to racism (Sidanius, 1985). Moreover, Fontaine et al. (2002) have argued that the Literal vs. Symbolic dimension relates to empathy (see also Duriez, 2002b), and lack of empathy was identified by McFarland (2000) as an important prejudice disposition. The Literal vs. Symbolic dimension was also reported to be related to right-wing authoritarianism and social dominance orientation (Duriez & Van Hiel, 2002; Duriez, Van Hiel & Kossowska, 2002). Two other constructs that were identified by McFarland (2000) as important prejudice dispositions.

Method

Samples

In total, 7 samples were gathered in Flanders (Belgium) (total $\underline{N}$ = 2314). Sample 1 ($\underline{N}$ = 518) consisted of adolescents, students and adults. Questionnaires were distributed by undergraduate students in schools and organizations, and by relatives and friends of these students, who were asked to hand out

questionnaires to their neighbors. For reasons of consistency with previous articles (Duriez, Fontaine & Hutsebaut., 2000; Duriez & Hutsebaut, 2000), this sample was not split up into adolescents, students and adults. The mean age was 35 years (SD=18), and 45% of the participants were male. Samples 2, 3 and 4 (N = 389, 338 and 376 respectively) consisted of university students only. Participants followed a psychology course at a large Belgian university. Participation was obligatory and they received course credit. The mean age in these samples was 18 years (SD=01), and 20% of the participants were male. Samples 5, 6 and 7 (N = 228, 164 and 301 respectively) consisted of adults only. Subjects from samples 5 and 6 were gathered by undergraduate students who asked their neighbors to participate in order to obtain heterogeneous samples. The mean age was 32 (SD=13) and 39 (SD=15) years respectively, and respectively 48% and 55% of the participants were male. Sample 7 was gathered among highly religious persons. The mean age was 45 years (SD=13), and 35% of the participants were male. All subjects having over two missing values on the Post-Critical Belief scale or having over one missing value on the racism scale were excluded from further analyses. In total, only 2% of the participants (N = 43) needed to be removed across the 7 samples. For subjects which were not removed, missing values were replaced by the sample-specific mean of the item. In total, only 182 missing values were replaced (< 0.3% of the individual score included in this study).

Measures

Participants completed one of three different versions of the Post-Critical Belief scale. Fontaine et al. (in press) have shown that the internal structure of the Post-Critical Belief scale is stable across these different versions. A 22 item version (Fontaine et al., in press) was presented to sample 1, a 31 item version (Fontaine et al., in press) was presented to sample 2, and a 33 item version (Fontaine et al., in press) was presented to samples 3 to 7. All items were scored on a 7-point Likert scale (1=completely opposed, 4=neutral, 7=completely in agreement). In order to control for interindividual differences in acquiescence, the average score across the items was subtracted from the raw scores (for a detailed description, see Fontaine et al, in press). For each sample, a Principal Component Analysis (PCA) was then carried out on the corrected scores. A scree test clearly pointed to a two-componential solution for all samples (cf. Fontaine et al., in press). In all samples, after orthogonal Procrustes rotation towards the estimated average structure reported by Fontaine et al. (in press), these two components could be interpreted in terms of Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic. In all samples, Tucker's Phi indices were above .90 for both components, suggesting good congruence (Bentler & Bonett, 1980; Van de Vijver & Leung, 1997).

Participants also completed a 9 item racism scale (Billiet & De Witte, 1991; Duriez & Hutsebaut, 2000). All items were scored on a 5-point Likert scale (1=completely opposed, 3=neutral, 5=completely in

agreement). According to Billiet and De Witte (1991), this scale consists of two components: racism and xenophobia. An example of a racism item is "We have to keep our race pure and fight mixture with other races". An example of a xenophobia item is "In general, immigrants are not to be trusted". However, a scree test clearly pointed to one component only in all samples.[5] Estimates of internal consistency (Cronbach Alpha's) were .90, .83, .86, .85, .84, .87 and .82 for samples 1 to 7 respectively.

Results

For each of the samples, the relation between the religiosity dimensions and racism was investigated by means of bivariate correlations. Results show some fluctuation across the samples regarding the relation between Exclusion vs. Inclusion of Transcendence and racism (see Table 1). Therefore, in order to exclude random sampling fluctuation and sample specific information as well as possible, average Pearson correlations were computed (see Table 1). For this purpose, the correlations obtained were weighted by sample size and subjected to Fisher-Z transformations. Results show that, whereas the average correlation between racism and Literal vs. Symbolic is strongly negative, the average correlation with Exclusion vs. Inclusion of Transcendence tends to zero.

Table 1   *Correlations between racism and the religiosity dimensions which Wulff (1991, 1997) identified*

Racism	Exclusion vs. Inclusion	Literal vs. Symbolic
Sample 1	.09	-.38 **
Sample 2	.09	-.32 **
Sample 3	.14 *	-.34 **
Sample 4	.03	-.40 **
Sample 5	.16 *	-.36 **
Sample 6	.06	-.30 **
Sample 7	.02	-.44 **
Mean	.08	-.39

Note: *A 10 item Marlowe-Crowne Social Desirability scale (Crowne & Marlowe, 1960) was administered in samples 3, 5 and 6 to check whether controlling for social desirability would influence the observed relations. Results showed that this hardly affected the correlations at all. In a similar vein, controlling for age and gender hardly affected the correlations.*

* p<.01, ** p<.0001; Mean = average correlation across the samples

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[5]   If the two theoretical components are kept seperately, the correlation between both subscales is almost as high as the internal consistency of the subscale with the lowest internal consistency. Moreover, both components show highly similar relations to the two religiosity dimensions.

Discussion

As expected, racism was negatively related to the Literal vs. Symbolic dimension and, on average, unrelated to the Exclusion vs. Inclusion of Transcendence dimension. These results contribute to the debate whether religious people, in general, are more inclined to hold racist opinions (see Duriez & Hutsebaut, 2000). The answer is no (Hutsebaut, 2002; Hutsebaut & Duriez, 2001). The present study clearly shows that, apparently, this debate has its origin in the simple fact that most religiosity measures confuse being religious or not with the way in which one is approaching religion. When separating both aspects, it becomes apparent that religiosity as such does not lead to racism. In contrast, the way in which religion is approached tells a great deal about whether or not one is inclined to hold racist opinions.

PART 3
Religion and Empathy

Abstract

The relation between the two religiosity dimensions which Wulff (1991, 1997) described (Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic) and empathy was investigated in a Flemish student sample (N = 375). The Post-Critical Belief scale (Duriez, Fontaine & Hutsebaut, 2000) was used to measure Wulff's religiosity dimensions, Davis' (1983) Interpersonal Reactivity Index was used to provide a differentiated empathy measure, and a shortened Marlowe-Crowne Social Desirability scale (Crowne & Marlowe, 1960) was administered to take into account the effects of social desirability. Empathy was expected to be unrelated to the Exclusion vs. Inclusion of Transcendence dimension and to be positively related to the Literal vs. Symbolic dimension. Results support these hypotheses.

Introduction

Batson (1983) has argued that an empathetically mediated kin-specific altruistic impulse is part of the human genetic heritage, and that one of the functions of religion is to extend the range of this altruistic impulse far beyond the kinship circle. Religion achieves this goal through the use of kinship language and imagery: By teaching that we are all children of God, religion enhances an altruistic impulse that is already present, extending it from the kinship circle to human kind in general. However, it is clear that religion does not always succeed in this. History is littered with moments in which religion has provided a justification for, or has given cause to, atrocities directed towards people from a different race or culture. A number of historians and theologians concluded from this that religion should be considered as a catalyst for prejudice, racism, etc., and a lot of psychological and sociological research has been carried out to investigate whether this is true (for an overview, see Duriez & Hutsebaut, 2000). In this respect, Duriez (2002a) has shown that the key to understand the religion-racism relation is not so much whether and what people believe but how they believe. In a similar vein, I will argue that the religiosity-empathy relation, which remains unclear to date (Darley & Batson, 1973; Batson & gray, 1981; Donahue, 1981; Greenwald, 1975; Francis & Pearson, 1987; Watson et al., 1984), cannot be understood in terms of whether and what people believe but should be understood in terms of how it is believed. Empathy was focussed upon since it is fundamental to altruism and helping behavior (Hoffman, 1976; Batson, 1991a, 1991b, 1998; Batson & Oleson, 1991; Batson et al., 1995; Duriez, 1999, 2000; Krebs, 1975; Rushton, 1980).

Method

Sample

Participants were 375 first year psychology students from a Belgian university, ranging in age from 17 to 31 with a mean of 18 (80% female). All participants were Flemish-speaking and of Belgian nationality. Participation was obligatory and participants received course credit. Anonymity was guaranteed.

Measures

As a religiosity measure, participants completed the Post-Critical Belief scale (Duriez, Fontaine & Hutsebaut, 2000; 33 items). Fontaine et al. (in press) have shown that this scale provides measures of the basic religiosity dimensions which Wulff (1991, 1997) identified, namely Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic. In this way, the effects of being religious or not (Exclusion vs. Inclusion of Transcendence) can be disentangled from the way in which religious contents are dealt with (either in a literal or in a symbolical way). The items were scored on a 7-point Likert scale (1=completely opposed, 4=neutral, 7=completely in agreement). As in Fontaine et al. (in press), a level of acquies-

cence estimation was subtracted from the raw scores. A Principal Component Analysis (PCA) was then carried out on these corrected scores. A scree test pointed to a two-componential solution. However, since PCA allows freedom of rotation, the componential structures obtained in different samples cannot be compared straightforwardly. Therefore, this structure was subjected to an orthogonal Procrustes rotation towards the average structure reported by Fontaine et al. (in press). Tucker's Phi indices were above .90 for both components, suggesting good congruence (Bentler & Bonett, 1980; Van de Vijver & Leung, 1997). Hence, these components could be interpreted as Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic respectively.

As an empathy measure, participants completed a Dutch version of the Interpersonal Reactivity Index (IRI, Davis, 1983; 28 items). The translation was done according to the guidelines of the International Test Commission (Hambleton, 1994), using the translation back-translation procedure (Brislin, 1980). Differences between the back-translated and the original version were minimal. A committee of five bilingual research assistants decided on the final Dutch version of the test (cf. Van de Vijver & Leung, 1997). The items were scored on a 5-point Likert scale (1=completely opposed, 3=neutral, 5=completely in agreement). The Interpersonal Reactivity Index consists of four subscales, each of which assesses a specific empathy aspect. The Fantasy scale measures the tendency to transpose oneself into feelings and actions of fictitious characters in books and movies. The Perspective Taking scale measures the tendency to adopt the viewpoint of other people in everyday life. The Personal Distress scale measures one's own feelings of unease and discomfort in reaction to other people's emotions. The Empathic Concern scale measures the tendency to experience compassion and concern for other people. Estimates of internal consistency (Cronbach Alpha's) were .82, .69, .70 and .70 for Fantasy, Perspective Taking, Personal Distress and Empathic Concern respectively. Apart from these scores, a general Empathy factor score was also computed (cf. McFarland, 2000). This score was positively related to Fantasy (r=.76, p<.0001), Perspective Taking (r=.56, p<.0001), Personal Distress (r=.45, p<.0001) and Empathic Concern (r=.85, p<.0001).

Because Batson (1976) pointed out the importance of Social Desirability when studying the relation between religion and prosocial attitudes and behavior, a 10 item Marlowe-Crowne Social Desirability scale (Crowne & Marlowe, 1960) was also administered. In this way, the effects of social desirability could be taken into account. Again, the translation was according to the abovementioned procedure.

Results

The relationship between the religiosity dimensions on the one hand and general empathy and its subdimensions on the other hand was investigated by means of bivariate correlations. Results show that,

whereas the correlations between Exclusion vs. Inclusion of Transcendence and both general empathy and all of its subdimensions tend to zero, the Literal vs. Symbolic dimension is positively related to general empathy and its subdimensions Fantasy, Perspective Taking and Empathic Concern. Controlling for Social Desirability hardly changed the correlations at all (see Table 1).

Table 1   *Correlations between the religiosity dimensions, general empathy and the empathy dimensions*

	Empathy	FA	PT	PD	EC
Exclusion vs. Inclusion	.00	-.08	.00	.07	.04
Exclusion vs. Inclusion	.00	-.08	.00	.07	.04
Literal vs. Symbolic	.22 ***	.22 ***	.24 ***	-.07	.16 *
Literal vs. Symbolic	.24 ***	.22 ***	.28 ***	-.08	.18 **

Note: *Empathy = General Empathy, FA = Fantasy, PT = Perspective Taking, EC = Empathic Concern. First lines refer to bivariate correlations. Second lines refer to partial correlations (corrected for Social Desirability).*
* p<.01, ** p<.001, *** p<.0001.

Discussion

As expected, general empathy as well as all of its subdimensions (apart from Personal Distress) were positively related to the Literal vs. Symbolic dimension and unrelated to the Exclusion vs. Inclusion of Transcendence dimension. These results contribute a great deal to the debate whether religious people, in general, are nicer people, in the sense that they feel more empathy towards their fellow men and, hence, are more likely to provide help to a person in need. The answer is no. The present study shows that, apparently, this debate has its origin in the simple fact that the religiosity measures that have been used in previous studies confuse being religious or not with the way in which one is approaching religion. When separating both aspects, it becomes apparent that religiosity as such has no connection whatsoever with empathy. In contrast, the way in which religion is approached tells a great deal about whether or not one is likely to experience feelings of empathy and, hence, to expose helping behavior (for altruistic rather than egoistic reasons). These findings are consistent with the results of previous studies relating Wulff's religiosity dimensions to variables such as prejudice and racism (Duriez, 2002a; Duriez, Fontaine & Hutsebaut, 2000; Duriez & Hutsebaut, 2000; Duriez et al., 2002; Duriez & Van Hiel, 2002), moral competence and moral attitudes (Duriez, in press A) and value orientations (Duriez, Fontaine & Luyten, 2001; Fontaine et al., 2002).

PART 4
Religion and Conservatism

Abstract

The relation between the two religiosity dimensions which Wulff (1997) described (Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic) and two conservative political ideologies (Cultural and Economic Conservatism) was investigated in a sample of 714 students, a heterogeneous sample of 262 adults and a sample of 301 religiously affiliated adults gathered in Flanders (Belgium). Both Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic were expected to relate only to Cultural Conservatism. Results supported these hypotheses, providing further evidence for the close association between religiosity and Cultural Conservatism and the validity of the Post-Critical Belief scale (Duriez, Fontaine & Hutsebaut, 2000) as a measure of Wulff's religiosity dimensions.

Introduction

In the past, researchers often assumed that political parties and political attitudes could be arrayed on a single dimension of left-right or progressivism-conservatism (e.g. Lipset, 1960; McClosky, 1958). However, more recently it has been argued that the meaning of this dimension varies across nations and over time and is thus often insufficient to represent the relevant political dimensions in a given society (e.g., Inglehart, 1990; Rokeach, 1973). Middendorp (1978, 1991), for instance, rigorously analyzed the ideological components of this left-right dimension (and of political conflicts in general) in a theoretical, historical and empirical way, and distinguished two unrelated dimensions rather than one. The first dimension, opposing traditionalism to libertarianism, concerns individual rights and readiness for social change. This dimension was later labeled Cultural Conservatism (De Witte & Scheepers, 1999), Cultural conservatives are concerned with maintaining discipline in people's lives, especially within the family (e.g., by making divorce difficult and by tightening controls over abortion and euthanasia), and are in favor of a strict upbringing and traditional sex-roles. The second dimension, opposing right-wing political attitudes to left-wing political attitudes, concerns the desirable level of economic equality among people as well as the desirability of trade unions and governmental intervention in economics. This dimension was later labeled Economic Conservatism (De Witte & Scheepers, 1999). Economic conservatives oppose economic equality, trade unions and governmental intervention in the economic sphere. The distinction between Cultural and Economic Conservatism is similar to the distinction between social and economic conservatism (Lipset, 1981) and between social traditionalism and economic conservatism (Johnson & Tamney, 2001).

In a somewhat similar vein, Wulff (1997) provided an interesting new perspective on religiosity. According to Wulff, all possible attitudes to religion can be summarized along two dimensions. The Exclusion vs. Inclusion of Transcendence dimension specifies whether the objects of religious interest are granted participation in a transcendent reality. The Literal vs. Symbolic dimension indicates whether religious expressions are interpreted literally or symbolically. Recently, Fontaine et al. (in press) have shown that the Post-Critical Belief scale (Duriez, Fontaine & Hutsebaut, 2000) captures interindividual differences in these basic religiosity dimensions. In this way, the Post-Critical Belief scale allows one to disentangle the effects of believing in a transcendent reality or not (Exclusion vs. Inclusion of Transcendence) from the way in which religious contents are approached (either in a literal or in a symbolical way).

The aim of the present study is to relate the religiosity dimensions that are captured by the Post-Critical Belief scale to the main conservative political ideologies which Middendorp (1978) identified (Cultural and Economic Conservatism) in order evaluate the external validity of the Post-Critical Belief scale. There are two reasons to examine the construct validity of this scale in relation to measures of conserv-

atism. First, religiosity has been found to be linked to some of these measures, but not to others (see below). Second, just like the Literal vs. Symbolic dimension (Desimpelaere, Sulas, Duriez & Hutsebaut, 1999; Duriez, 2002c), some of these measures have been found to relate to cognitive variables such as dogmatism (see below). Hence, specific predictions can be made regarding the relation between the two religiosity dimensions and these conservatism measures.

The Exclusion vs. Inclusion of Transcendence dimension is expected to relate to Cultural Conservatism. Factor analyses of social attitude items have consistently led to a cultural conservatism - religiosity factor (Brown, 1981; Comrey & Newmeyer, 1965; Eysenck, 1944, 1954, 1971; Ferguson, 1939, 1940, 1973; Gorsuch & McFarland, 1972; Sania, 1952; Saucier, 2000; Thurstone, 1934; Wilson, 1970), and independently developed measures of cultural conservatism and religiosity have often been reported to be strongly related (Gorsuch, 1984; Walkey, Katz & Green, 1990). In contrast, since Economic Conservatism was shown to be independent of religiosity (Johnson & Tamney, 2001; Middendorp, 1978), Exclusion vs. Inclusion of Transcendence is expected to be unrelated to Economic Conservatism.

The Literal vs. Symbolic dimension, which is basically a cognitive dimension (see Desimpelaere et al., 1999), is expected to relate negatively to Cultural Conservatism. Recent research has shown that persons high on cognitive rigidity measures are likely to support culturally conservative ideologies since these rely on tradition, are aimed at (societal) stability, and imply the avoidance of ambiguity caused by change (e.g., Greenberg et al., 1990; Johnson & Tamney, 2001; Jost, Glaser & Kruglanski, in press; Kemmelmeier, 1997; Kossowska & Van Hiel, 2002; Shah, Kruglanski & Thompson, 1998; Tetlock, 1983, 1993; Van Hiel, Pandelare & Duriez, 2002). Moreover, recent research has shown that literal thinkers tend to be high on measures of cognitive rigidity such as dogmatism, closed-mindedness and intolerance of ambiguity (Duriez, 2002c, Duriez & Soenens, 2002). In contrast, the Literal vs. Symbolic dimension is expected to be unrelated to Economic Conservatism. On the one hand, there is evidence that Economic Conservatism relates negatively to dogmatism (Johnson & Tamney, 2001). Economic Conservatism tends to embrace technological evolutions, especially within the business world (Sayer, 1991) and hence it is likely to go hand in hand with a pragmatist outlook in which there is little room for the traditional morality that might be incompatible with technical evolutions. Economical Conservatism would therefore relate to trying to understand the (religious) views of the opposition, rather than to emotionally reject them. However, at the same time, pragmatism is likely to inhibit thinking about the symbolic meaning of religious language.

In sum, the Exclusion vs. Inclusion of Transcendence dimension is expected to relate positively to Cultural Conservatism and to be unrelated to Economic Conservatism, and the Literal vs. Symbolic dimension is expected to relate negatively to Cultural Conservatism and to be unrelated to Economic Conservatism.

Method

Samples

Three samples were gathered in Flanders (Belgium) (total $\underline{N}$ = 1277). Sample 1 ($\underline{N}$ = 714; 20% male) consisted of university students following an introductory psychology course. Participation was obligatory and they received course credit. The mean age was 18 years (SD=01). Sample 2 ($\underline{N}$ = 262; 55% male) consisted of adults only. Subjects were gathered by undergraduate students who asked their neighbors to participate in order to obtain heterogeneous samples. The mean age was 39 years (SD=15). Sample 3 was gathered among highly religious subjects, affiliated to the Roman Catholic Church ($\underline{N}$ = 301; 35% male). The mean age was 45 years (SD=12). Participants having over two missing values on the Post-Critical Belief scale or over one missing value on one of the other scales were excluded from further analyses. This way, 19 participants (= less than 2%) were removed across the samples. For subjects which were not removed, missing values were replaced by the sample-specific mean of the item. In total, only 82 missing values were replaced.

Measures

Participants completed a Cultural and Economic Conservatism scale (De Witte, 1990; Duriez et al., 2002; both 12 items). The items were scored on a 5-point scale anchored by Certainly disagree and Certainly agree. Examples of items for cultural and economic conservatism are, respectively, "Women should do the household and men should go out making money" and "Differences between high and low incomes should remain the same". Estimates of internal consistency were .70, .79 and .75 for Cultural Conservatism, .76, .83 and .86 for Economic Conservatism in sample 1, 2 and 3 respectively. Participants obtained mean scores of 2.22 ($\underline{SD}$=0.44), 2.58 ($\underline{SD}$=0.67) and 2.87 ($\underline{SD}$=0.63) for Cultural Conservatism and 2.52 ($\underline{SD}$=0.43), 2.48 ($\underline{SD}$=0.67) and 2.45 ($\underline{SD}$=0.73) for Economic Conservatism in sample 1, 2 and 3 respectively. As expected, Cultural and Economic Conservatism were largely unrelated (-$\underline{r}$s=.11, p<.01, .05, n.s., and 09, n.s.). Participants also completed the Post-Critical Belief scale (Duriez, Fontaine & Hutsebaut, 2000; 33 items). The items were scored on a 7-point scale anchored by Certainly disagree and Certainly agree. As in Fontaine et al. (in press), an estimation of level of acquiescence was subtracted from the raw scores. For each sample, a Principal Component Analysis (PCA) was carried out on these corrected scores. A scree test indicated a two-componential solution for all samples. These structures were subjected to orthogonal Procrustes rotations towards the average structure reported by Fontaine et al. (in press). In all samples, Tucker's $\underline{Phi}$ indices suggested good fit. Hence, in all samples, the two components could be interpreted as Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic respectively. Due to the correction for level of acquiescence, the mean scores on these dimensions were 0.00 ($\underline{SD}$=1.00) for all samples.

Results

For each sample, the relationships between the religiosity dimensions and the conservative ideologies were investigated by means of bivariate correlations. In addition, average correlations across the three samples that were used in this study were also computed. For this purpose, the correlations obtained in the different samples were subjected to Fisher-Z transformations. Whereas Cultural Conservatism, on average, relates positively to Exclusion vs. Inclusion of Transcendence (r=.44) and negatively to Literal vs. Symbolic (r=.-23), Economic Conservatism is virtually unrelated to both religiosity dimensions (r=.00 and -.03 respectively). Although there was some fluctuation across the three samples that were used in this study, similar patterns occurred. Whereas Cultural Conservatism related consistently positively to Exclusion vs. Inclusion of Transcendence (r=.35, .48 and .40, p<.0001 for sample 1, 2 and 3) and consistently negatively to Literal vs. Symbolic (r=-.13 and -.20, p<.01 for sample 1 and 2, and r=-.33, p<.0001 for sample 3), Economic Conservatism was consistently unrelated to both Exclusion vs. Inclusion of Transcendence (r=.06, .03 and -.10, n.s., for sample 1, 2 and 3) and Literal vs. Symbolic (r=-.08, .03 and -.04, n.s., for sample 1, 2 and 3). A 10 item Marlowe-Crowne Social Desirability scale (Crowne & Marlowe, 1960) was administered in samples 1 and 3 to check whether controlling for social desirability would influence the observed relations. However, controlling for social desirability had no significant effect on the correlations. In a similar vein, controlling for gender, age and level of education in study 2 and 3 had no significant effect on the correlations.

Discussion

The present results provide further evidence for the close association between religiosity and Cultural Conservatism and support the construct validity of the Post-Critical Belief scale. As expected, whereas Cultural Conservatism relates positively to the Exclusion vs. Inclusion of Transcendence dimension and negatively to the Literal vs. Symbolic dimension, Economic Conservatism is unrelated to both of these religiosity dimensions. Relationships were relatively stable across the different samples. An interesting avenue for future research would be to examine whether these relations also remain stable across religious denominations and countries. From the theory of Max Weber (1930), one might hypothesize that Exclusion vs. Inclusion of Transcendence might relate to Economic Conservatism in Protestant denominations. Similarly, the association between Exclusion vs. Inclusion of Transcendence and Cultural Conservatism might drop off in countries where the tradition is hostile to religion, as might be the case in communist and formerly communist countries.

Do Sheep Need a Leader ?

PART 1

Religion and Authoritarianism 1

Abstract

In the present study, we tried to identify variables that are differently related to Social Dominance Orientation (SDO) and authoritarianism. A strong positive relationship between SDO and authoritarianism was found and both variables showed strong positive correlations with racism. Nevertheless, results support the idea that SDO and authoritarianism refer to different kinds of dispositional prejudice. Authoritarianism, when statistically corrected for SDO, was negatively associated with level of education, moral competence, relativism, and the values hedonism, stimulation and self-direction, whereas positive correlations with age, cultural conservatism, orthodoxy, and the values tradition, conformity and security were registered. In contrast, SDO, when corrected for authoritarianism, was negatively associated with age, second naiveté and the values universalism, benevolence and tradition, whereas economic conservatism, external critique, and the values power, achievement, hedonism and stimulation showed positive relationships. It is argued that SDO represents a more modern kind of prejudice than authoritarianism.

Introduction

Social Dominance Orientation (SDO) is considered to be "a general attitudinal orientation toward intergroup relations, reflecting whether one generally prefers such relations to be equal, versus hierarchical" (Pratto, Sidanius, Stallworth & Malle, 1994, p. 742). SDO thus reflects an individual's tendency to classify social groups along a superiority-inferiority dimension and to favor policies that maintain social inequality. Researchers reported strong correlations between SDO and general conservative beliefs, such as ethnic prejudice, political and economic conservatism, and right-wing political party preferences (e.g., Pratto et al., 1994; Sidanius, Pratto & Bobo, 1996; Pratto, Stallworth & Sidanius, 1997). Also strong correlations between SDO and other variables such as nationalism, patriotism, rejection of noblesse oblige, support of punitive policies and military programs were reported (e.g., Pratto, Stallworth & Conway-Lanz, 1998; Sidanius & Liu, 1992; Sidanius, Liu, Shaw & Pratto, 1994; for a recent overview, see Pratto, 1999).

Previous research has also reported that conservative beliefs, right-wing political preferences, and positive opinions about punitive policies and military programs are similarly related to authoritarianism (e.g., Adorno, Frenkel-Brunswik, Levinson & Sanford, 1950; Altemeyer, 1996; Peterson, Doty & Winter, 1993). However, only recently, researchers developed an interest in contrasting authoritarianism with SDO. McFarland (1998, 1999; McFarland & Adelson, 1996) and Altemeyer (1998) conducted a series of studies in which the predictive validity of both measures was compared. Authoritarianism and SDO were found to independently predict conservative beliefs and prejudice. McFarland, Altemeyer and some other authors (e.g., Lippa & Arad, 1999; Pratto et al., 1994; Whitley, 1999) reported a modest relationship between authoritarianism and SDO in American samples. In contrast, Van Hiel and Mervielde (in press A) reported substantial correlations (rs > .40) between these two constructs in a Western European sample.

The modest correlation generally observed in North American samples between authoritarianism and SDO has been interpreted as evidence of "two kinds of dispositional prejudice". Authoritarianism-based prejudice is supposed to stem from an acceptance of statements made by respected authority figures that denigrate out-groups and can be considered as "entailing real repugnance toward targets who are viewed as violating in-group norms and standards" (Lippa & Arad, 1999, p. 488). In contrast, SDO-based prejudice is supposed to stem from a need to justify the maintenance of societal inequalities from which one benefits. It serves an instrumental function and can be considered as "a route to superiority and power in a 'dog eat dog' world" (Lippa & Arad, 1999, p. 488). Shortly, authoritarianism can be considered as an intragroup phenomenon, whereas SDO is an intergroup phenomenon (Altemeyer, 1998; Pratto et al., 1994; Whitley, 1999).

But SDO and authoritarianism are expected to show some similarities too. That is, the SDO concept has actually been based on authoritarianism and related constructs. First, preferences for hierarchy and the generalization of the dimension superiority-inferiority have always been considered a component of authori-

tarianism (Adorno et al., 1950; Maslow, 1943). Second, personality characteristics such as coldness, disagreeableness, insensitiveness, and realism that have been typically used to describe social dominators, clearly refer to Eysenck's (1954; Eysenck & Coulter, 1972) tough-mindedness dimension and have been repeatedly found to correlate positively with conservative ideology (Wilson, 1973).

The first aim of the present study was to replicate the strong correlations between authoritarianism, SDO, and racism reported by Van Hiel and Mervielde (in press A). This result would substantiate their claim that both constructs are far from unrelated in Western Europe. Second, the present study was designed to identify variables that are differently related to both constructs in order to come to a better understanding of the underlying dynamics of these constructs. Among other things, Van Hiel and Mervielde (in press A) suggested that SDO and authoritarianism might be differently related to Schwartz' (1992) value orientations (see also, McFarland, 1998, 1999; McFarland & Adelson, 1996), and that religionism might be typical of authoritarianism but not of SDO (see also, Altemeyer, 1998). A third aim is to elaborate the findings of Van Hiel and Mervielde (in press A) concerning analogous relationships between SDO and authoritarianism on the one hand and conservatism on the other hand. Here, a distinction between cultural and economic conservatism will be made (see Middendorp, 1978). Finally, we thought that it might be interesting to examine how SDO and authoritarianism relate to age, level of education and moral competence.

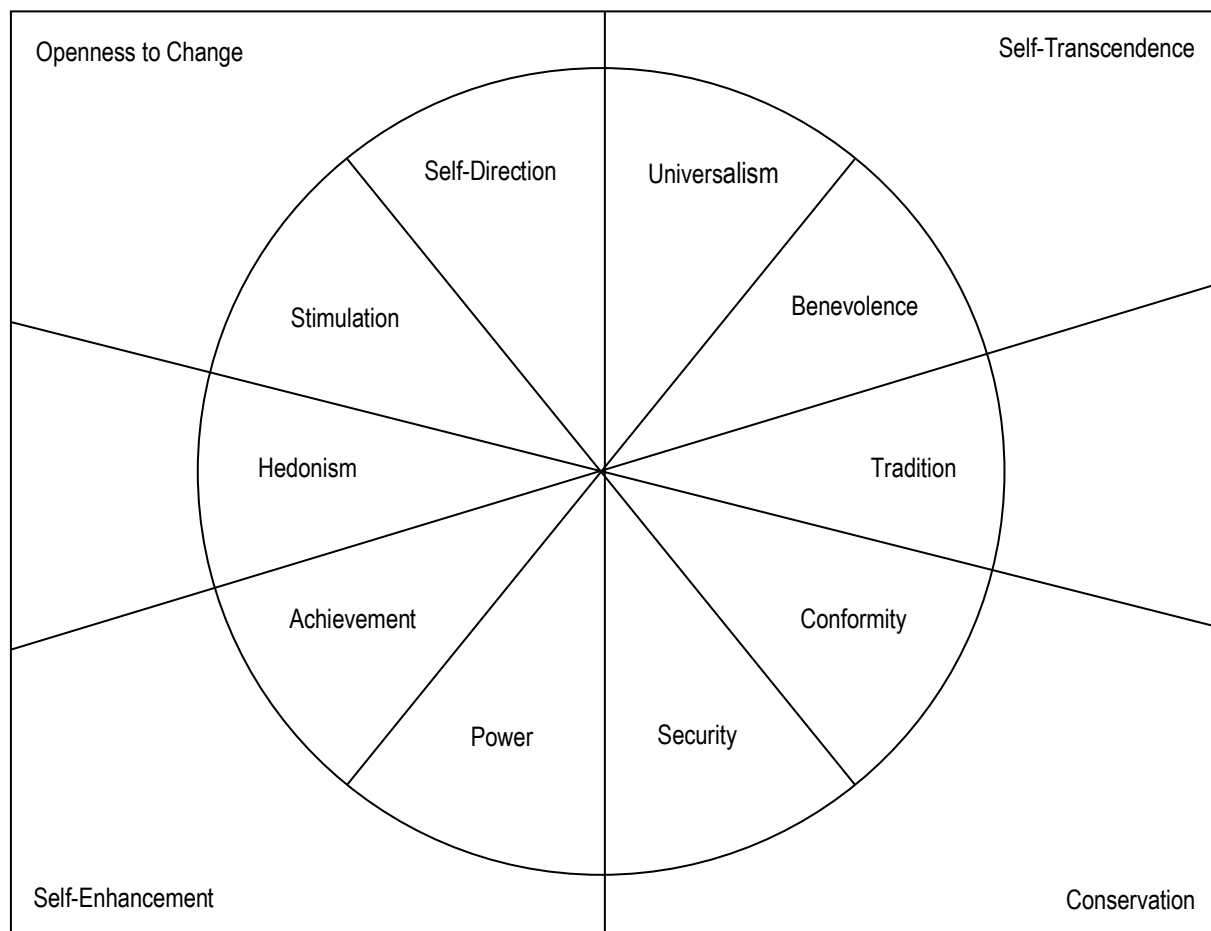### SDO, authoritarianism and values

Schwartz (1992) developed a comprehensive theory about the content and the structure of the value domain, which received support in over 40 countries (Schwartz & Sagiv, 1995). Schwartz (1992) defines a value as a transsituational goal that varies in importance as a guiding principle in one's life. On the basis of theoretical analyses and extensive empirical research, he identified 10 different value types: Power, Achievement, Hedonism, Stimulation, Self-Direction, Universalism, Benevolence, Tradition, Conformity, and Security (see Table 1). According to Schwartz (1992), these value types can be arranged into a two-dimensional circular circumplex structure on the basis of the mutual compatibilities and conflicts between their respective motivational goals. Value types that share compatible goals are positively related and emerge adjacent to one another in the two-dimensional representation. Value types that are characterized by conflicting goals are negatively related and are situated opposite to one another. In this way, the value structure can be regarded as composed of four higher order value types that form two bipolar dimensions: Openness to change vs. conservation and self-enhancement vs. self-transcendence (see Figure 1).[6]

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[6]   Both Table 1 and Figure 1 are adapted with permission from "Value Priorities and Religiosity in four Western Religions," by S.H. Schwartz and S. Huismans, 1995, Social Psychology Quarterly, June p. 91. Copyright 1995 by the American Sociological Association. Adapted with permission.

Table 1   *Definitions of motivational types of values in terms of their goals and the values that represent them*

POWER	Social status and prestige, control or dominance over people and resources (social power, authority, wealth, preserving my public image, social recognition)
ACHIEVEMENT	Personal success through demonstrating competence according to social standards (successful, capable, ambitious, influential, intelligent)
HEDONISM	Pleasure & sensuous gratification for oneself (pleasure, enjoying life, self-indulgence)
STIMULATION	Excitement, novelty, and challenge in life (daring, a varied life, an exciting life)
SELF-DIRECTION	Independent thought and action-choosing, creating, exploring (freedom, independent, choosing own goals, creativity, curious, self-respect)
UNIVERSALISM	Understanding, appreciation, tolerance, and protection for the welfare of all people and for nature (broad-minded, social justice, equality, a world at peace, a world of beauty, unity with nature, protecting the environment, wisdom)
BENEVOLENCE	Preservation and enhancement of the welfare of people with whom one is in frequent personal contact (helpful, honest, forgiving, loyal, responsible, true friendship, mature love)
TRADITION	Respect, commitment, and acceptance of the customs and ideas that Traditional culture or religion provide (humble, devout, respect for tradition, moderate, accepting my portion in life, detachment)
CONFORMITY	Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms (obedient, politeness, honoring parents and elders, self-discipline)
SECURITY	Safety, harmony and stability of society, of relationships, and of self (national security, social order, family security, clean, reciprocation of favors, sense of belonging, healthy)

Figure 1   *Theoretical model of relations between types of values*

McFarland (1998, 1999; McFarland & Adelson, 1996; total $\underline{N}$ = 1082) reported meaningful differential correlations between SDO and authoritarianism on the one hand and some of Schwartz' (1992) value types on the other hand. In particular, McFarland reported positive relationships between authoritarianism and tradition (mean $\underline{r}$ = .41), conformity (mean $\underline{r}$ = .30) and security (mean $\underline{r}$ = .26), and negative relationships between authoritarianism and power ($\underline{r}$=-.21, $\underline{N}$ = 186), self-direction (mean $\underline{r}$ = -.21) and universalism (in some samples only) (mean $\underline{r}$ = -.09). SDO was not significantly related to tradition (mean $\underline{r}$ = -.06), conformity (mean $\underline{r}$ = -.09), security (mean $\underline{r}$ = .03) and self-direction (mean $\underline{r}$ = -.08), but showed a somewhat stronger negative relation with universalism (mean $\underline{r}$ = -.29), and a positive relation with power ($\underline{r}$=.37, $\underline{N}$ = 186). The value types achievement, hedonism, stimulation and benevolence were not administered by McFarland and colleagues. Therefore, it might be interesting to see if we can replicate and elaborate their findings. We expect authoritarianism to show a slightly negative relationship with the pure self-enhancement value types (power and achievement), a clearly negative relationship with hedonism and the pure openness to change value types (stimulation and self-direction), a slightly negative relationship with the self-transcendence value types (universalism and benevolence), and a clearly positive relationship with the conservation value types (tradition, conformity and security). We expect SDO to show a positive relationship with the pure self-enhancement value types, no relationship with the pure openness to change value types and hedonism, a negative relationship with the self-transcendence value types, and no relationship with the conservation value types.

SDO, authoritarianism and religiosity

It has repeatedly been administered that religionism and fundamentalism are typical of ethnocentrism (e.g., Wilson & Bagley, 1973) and authoritarianism (e.g., Altemeyer, 1996). Altemeyer (1998) and Van Hiel and Mervielde (in press A) have argued that religionism is typical of authoritarians, but not of social dominators. This hypothesis is based on the observation that, in some countries, authoritarians prefer traditionalist, religious parties to fascist parties. Moreover, Altemeyer (1998) reported religious fundamentalism to relate positively to authoritarianism (mean $\underline{r}$ = .74, $\underline{N}$ = 890), but not to SDO (mean $\underline{r}$ = .06). He also reported that authoritarianism is related to "Emphasis placed on religion while growing up" ($\underline{r}$=.58, $\underline{N}$ = 116), "Acceptation of teaching of the home religion" ($\underline{r}$ = .52, $\underline{N}$ = 117) and church attendance (mean $\underline{r}$ = .39, $\underline{N}$ = 1160), whereas SDO is not ($\underline{r}$ = -.17, -.15 and -.11 respectively). Finally, Saucier (2000) reported a positive correlation between self-descriptive terms referring to religiousness and authoritarianism ($\underline{r}$=.74, $\underline{N}$ = 303), but not to SDO ($\underline{r}$=.05). In the present investigation we can proceed one step further, since recent developments in the conceptualization and the measurement of religious attitudes provide a potentially more interesting perspective to investigate the relationship between SDO, authoritarianism and religiosity.

According to Wulff (1991), all possible approaches to religion can be summarized in a two-dimensional diagram. The vertical axis specifies whether the objects of religious interest are granted participation in a transcendent reality (inclusion vs. exclusion of transcendence). The horizontal axis indicates whether the expressions of religion are interpreted literally or symbolically (literal vs. symbolic). These two dimensions define four basic attitudes toward religion. The upper left quadrant represents literal affirmation of the religious realm, a position most clearly embodied by religious fundamentalism. The lower left quadrant represents a disaffirmation of the religious realm, in which the possibility is lost out of sight that this realm could have a symbolic meaning. The lower right quadrant represents a disaffirmation of the religious realm in which a privileged perspective on the true but hidden mundane meaning of religion's myths and rituals is claimed. The upper right quadrant represents an affirmation, in which one tries to encompass and go beyond all possible reductive interpretations in order to find religion's symbolical message. In this respect, Wulff (1991) speaks of a second naiveté. Building further on this, Hutsebaut and colleagues (Duriez, Fontaine & Hutsebaut, 2000; Hutsebaut, 1996) drew up a questionnaire – the Post-Critical Belief scale – that captures four different approaches to Roman Catholic religion: Orthodoxy, External Critique, Relativism and Second Naiveté. According to Duriez, Fontaine and Hutsebaut (2000), this questionnaire is designed for usage in a context in which subjects are either Roman Catholics or at least have fair knowledge of Roman Catholic doctrines and customs. Multi-dimensional scaling analyses revealed that these approaches map onto Wulff's shame (Luyten, Corveleyn & Fontaine, 1998; Duriez, Fontaine & Hutsebaut, 2000; Fontaine, Luyten & Corveleyn, 2000). Orthodoxy is located in the upper left quadrant, External Critique is located in the lower left quadrant, Relativism is located in the lower right quadrant, and Second Naiveté is located in the upper right quadrant.

SDO, authoritarianism, cultural conservatism and economic conservatism

Researchers often assumed that both political parties and political attitudes can be positioned on a single left-right (progressive-conservative) dimension (e.g., Lipset, 1960; McClosky, 1958). However, others have argued that the meaning of this dimension varies across nations and over time, and that a single dimension is often insufficient to represent all relevant political polarities in a given society (e.g., Inglehart, 1990; Leeson & Heaven, 1999; Rokeach, 1973). Middendorp (1978) distinguished between a cultural conservatism vs. progressivism dimension considering attitudes in favor of social change and individual rights and freedom, and an economic conservatism vs. progressivism dimension considering the degree of economic equality among people. We expected that economic and cultural conservatism would be differently related to SDO and authoritarianism. In the light of the aforementioned characteristics of both authoritarianism and SDO, we expected that authoritarianism would be positively related to cultural conservatism, whereas SDO would show a clearly positive relation to economic conservatism.

SDO, authoritarianism, age, level of education and moral competence

According to Lind (2000a), moral competence would have a desirable outcome on moral-democratic capacities. In particular, a high moral competence refers to the internal consistency of a subject's moral reasoning, even when under pressure to acquiesce to non-moral factors like majority's opinion, prejudice, abusive authorities, etc. (Lind, 2000a, 2000b). Consequently, we expected that especially authoritarianism would be negatively related to moral competence.

McFarland and colleagues have noted that, whereas many studies do report a negative relationship between authoritarianism and level of education (as well as intelligence and cognitive complexity) (McFarland, 1998, 1999), SDO appears to be unrelated to level of education (McFarland & Adelson, 1996) as well as to cognitive complexity and intelligence (McFarland, 1998, 1999; McFarland & Adelson, 1996). Age too would be negatively related to authoritarianism, but unrelated to SDO (McFarland & Adelson, 1996).

Method

Sample

A total of 350 questionnaires were distributed by undergraduate students who asked their neighbors to participate, in order to obtain a heterogeneous sample. Refusal rates were low (13%). In total we received 303 completed questionnaires. All of these were checked for three kinds of response biases: acquiescence (yeah-saying), denial (no-saying) and avoidance (sticking to the neutral point). No participants needed to be excluded on any of these grounds. All participants were Flemish-speaking and of Belgian nationality. All subjects were either Roman Catholics or at least had fair knowledge of Roman Catholic doctrines and customs. The mean age was 45.08 years ($\underline{SD}$ = 12.52); the sample consisted of 106 (35%) males and 197 (65%) females. Of these participants, 65 (21%) attended university, 122 (40%) obtained a higher education diploma, 94 (31%) obtained a secondary education diploma, and 5 (2%) obtained a primary school diploma only. The 17 (6%) remaining subjects failed to give an answer to this question.

Measures

Participants completed Dutch versions of the SDO-scale (Van Hiel & Duriez, 2002; 14 items), Adorno's F-scale (Scheepers, Felling & Peters, 1991; 9 items), Altemeyer's RWA-scale (Meloen, 1991; 10 items), a racism scale (Billiet & De Witte, 1991), and a cultural and an economic conservatism scale (De Witte, 1990; both 12 items).[7] According to Billiet and De Witte (1991), the racism scale is comprised of two

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[7]   Although Altemeyer (1981, 1988) tried to show that the RWA scale is psychometrically superior to the F scale, Meloen, Van der Linden and De Witte (1996) and Van Hiel and Mervielde (in press), have shown that both scales are reliable and effective in predicting political party preferences, racism, conservatism and various other attitudes. Moreover, despite the high correlation between both scales (r = .65), the F-scale has some unique aspects (e.g., topics like superstition, harshness, projectivity,

conceptually different components: xenophobia and racism. An example of a xenophobia item is "In general, immigrants are not to be trusted". An example of a racism item is "We have to keep our race pure and fight mixture with other races". However, a scree test (Cattell, 1966) clearly pointed to one component only (cf. Duriez, 2002a; Duriez & Hutsebaut, 2000; Duriez, Fontaine & Hutsebaut, 2000). The cultural conservatism scale addresses issues like upbringing, work ethic, the position of women in society, abortion, euthanasia, and premarital sex. The economic conservatism scale addresses issues such as the desirable impact of trade unions, level of government interference in economics, and income differences. The items of all these scales were to be rated on a 5-point Likert scale. Estimates of internal consistency (Cronbach's Alpha) were satisfactory for SDO (.83, $\underline{M}$ = 2.08, $\underline{SD}$ = 0.60), F (.72, $\underline{M}$ = 2.79, $\underline{SD}$ = 0.67), RWA (.74, $\underline{M}$ = 3.13, $\underline{SD}$ = 0.62), racism (.83, $\underline{M}$ = 1.98, $\underline{SD}$ = 0.64), cultural conservatism (.75, $\underline{M}$ = 2.87, $\underline{SD}$ = 0.63) and economic conservatism (.87, $\underline{M}$ = 2.45, $\underline{SD}$ = 0.72).

The Dutch translation of Schwartz' value survey consists of 54 values (Schwartz, 1992). Each value was rated in terms of its importance as a guideline in one's life on a 9-point scale, ranging from "opposed to my principles" (-1) over "not important" (0) to "of supreme importance" (7). Estimates of internal consistency (Cronbach's Alpha) were .60 for Power ($\underline{M}$ = 1.99, $\underline{SD}$ = 0.97), .64 for Achievement ($\underline{M}$ = 3.02, $\underline{SD}$ = 1.05), .74 for Hedonism ($\underline{M}$ = 2.79, $\underline{SD}$ = 1.39), .71 for Stimulation ($\underline{M}$ = 1.62, $\underline{SD}$ = 1.40), .70 for Self-Direction ($\underline{M}$ = 3.78, $\underline{SD}$ = 1.04), .74 for Universalism ($\underline{M}$ = 4.64, $\underline{SD}$ = 0.92), .60 for Benevolence ($\underline{M}$ = 5.30, $\underline{SD}$ = 0.70), .65 for Tradition ($\underline{M}$ = 3.74, $\underline{SD}$ = 1.06), .64 for Conformity ($\underline{M}$ = 4.36, $\underline{SD}$ = 1.04), and .69 for Security ($\underline{M}$ = 3.99, $\underline{SD}$ = 0.97). As in Schwartz and Huismans (1995), a correction of the mean score for each participant was done in order to correct for systematic response sets.

Participants also completed the Post-Critical Belief scale (Duriez, Fontaine & Hutsebaut, 2000; 33 items). Eight items refer to Orthodoxy, nine refer to External Critique, nine refer to Relativism, and seven refer to Second Naiveté. All items are scored on a 7-point Likert scale. Seven items (2 for External Critique, 1 for Relativism and 4 for Second Naiveté) were excluded from further analysis, because they suppressed the internal consistency. Estimates of internal consistency (Cronbach's Alpha) were .72 for Orthodoxy ($\underline{M}$ = 2.86, $\underline{SD}$ = 1.10), .72 for External Critique ($\underline{M}$ = 2.13, $\underline{SD}$ = 0.93), .65 for Relativism ($\underline{M}$ = 4.95, $\underline{SD}$ = 1.03), and .68 for Second Naiveté ($\underline{M}$ = 5.22, $\underline{SD}$ = 0.86).

The Dutch translation of Lind's Moral Judgment Test (Lind, 1998) was included to provide an index of moral competence. Since this test is used to examine the internal consistency of a subject's moral reasoning, it is obviously useless to check the validity of the test by relying on classical test theory (cf. Rest, 1997). However, this test was recently validated by Duriez and De Marez (2000), according to the prescriptions of Lind (1998), and can be regarded as a fully fledged translation of the original test.

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sexual preoccupation and destructiveness are not included in the RWA scale). Hence, both scales were included in this study.

Results

In accordance with Van Hiel and Mervielde (in press A), we found a quite strong positive correlation between SDO and the authoritarianism scales ($\underline{r}$ = .37 and .35, $\underline{p}$s < .0001, for RWA and the F-scale respectively). RWA and F were, of course, highly related ($\underline{r}$=.65, $\underline{p}$ < .0001). The correlations between SDO and authoritarianism on the one hand, and racism, value types, religiosity, cultural and economic conservatism, age, level of education and moral competence on the other hand, are presented in Table 2.[8]

Table 2 Correlations between SDO and authoritarianism on the one hand and racism, value types, religiosity dimensions, cultural and economic conservatism, and moral competence on the other hand

	SDO		RWA-scale		F-scale	
Racism	.52	***	.57	***	.52	***
Power	.25	***	.08		.06	
Achievement	.21	**	-.04		-.01	
Hedonism	.18	**	-.17	**	-.14	*
Stimulation	.06		-.26	***	-.13	*
Self-Direction	.04		-.33	***	-.18	**
Universalism	-.46	***	-.20	**	-.21	**
Benevolence	-.28	***	-.13	*	-.19	**
Tradition	-.13	*	.18	**	.15	*
Conformity	.20	**	.49	***	.39	***
Security	.24	***	.44	***	.31	***
Orthodoxy	.16	**	.43	***	.49	***
External Critique	.24	***	.02		.12	*
Relativism	-.08		-.34	***	-.29	***
Second Naiveté	-.27	***	-.01		-.08	
Cultural Conservatism	.26	***	.61	***	.59	***
Economic conservatism	.38	***	.13	*	.01	
Moral competence	-.13	*	-.32	***	-.31	***
Level of Education	.02		-.24	***	-.23	***
Age	-.13	*	.24	***	.34	***

Note: The correlations in Table 3 are corrected for social desirability. For this purpose, a 10-item version of the Marlowe-Crowne Social Desirability scale (Crowne & Marlowe, 1960) was administered.

*$\underline{p}$<.05, ** $\underline{p}$<.01 *** $\underline{p}$<.0001.*

Table 3 visualizes partial correlations between (1) SDO corrected for authoritarianism and (2) authoritarianism corrected for SDO on the one hand, and racism, value types, religiosity, cultural and economic con-

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8   The high correlations between authoritarianism and cultural conservatism and between SDO and economic conservatism might have been caused by item overlap. We therefore recomputed these correlations after excluding the overlapping items. For this purpose, one F item, referring to the importance of working hard, and two RWA items, referring respectively to the traditional family and to child rearing practices, were removed because they showed great similarity to some of the cultural conservatism items. Two SDO items, referring to income and social equality, were also removed because they showed great similarity to some of the economic conservatism items. Excluding these items neither substantially altered the correlation between authoritarianism and cultural conservatism (r=.58, p<.0001 and r=.56, p<.0001 for RWA and F respectively) nor between SDO and economic conservatism (r=.35, p<.0001).

servatism, age, level of education and moral competence on the other hand. When statistically corrected for authoritarianism, SDO appeared to be positively related to racism, power, achievement, hedonism, stimulation, self-direction, external critique, economic conservatism and level of education, unrelated to conformity, security, orthodoxy, relativism, cultural conservatism and moral competence, and negatively related to universalism, benevolence, tradition, second naiveté and age. When statistically corrected for SDO, both RWA and F appeared to be positively related to racism, tradition, conformity, security, orthodoxy, cultural conservatism and age, unrelated to power, achievement, universalism, benevolence, external critique, second naiveté and economic conservatism, and negatively related to hedonism, stimulation, self-direction, relativism, moral competence and level of education.

Table 3   Partial correlations between the dependent variables and (1) SDO corrected for authoritarianism, and (2) authoritarianism corrected for SDO

	SDO		RWA-scale		F-scale	
Racism	.38	***	.46	***	.45	***
Power	.24	***	-.01		-.03	
Achievement	.24	***	-.10		-.09	
Hedonism	.27	***	-.26	***	-.22	**
Stimulation	.17	**	-.30	***	-.17	**
Self-Direction	.18	**	-.37	***	-.20	**
Universalism	-.42	***	-.04		-.06	
Benevolence	-.24	***	-.02		-.10	
Tradition	-.23	***	.25	***	.21	**
Conformity	.01		.46	***	.34	***
Security	.09		.40	***	.25	***
Orthodoxy	-.05		.40	***	.47	***
External Critique	.24	***	-.08		.04	
Relativism	.07		-.34	***	-.28	***
Second Naiveté	-.28	***	.08		.00	
Cultural Conservatism	-.01		.57	***	.55	***
Economic conservatism	.38	***	-.10		-.02	
Moral competence	.01		-.29	***	-.28	***
Level of Education	.13	*	-.26	***	-.24	***
Age	-.28	***	.31	***	.39	***

Note: The correlations in Table 3 are corrected for social desirability. For this purpose, a 10-item version of the Marlowe-Crowne Social Desirability scale (Crowne & Marlowe, 1960) was administered.

* p<.05, ** p<.01 *** p<.0001.

In order to further investigate the relationships between the various scales in this study, a Principal Component Analyses (PCA) (using a PROMAX rotation) was performed on all scales included in this study. Cattell's scree test (Cattell, 1966) pointed to a two-componential solution.[9] This solution accounted for 38% of

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[9]   The eigenvalues for the first six components, after extraction, were 4.93, 3.89, 1.70, 1.27, 1.21, and 0.98 respectively.

the total variance. The authoritarianism scales (RWA and F) were the scales with the highest loading on the first bipolar component (see Table 4). The SDO scale was the scale with the highest loading on the second bipolar factor (see Table 4). Table 4 also shows that cultural conservatism, orthodoxy, conformity, racism, security, age and tradition loaded positively (more than .35) on the first component, whereas relativism, self-direction stimulation, level of education, moral competence and hedonism loaded negatively (less than -.35) on this component. Hedonism, external critique, racism, power, stimulation, achievement and economic conservatism loaded positively (more than .35) on the second component, whereas universalism, benevolence, tradition, second naiveté and age loaded negatively (less than -.35) on this component. These results are largely in line with our correlational analyses, with the exception that SDO does not show substantial positive relationships with self-direction and level of education.

Table 3   *Rotated two-componential pattern of the scales included in this research*

	Component 1	Component 2
RWA	.80 *	.19
F	.74 *	.21
SDO	.30	.66 *
Racism	.55 *	.52 *
Power	-.02	.51 *
Achievement	-.13	.43 *
Hedonism	-.35 *	.53 *
Stimulation	-.46 *	.45 *
Self-Direction	-.47 *	.24
Universalism	-.14	-.66 *
Benevolence	-.07	-.58 *
Tradition	.44 *	-.58 *
Conformity	.66 *	-.11
Security	.49 *	.28
Orthodoxy	.69 *	-.11
External Critique	-.08	.53 *
Relativism	-.56 *	.13
Second Naiveté	.03	-.53 *
Cultural Conservatism	.73 *	.02
Economic conservatism	.05	.35 *
Moral competence	-.39 *	-.18
Level of Education	-.39 *	.09
Age	.49 *	-.37 *

= loading > .35 or loading < -.35

Discussion

In accordance with Van Hiel and Mervielde (in press A), we found a strong positive relationship between SDO and authoritarianism. Also in accordance with Van Hiel and Mervielde (in press A), both SDO and au-

thoritarianism were strongly positively related to racism. Although these results suggest great similarity be-

tween SDO and authoritarianism (at least in Western Europe), various authors (e.g., Lippa & Arad, 1999;

Whitley, 1999) distinguished between an "old-fashioned" authoritarianism-based prejudice that stems from

an uncritical acceptance of statements made by respected authority figures that denigrate out-groups, and a

more "modern" SDO-based prejudice that is more "sophisticated" in the sense that it is more thought out

because it stems from a need to justify the maintenance of societal status inequalities from which one bene-

fits. The existence of two different forms of prejudice becomes apparent when looking at the relation be-

tween SDO and authoritarianism, once racism is corrected for ($\underline{r}$ = .10 for RWA and .09 for F, n.s.). Preju-

dice is about the only thing SDO and authoritarianism have in common.[10] This supports the need to distin-

guish between two forms of prejudice. Both social dominators and authoritarians are likely to be racially

prejudiced, but for different reasons.

SDO is negatively to age, once authoritarianism is corrected for, whereas authoritarianism is characterized

by an opposite pattern. Moreover, SDO is unrelated to moral competence and unrelated (or only very weak-

ly positively related) to level of education, once authoritarianism is corrected for, whereas authoritarianism

shows a negative relationship with both moral competence and level of education. These results support

the thesis that social dominators are not only likely to be racially prejudiced, just like authoritarians, but that

their prejudice is also likely to be more sophisticated. High SDO scorers may exhibit a style of thinking

which reflects a form of "modern racism" that surfaces in subtle ways when it is safe, socially acceptable,

and easy to rationalize (Dovidio & Gaertner, 1997). Thus, although the underlying disease remains the

same, the overt symptoms of racism may have changed. The modern fascist is no longer a closed-minded

bigot, but an intellectual, who is perfectly able to express his world-views in such a way that they do not only

sound acceptable, but also attractive to the general public. This might have important consequences. The

presence of racist attitudes among social dominators is likely to exert more influence on both the output of

public policy and the opinions of other people than is the case with the old-fashioned prejudice of authoritar-

ians. This influence of social dominators is not likely to be effectively countered as long as both politicians

and media fail to understand that the "fascist personality" is going through quite a few changes. In a similar

vein, any effort to boost people's moral competence is indeed likely to diminish the level of authoritarianism

in the population, but is unlikely to diminish the SDO-level.

SDO is also a more modern form of prejudice than authoritarianism because SDO is no longer related to

cultural conservatism, once authoritarianism is corrected for. With regard to economic conservatism, the

opposite pattern can be observed: Authoritarianism is no longer related to economic conservatism, once

SDO is corrected for. These results support the idea that authoritarianism is related to the preservation of

in-group norms, whereas SDO presents a route to power (Lippa & Arad, 1999). It has also be noted that

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[10]   Statistical correction for racism did not undermine the correlation between RWA and F ($\underline{r}$ = .49, $\underline{p}$<.0001).

high SDO-scorers admit they oppose a more even distribution of wealth (Altemeyer, 1998). These persons are therefore often in favor of privatization, reduction in social spending, weakening of unions, lower taxes for both businesses and the rich, and less government involvement in the economy.

Finally, SDO is also a more modern form of prejudice than authoritarianism because it is highly secularized. Whereas authoritarianism corrected for SDO is highly related to Orthodoxy and negatively to Relativism, SDO corrected for authoritarianism is positively related to External Critique and negatively to Second Naiveté. These findings suggest that, whereas both stances are characterized by literal thinking about the religious realm, authoritarianism is associated with Wulff's (1991, 1997) inclusion of transcendence, whereas SDO is not. This is clearly in line with Altemeyer's (1998) statement that religionism is typical of authoritarianism but not of SDO, and with Van Hiel and Mervielde (in press A), who found that for authoritarians, the traditionalist Christian democrat party is a valid alternative for the rather a-religious fascist party.

The previous findings are also reflected in the value patterns associated with SDO and with authoritarianism. When corrected for SDO, it becomes apparent that authoritarianism can be understood in terms of openness to change versus conservation. In particular, authoritarianism shows a clearly positive correlation with the conservation value types security, conformity and tradition, and a clearly negative relationship with the openness to change value types stimulation and self-direction, as well as with hedonism. SDO, corrected for authoritarianism, is characterized by a thoroughly different underlying value pattern. SDO shows a positive relationship with the openness to change value type stimulation (and according to some of our analyses also with self-direction), as well as with hedonism, and, though unrelated to the conservation value types conformity and security, it has a negative relationship with tradition. Moreover, SDO is also positively associated with the self-enhancement value types power and achievement, and negatively with the self-transcendence value types universalism and benevolence. These findings not only replicate the studies of McFarland and colleagues (1998, 1999; McFarland & Adelson, 1996) which used North American samples, but also elaborate these results. These results, again, support the idea of Lippa and Arad (1999) that authoritarianism is related to the preservation of in-group norms and tradition, whereas SDO presents a route to superiority and power.

PART 2

Religion and Authoritarianism 2

Abstract

The present study tests whether there are cross-cultural and intra-cultural differences in the relationship between right-wing authoritarianism (RWA) and social dominance orientation (SDO), and if such differences occur, whether the differential relationships with religiosity, value orientations and ideological attitudes that were identified in previous studies remain stable in spite of these differences. For these purposes, two student samples, three adult samples and a political activist sample were gathered in Flanders (Belgium) and an adult sample was collected in Poland. Both cross-cultural and intra-cultural differences in the RWA-SDO relation emerged. The cross-cultural differences can be attributed to differences in socio-political context, whereas the intra-cultural differences can be attributed to differences in political involvement. Although the external relationships were quite stable, important differences, which can also be attributed to differences in the socio-political context and differences in political involvement, did occur.

Introduction

Although the motive for domineering others was initially considered to be an integral part of authoritarianism (Adorno et al., 1950; Eysenck, 1954; Maslow, 1943), this motive was somewhat overlooked as attention primarily focused on authoritarian submission (see Altemeyer, 1988). Recently, a renewed interest in this motive led to the study of the social dominance orientation (SDO) in its own right. Because SDO and right-wing authoritarianism (RWA) were found (1) to be unrelated and to independently predict prejudice (Altemeyer, 1998; Lippa & Arad, 1999; Pratto et al., 1994; Van Hiel & Mervielde, in press A; Whitley, 1999) and (2) to relate differentially to variables such as religiosity, value orientations, and ideological attitudes (Altemeyer, 1996; Duriez & Van Hiel, 2002; McFarland, 1998, 1999; McFarland & Adelson, 1996), it was concluded that RWA and SDO constitute different kinds of prejudice. According to Duckitt (2001), RWA-based prejudice is driven by fear and feelings of threat, whereas SDO-based prejudice is driven by viewing the world as a competitive jungle characterized by a ruthless struggle for resources and power.

But although RWA and SDO seem to constitute different kinds of prejudice, their relation seems to fluctuate across and even within cultures. According to Duckitt (2001), cross-cultural differences might result from the socio-political context. In Western Europe (and countries like New Zealand), the political system would be ideologized along a broad left-right dimension because of the existence of both socialist left-wing political parties and liberal and conservative right-wing parties. As a consequence, RWA and SDO might influence each other because both of them are associated with the political right. In the United States, this broad left-right dimension would be less important. In line with this reasoning, RWA and SDO were found to be strongly related in Belgium (Duriez & Van Hiel, 2002; Van Hiel & Mervielde, in press A), the U.K., Germany and New Zealand (Duckitt, 2001), whereas no such relationship was obtained in the United States. In addition, intra-cultural differences might also be expected. Although the attitudes expressed in the RWA and SDO scales may be acquired independently, both refer to the political right side of the broad left-right dichotomy that exists to a varying extent in most Western cultures, and hence both sets of attitudes might influence each another as a consequence of political socialization during late adolescence and / or political involvement (Duckitt, 2001). Hence, differences within cultures, and especially within cultures in which the broad left-right dimension of politics is important, might depend on level of political socialization and involvement. In line with this reasoning, Middendorp (1978) showed that, in the Netherlands, political activists show more ideological constraint. Whereas in the general population, the left-right dimension breaks up into the two unrelated dimensions of cultural and economic progressivism vs. conservatism, a clear unidimensional progressive-conservative dimension was found among political activists.

The present study tests whether there are cross-cultural and intra-cultural differences in the RWA-SDO relation, and if differences in the strength of this relation are obtained, whether the differential relationships between RWA and SDO on the one hand and religiosity, value orientations and ideological attitudes on the other hand are stable in spite of these differences. For these purposes, two student samples, three adult samples and a political activist sample were gathered in Flanders (Belgium) and an adult sample was collected in Poland. In Belgium, a clear left-right dimension underlies people's political party preferences. Hence, one can expect RWA and SDO to be strongly positively related. Conversely, in Poland, the political spectrum is much more complicated and diverse. In the first years after the fall of the communist regime, no less than 60 political parties participated in the elections, and Boski (1993) revealed that two orthogonal dimensions underlied party preference (Van Hiel & Mervielde, 1996). The first dimension, which relates to RWA (Van Hiel, Duriez & Kossowska, 2002), was labeled Secular European State vs. Religious National State. The second was labeled Socialist Welfare State vs. Liberal Capitalism. This dimension should relate to SDO because both variables refer to economic issues. Thus, given the fact that RWA and SDO relate to essentially distinctive dimensions, one should expect no relation between them.

In the Flemish samples, the RWA-SDO relation was expected to fluctuate according to level of political socialization and involvement. This relation should be most pronounced in the political activist sample, followed by the adult samples and the student samples. A difference between the adult samples and the student samples was expected because, whereas the adult samples consist of voters (voting is compulsory in Belgium from 18 years on), the student samples consist of late adolescents (18-year olds) who did not participate in elections previous to this study. However, in spite of these differences in the strength of the RWA-SDO relation, stable relations with religiosity, value orientations and ideological attitudes were expected. In particular, we expected that RWA should relate positively to religiosity, conservation values and cultural conservatism and negatively to openness to change values. SDO was expected to relate positively to economic conservatism and self-enhancement values and negatively to self-transcendence values (see Duckitt, 2001, Duriez & Van Hiel, 2002). However, we do not expect all of these relations to show cross-cultural stability. Since in Eastern Europe, in contrast to the United States and Western Europe, RWA was reported to be associated with support for communism (McFarland, Ageyev & Abalakina-Paap, 1992), RWA is expected to relate to a preference for left-wing economical principles, and hence to relate negatively to economical conservatism. Conversely, no such relation or even a positive relation can be expected in Belgium as well as in the United States. Similar cross-cultural differences in the associated value pattern can also be expected, with RWA, in contrast to Western Europe and the United States, relating positively to self-enhancement values and negatively to self-transcendence values in Poland.

Method

Samples

Six Flemish samples (samples 1-6) and one Polish sample (sample P) were collected. The student samples (samples 1 and 2) ($\underline{N}$ = 321 and 363) consisted of university students participating in partial ful-filment of a requirement for introductory courses in psychology. These samples consisted of 20% male participants, The mean age was 18 ($\underline{SD}$=0.73). The adult samples (samples 3, 4, 5 and P) ($\underline{N}$ = 293, 175, 85 and 232) were gathered by undergraduate students who asked their neighbors to participate in order to obtain heterogeneous samples. These samples consisted of, respectively, 35%, 56%, 53% and 47% male participants. The mean age was 45, 39, 40 and 44 ($\underline{SD}$=13, 15, 14 and 12). Sample 6 ($\underline{N}$ = 69; 73% male; mean age=39, $\underline{SD}$=15.22) consisted of militants of a variety of political movements, cover-ing the whole political spectrum.

Measures

Participants completed the 14 item SDO-scale (Pratto et al., 1994; Van Hiel & Duriez, 2002), a shortened RWA-scale (Altemeyer, 1981; Meloen, 1991; 11 items) and a cultural and economic conservatism scale (De Witte, 1990; Duriez et al., 2002; both 12 items). The cultural conservatism scale addresses issues like upbringing, work ethic, the position of women in society, abortion, euthanasia, and premarital sex. The economic conservatism scale addresses issues such as the desirable impact of trade unions, level of government interference in economics, and income differences. The translation of the items into Polish was done according to the guidelines of the International Test Commission (Hambleton, 1994) using the translation back-translation procedure (Brislin, 1980). In the Flemish samples, a racism scale was also administered (Billiet & De Witte; 1991; Duriez & Hutsebaut, 2000; 9 items). The items of these scales were to be rated on a 5-point Likert scale.[11] Furthermore, participants completed Schwartz' (1992) Value Inventory (54 items). Within the value domain, Schwartz identified ten value types (Power, Achievement, Hedonism, Stimulation, Self-Direction, Universalism, Benevolence, Tradition, Conformity and Security) which can be arranged into a two-dimensional structure on the basis of the compatibilities and conflicts between their motivational goals. In this way, the value structure can be regarded as com-posed of two higher order dimensions: Openness to change vs. Conservation (opposing Stimulation and Self-Direction to Tradition, Conformity and Security) and Self-Enhancement vs. Self-Transcendence (opposing Power and Achievement to Universalism and Benevolence). Each value was rated in terms of its importance as a guideline in one's life on a 9-point scale, ranging from "opposed to my principles"

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[11]   Cronbach Alpha's were .83, .85, .86, .79, .88, .88, and .72 for SDO, .75, .74, .72, .80, .84, .89 and .79 for RWA, .74, .67, .67, .78, .81, .92 and .82 for cultural conservatism, and .86, .74, .76, .84, .81, .94 and .79 for economic conservatism for sample 1 – 6 and P respectively, and .82, .86, .85, .92, .86 and .94 for racism for sample 1 – 6.

over "not important" to "of supreme importance".[12] As in Schwartz and Huismans (1995), systematic response sets were corrected for. Finally, as a religiosity measure, the Post-Critical Belief scale (Duriez, Fontaine & Hutsebaut, 2000; 33 items) was administered. This scale captures the two dimensions of the religiosity domain which Wulff (1997) identified, namely Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic (Fontaine et al., in press). The items were translated according to the guidelines of the International Test Commission, and were rated on a 7-point Likert scale.[13]

Results

To investigate whether there are cross-cultural differences with respect to the RWA-SDO relation, the correlations between RWA and SDO between the Flemish samples and the Polish sample were compared. In accordance with Duriez and Van Hiel (2002) and Van Hiel and Mervielde (in press A), highly positive correlations were obtained between RWA and SDO in the Flemish samples (r=.36, .36, .32, .24, .54 and .63, ps< .01, for sample 1-6). In the Polish sample, RWA and SDO were unrelated (r=-.02, n.s.). These findings were in line with our expectations and support Duckitt's (2001) theorizing.

To investigate whether there are intra-cultural differences with respect to the RWA-SDO relation that can be attributed to political socialization and involvement, weighted mean correlations between RWA and SDO were computed for the student samples and the adult samples separately, after which the correlations between RWA and SDO were compared between students, adults and political activists. Although we expected a somewhat larger correlation among adults than among students, the weighted mean correlation of the student samples (r=.36) did not differ from the adult samples (r=.35). However, both these correlations were substantially weaker than the correlation between RWA and SDO in the political activist sample (r=.63). Similar results were obtained when looking at the relation between cultural and economic conservatism. Whereas both variables tend to be unrelated in general (rs=.08, .15, .09, .01, and .21, n.s., for samples 1 - 5 respectively), they are highly positively related among political activists (r=.63,

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[12] Cronbach Alpha's were .54, .64, .58, .43, .78, .64 and .56 for Power, .60, .72, .62, .67, .71, .68 and .71 for Achievement, .74, .72, .68, .76, .71, .83 and .67 for Hedonism, .70, .80, .77, .60, .66, .71 and .76 for Stimulation, .66, .51, .52, .58, .50, .61 and .60 for Self-direction, .74, .76, .76, .72, .61, .82 and .78 for Universalism, .59, .63, .63, .73, .70, .69 and .73 for Benevolence, .56, .50, .46, .44, .52, .74 and .53 for Tradition, .64, .67, .60, .70, .79, .84 and .69 for Conformity, and .65, .60, .53, .68, .65, .77, and .68 for Security for sample 1 – 6 and P respectively. The higher order dimensions were computed by substracting the sum of the value types with a negative loading on these dimension from the sum of the value types with a positive loading.

[13] As in Fontaine et al. (in press), a level of acquiescence estimation was subtracted from the raw scores. For each sample, a Principal Component Analysis (PCA) was carried out on these corrected scores. The scree test pointed to a two-componential solution for all samples. These structures were subjected to orthogonal Procrustes rotations towards the average componential structure reported by Fontaine et al. (in press). In all Flemish samples, the Tucker's Phi indices suggested good congruence. Hence, the two components could be interpreted as Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic respectively. In the Polish sample, ten items seemed to have a different meaning and were left out of the analyses. The other items were subjected to the procedure described above. Tucker's Phi indices suggested good congruence and the two components could be interpreted as Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic.

p<.01). This supports Duckitt's (2001) reasoning, but suggests that it is political involvement rather than socialization which is important to explain these intra-cultural differences.

To investigate whether the differential relations between RWA and SDO on the one hand and religiosity, value orientations and ideological attitudes on the other hand are stable, bivariate correlations and partial correlations (in which RWA and SDO were statistically corrected for each other) were computed. Computing partial correlations will hardly affect the results in the Polish sample (since RWA and SDO were unrelated in this sample) but will impact on the Flemish results. Hence, partial correlations allow us to compare the correlates of both constructs in their purest form. Bivariate correlations between RWA and SDO on the one hand, and racism, religiosity, values, cultural conservatism, economic conservatism, age and level of education on the other hand, are presented in Table 1. Partial correlations are presented in Table 2. For the Flemish samples, weighted mean correlations were also computed.

Although both RWA and SDO relate strongly to racism in the Flemish samples, they relate differentially to almost all other variables included in this study. Something which becomes even more apparent when looking at the partial correlations. On average, RWA relates positively to both church attendance and belief in God, whereas SDO relates slightly negatively to these measures. When excluding the way people deal with religion (Literal vs. Symbolic) from whether they accept a transcendent reality (Exclusion vs. Inclusion of Transcendence), the differential relation with religiosity becomes even more apparent: Although the Literal vs. Symbolic dimension relates negatively to both RWA and SDO, Exclusion vs. Inclusion of Transcendence relates positively to RWA but negatively to SDO. Thus, although both RWA and SDO are characterized by literal thinking about the religious realm, RWA is connected to religiosity whereas SDO is not.

The associated value patterns also seem to be different. RWA can primarily be understood in terms of Conservation and low Openness to Change, whereas SDO can primarily be understood in terms of Self-Enhancement and lack of Self-Transcendence. In line with these findings, RWA primarily relates to cultural conservatism, whereas SDO primarily relates to economic conservatism. Finally, RWA relates positively to age and negatively to education, whereas SDO is virtually unrelated to both variables. All of these relationships are quite stable across the different samples. However, there are some fluctuations. In general, the relations of the external variables with RWA and SDO are stronger in the political activist sample. A plausible reason for this observation is the fact that this sample contains people from the far-left and the far-right who are known to obtain different scores on ideological variables (see Van Hiel, Kossowska & Mervielde, 2000). This extension of range might have boosted the correlations. In general, the relations of the external variables with RWA and SDO also show more similarity. A plausible reason for this observation is the fact that political activists show more ideological constraint.

Table 1   *Bivariate correlations between RWA and SDO and the dependent variables.*

| Dependent Variable | Right-Wing Authoritarianism | | | | | | | |
	1	2	3	4	5	6	Mean	P
Racism	.51 *	.43 *	.57 *	.51 *	.71 *	.78 *	.60	-
Church attendance	.06	-	.09	-	.23	.60 *	.15	.22 *
Belief in God	.07	-	.05	-	.42 *	.71 *	.18	.09
Inclusion-Exclusion	.23 *	.31 *	.26 *	.42 *	.34 *	.48 *	.32	.22 *
Literal-Symbolic	-.37 *	-.28 *	-.36 *	-.29 *	-.20	-.03	-.31	-.42 *
Hedonism	-.08	-.05	-.19 *	-.17	-.24	-.48 *	-.14	.02
Stimulation	-.11	-.18 *	-.29 *	-.33 *	-.26	-.55 *	-.24	-.06
Self-Direction	-.34 *	-.42 *	-.34 *	-.42 *	-.47 *	-.59 *	-.42	-.39 *
Universalism	-.35 *	-.38 *	-.17 *	-.19 *	-.44 *	-.57 *	-.33	-.20 *
Benevolence	-.09	-.01	-.12	.12	-.15	.02	-.04	-.19 *
Tradition	.07	.14 *	.20 *	.10	.04	.51 *	.15	.20 *
Conformity	.35 *	.36 *	.46 *	.62 *	.56 *	.68 *	.49	.10
Security	.24 *	.40 *	.47 *	.54 *	.58 *	.66 *	.46	.16
Power	.15 *	.16 *	.13	.17	.23	.44 *	.17	.22 *
Achievement	.20 *	-.03	.01	-.10	.24	-.04	.04	.09
Openness-Conservation	.31 *	.43 *	.49 *	.63 *	.52 *	.73 *	.51	.25 *
SelfEnhanc.-SelfTransc.	-.28 *	-.19 *	-.15 *	-.05	-.33 *	-.34 *	-.21	-.24 *
Cultural Cons.	.57 *	.58 *	.61 *	.63 *	.69 *	.89 *	.73	.66 *
Economic Cons.	.15 *	.22 *	.12	.09	.14	.71 *	.19	-.41 *
Education	-	-	-.23 *	-.33 *	-.32 *	-.35 *	-.29	-.26 *
Age	-	-	.25 *	.30 *	.36 *	.61 *	.34	.26 *

| Dependent Variable | Social Dominance Orientation | | | | | | | |
	1	2	3	4	5	6	Mean	P
Racism	.58 *	.53 *	.52 *	.35 *	.63 *	.74 *	.60	-
Church attendance	-.02	-	-.10	-	-.02	.37 *	-.01	-.20 *
Belief in God	-.02	-	-.12	-	-.08	.41 *	-.02	-.20 *
Inclusion-Exclusion	-.11	-.02	-.15	-.10	-.18	.42 *	-.07	-.25 *
Literal-Symbolic	-.27 *	-.33 *	-.37 *	-.21 *	-.24 *	-.16	-.30	-.02
Hedonism	.21 *	.20 *	.15 *	-.03	-.02	-.12	.13	.19 *
Stimulation	.06	.13	.05	.04	-.06	-.24	.05	.20 *
Self-Direction	-.09	-.18 *	-.04	-.03	-.35 *	-.43 *	-.13	.07
Universalism	-.52 *	-.54 *	-.50 *	-.53 *	-.64 *	-.64 *	-.60	-.34 *
Benevolence	-.34 *	-.41 *	-.35 *	-.35 *	-.39 *	-.14	-.37	-.20 *
Tradition	-.08	-.17 *	-.16 *	-.08	-.21	.19	-.12	-.21 *
Conformity	.08	-.04	.08	.04	.35 *	.41 *	.08	-.18 *
Security	.00	.12	.19 *	.12	.35 *	.37 *	.14	-.05
Power	.37 *	.49 *	.25 *	.31 *	.48 *	.43 *	.40	.25 *
Achievement	.25 *	.26 *	.20 *	.20 *	.41 *	.15	.25	.09
Openness-Conservation	.00	-.05	.01	.04	.24	.40 *	.03	-.21 *
SelfEnhanc.-SelfTransc.	-.51 *	-.60 *	-.47 *	-.49 *	-.60 *	-.48 *	-.59	-.30 *
Cultural Cons.	.23 *	.23 *	.25 *	.21 *	.42 *	.59 *	.27	-.11
Economic Cons.	.45 *	.40 *	.38 *	.38 *	.46 *	.66 *	.45	.37 *
Education	-	-	.04	-.09	-.06	-.22	-.04	.08
Age	-	-	-.14	-.02	-.02	.19	-.05	-.22 *

* p<.01

Table 2   *Partial correlations between RWA and SDO and the dependent variables.*

Dependent Variable	Right-Wing Authoritarianism							
	1	2	3	4	5	6	Mean	P
Racism	.40 *	.33 *	.47 *	.45 *	.56 *	.60 *	.46	-
Church attendance	.09	-	.13	-	.28 *	.51 *	.17	.22 *
Belief in God	.08	-	.10	-	.45 *	.64 *	.19	.09
Inclusion-Exclusion	.20 *	.34 *	.34 *	.47 *	.29 *	.29 *	.33	.22 *
Literal-Symbolic	-.30 *	-.20 *	-.28 *	-.29 *	-.05	-.09	-.24	-.42 *
Hedonism	-.15 *	-.14 *	-.27 *	-.20 *	-.27 *	-.51 *	-.21	.04
Stimulation	-.15 *	-.23 *	-.34 *	-.33 *	-.27 *	-.52 *	-.28	-.05
Self-Direction	-.32 *	-.39 *	-.35 *	-.42 *	-.36 *	-.45 *	-.39	-.39 *
Universalism	-.21 *	-.26 *	.00	-.09	-.14	-.28	-.16	-.23 *
Benevolence	.03	.14 *	.02	.20 *	.08	.12	.09	-.19 *
Tradition	.11	.21 *	.29 *	.12	.20	.51 *	.21	.19 *
Conformity	.35 *	.40 *	.46 *	.63 *	.47 *	.59 *	.49	.10
Security	.26 *	.38 *	.45 *	.53 *	.50 *	.59 *	.44	.16
Power	.01	.00	-.04	.11	-.05	.24	.02	.24 *
Achievement	.12	-.12	-.07	-.15	.02	-.18	-.05	.07
Openness-Conservation	.33 *	.47 *	.53 *	.63 *	.48 *	.67 *	.54	.25 *
SelfEnhanc.-SelfTransc.	-.11	.00	.02	.07	-.01	-.06	-.02	-.25 *
Cultural Cons.	.53 *	.55 *	.57 *	.59 *	.60 *	.82 *	.66	.66 *
Economic Cons.	-.02	.11	-.03	-.16	-.15	.51 *	.02	-.42 *
Education	-	-	-.26 *	-.34 *	-.34 *	-.27 *	-.30	-.26 *
Age	-	-	.32 *	.32 *	.45 *	.64 *	.40	.26 *

Dependent Variable	Social Dominance Orientation							
	1	2	3	4	5	6	Mean	P
Racism	.49 *	.46 *	.41 *	.26 *	.47 *	.52 *	.47	-
Church attendance	-.06	-	-.14	-	-.18	-.01	-.10	-.21 *
Belief in God	-.06	-	-.14	-	-.19	-.06	-.11	-.20 *
Inclusion-Exclusion	-.03 *	-.13	-.27 *	-.20	-.01	-.18	-.14	-.25 *
Literal-Symbolic	-.16 *	-.26 *	-.27 *	-.17	-.17	-.18	-.22	-.10
Hedonism	.21 *	.22 *	.24 *	.18	.13	.25	.22	.19 *
Stimulation	.11	.20 *	.19 *	.04	.10	.10	.14	.20 *
Self-Direction	.03	-.05	.10	.06	-.12	-.11	.01	.08
Universalism	-.45 *	-.48 *	-.47 *	-.51 *	-.53 *	-.43 *	-.52	-.36 *
Benevolence	-.33 *	-.43 *	-.34 *	-.38 *	-.37 *	-.20	-.38	-.21 *
Tradition	-.11	-.23 *	-.26 *	-.11	-.28 *	-.19	-.20	-.21 *
Conformity	-.06	-.18 *	-.10	-.12	.07	-.03	-.10	-.18 *
Security	-.10	.00	.00	.00	.05	-.08	-.03	-.05
Power	.35 *	.47 *	.23 *	.29 *	.44 *	.22	.37	.26 *
Achievement	.20 *	.29 *	.20 *	.22 *	.34 *	.22	.24	.10
Openness-Conservation	-.13	-.21 *	-.22 *	-.12	-.06	-.11	-.17	-.22 *
SelfEnhanc.-SelfTransc.	-.46 *	-.57 *	-.45 *	-.50 *	-.53 *	-.36 *	-.54	-.32 *
Cultural Cons.	.03	.06	.03	.06	.07	.11	.05	-.13
Economic Cons.	.43 *	.36 *	.37 *	.45 *	.47 *	.40 *	.43	.43 *
Education	-	-	.14	-.02	.14	-.01	.08	.08
Age	-	-	-.25 *	-.12	-.28 *	-.30 *	-.23	-.22 *

* *p<.01*

In the Polish sample, the SDO-related results were quite consistent with the Flemish results, especially when the partial correlations are compared. However, the RWA-related results showed important differences. First, whereas RWA and economic conservatism tend to be unrelated in the Flemish samples after SDO is controlled for (except for the political activist sample), both variables are clearly negatively related in the Polish sample. Second, whereas RWA and Self-Enhancement vs. Self-Transcendence are virtually unrelated in the Flemish samples after SDO is controlled for, both variables were negatively related in the Polish sample. Moreover, the relation with Openness to Change vs. Conservation and most of the included value types was substantially weaker in the Polish sample. These findings were largely in line with our expectations, and will be discussed in more depth in the discussion section.

Discussion

The present study yields two important results. First, there appear to be both cross-cultural and intra-cultural differences with respect to strength of the RWA-SDO relation. Second, although the differential relations with variables such as religiosity, value orientations and ideological attitudes are quite stable, important intra-cultural and cross-cultural differences were also noted.

The RWA-SDO relation

In contrast with the results obtained in North America, but in line with previous studies in Western Europe and New Zealand, a strong positive RWA-SDO relation was observed in the Flemish samples. In the Polish sample, both constructs were virtually unrelated. These results support Duckitt's (2001) hypothesis that cross-cultural differences might result from the socio-political context. In Western Europe, political parties can often be placed on a broad left-right dimension, with left-wing and right-wing parties being about equally strong. In this case, the political system would be strongly ideologized along a broad left-right dimension, which would result in RWA and SDO influencing each other because both of them clearly refer to the political right. In countries in which either socialist left-wing or liberal or conservative right-wing parties have dominated politics over a long period of time or still dominate politics, as is respectively the case in former communist countries and the United States, this left-right dimension would be less important. Moreover, Boski (1993) has shown that, after the fall of communism, the complicated and diverse political spectrum that emerged in Poland could not be grasped in terms of a single left-right dimension. Rather, it should be grasped in terms of two independent dimensions, since the political context sustains an independent configuration of RWA and SDO related beliefs.

The results in the Flemish samples also suggest that, apart from cross-cultural differences in the RWA-SDO relation that are due to the specific socio-political context, the degree to which RWA and SDO are related can fluctuate quite a bit within a given culture. Results support Duckitt's (2001) hypothesis that

these differences stem from differences in political involvement, with the politically involved showing more ideological constraint and experiencing more similarity between the attitudes encompassed in the RWA and SDO scales. Thus, whereas in Western Europe the left-right dimension seems to break up to some extent into the unrelated dimensions of RWA / cultural conservatism and SDO / economic conservatism in the general population, a unidimensional left-right dimension seems to be a reality among political activists (cf. Middendorp, 1978). Future research might investigate whether this phenomenon of RWA-SDO relations being dependent on level of political involvement is restricted to cultures in which the broad left-right dimension is highly important or whether a similar phenomenon also occurs in cultures in which this distinction is less important.

The stability of external relations

The Flemish results show that, although the differential relations with variables such as religiosity, value orientations and ideological attitudes are relatively stable, some important intra-cultural differences do appear. In particular, the relations of the external variables with RWA and SDO were stronger in the political activist sample. A plausible reason for this observation is the fact that this sample contains people from the far-left and the far-right who generally obtain different scores on ideological variables. This extension of range might have boosted the correlations. Moreover, the relations of the external variables with RWA and SDO show more similarity. A plausible reason for this observation is the fact that political activists show more ideological constraint and experience more similarity between RWA and SDO. Hence, these finding complement the findings discussed above.

Results of the present study also show that, although the differential RWA-SDO relations with external variables such as religiosity, value orientations and ideological attitudes which were obtained in previous research in the United States are relatively stable, some important cross-cultural differences do appear. First, as can be expected, these external relationships tend to be more similar in cultures in which the broad left-right dimension of politics is more important (as is the case in Belgium compared to the United States), especially among the politically involved, for whom this broad left-right dimension is even more important. Second, whereas these differences also seem to exist in former communist countries such as Poland, some important differences can be noted which can be attributed to differences in socio-political history. First, whereas RWA and economic conservatism seem to be either unrelated or positively related in Western Europe (depending on political involvement) and the United States, both constructs seem negatively related in Eastern Europe. Thus, apparently, East European authoritarians prefer left-wing economical principles over right-wing economical principles. This finding is in line with McFarland et al. (1992), who reported RWA to be associated with support for communism in the former Soviet Union, and receives support from looking at the relation between cultural and economic conservatism. Where-

as both constructs tend to be either unrelated or positively related in Western Europe (depending on political involvement) and the United States, both constructs seem negatively related in Eastern Europe (r=-43, p<.01 for the Polish sample). These findings suggest that, in contrast to Western Europe and the United States, in Eastern Europe the desire to preserve one's culture goes hand in hand with support for communists economical principles. Second, whereas both constructs seem either unrelated or positively related in the Western Europe and the United States, RWA seems to relate negatively to Self-Enhancement vs. Self-Transcendence in Eastern Europe. East European authoritarians thus seem to take special interest in social status, prestige and control over people and resources, and seem to reject the protection and enhancement of the welfare of other people. In sum, they seem interested in the domination of their fellow citizens. Thus, although East European authoritarians seem to support economical principles aimed at redistributing wealth, they appear to support these principles because they are part of a cultural tradition rather than because of their aim. This interpretation receives support from the finding that the relation between RWA and Openness to Change vs. Conservation, albeit weaker than in Flanders, was still positive.

PART 3

Left-Wing and Right-Wing Authoritarianism

Abstract

The presence of left-wing authoritarianism (LWA) as well as its relationship with right-wing authoritarianism (RWA), ideology-free authoritarianism (IFA) and various ideological variables (racism, economic and cultural conservatism) were tested in a sample of Flemish political activists (N = 69) and two adult samples, one in Flanders (N = 88) and one in Poland (N = 235). An adapted version of Altemeyer's LWA-scale was internally consistent and the facets conventionalism, aggression and submission could be distinguished. In the political activist sample, high levels of left-wing authoritarianism were obtained among communists. The relationship between left-wing and right-wing authoritarianism as well as the results in the Polish sample are discussed.

Introduction

The Authoritarian Personality (Adorno et al., 1950) can be considered as one of the cornerstones of political psychology and has been cited in more than 2,000 publications (Meloen, 1993). Recent attention for the authoritarianism concept has led to various publications on its relationship with opinions about contemporary societal problems such as HIV (e.g., Cunningham, Dollinger, Satz & Rotter, 1991) and environmental problems (Schultz & Stone, 1994), personality correlates such as rigidity (Schultz, Stone & Christie, 1997), social dominance orientation (e.g., Duriez & Van Hiel, 2002; Heaven & Bucci, 2001; McFarland, 1999; Whitley, 1999) and the NEO_PI_R Openness to Experience dimension (McCrae, 1996). Research overviews in Advances of Experimental Social Psychology (Altemeyer, 1998) and Political Psychology (Martin, 2001) also attest the recent resurgence of interest in the authoritarianism concept.

The work of Adorno et al. (1950) consisted of two parts. The "qualitative" part was concerned with interviews which covered general areas such as vocation, income and religion, clinical data with inclusion of family background, and political issues and opinions about minorities and racial differences. Also techniques such as the Thematic Apperception Test and a set of projective questions were administered. The "quantitative" part was concerned with the "covariation principle" which states that anti-Semitism coexists with other attitudes, such as ethnocentrism, political and economic conservatism, and authoritarianism (see Brown, 1965). The authors constructed questionnaires to measure each of these attitudes and observed very high positive correlations among them in samples of university students, war veterans, psychiatric patients, members of trade unions, prisoners, teachers and nurses, with a total $\underline{N}$ well beyond 2,000.

However, critics discovered serious methodological flaws. Criticisms on the qualitative part of the study were numerous and include issues such as the coding of multiple variables from the same content and the fact that coders knew in advance that the interview they were coding belonged to a high or low scorer on Ethnocentrism (Hyman & Sheatsley, 1954). Other authors (e.g., Bass, 1955) pointed at severe methodological problems with the questionnaire data. In particular, the items of the F-scale which was used to measure authoritarian personality as well as the scales which were used to measure the other ideological variables were worded in such a way that agreement with the items led to high scores on each scale (note however that the political and economic conservatism scale had negative items as well). Thus, the positive correlations between these scales might have been due to participants simply expressing agreement with every statement they encounter (i.e., yeah-saying). Continued attempts to construct balanced scales that contain an equal number of positive and negative statements were not entirely successful. Nevertheless, it was concluded that, although acquiescence might somewhat elevate the correlations between the various scales, these scales also share "true" common variance (e.g., Brown, 1965).

In search of left-wing authoritarians

Various authors have criticized The Authoritarian Personality because it was limited to the problem of right-wing extremism (Eysenck, 1954; Rokeach, 1960). These authors asserted that fascists and communists have many attitudes in common that oppose the value systems of democrats. The position that fascists as well as communists share traits similar to these described in The Authoritarian Personality has become known as extremism theory or authoritarianism of the left theory. Early contributions in this tradition tried to identify personality dimensions that characterize extremists of whatever political stance. In order to achieve this aim, Eysenck (1954) extracted two factors from the correlations among 40 attitudinal statements. The first dimension was interpreted as liberalism versus conservatism. The second dimension was labeled tough-mindedness versus tender-mindedness. Eysenck (1954; Eysenck & Coulter, 1972) showed that moderates generally obtain low tough-mindedness scores, whereas extremist groups such as communists and especially fascists obtain higher scores. However, Eysenck's study has been severely criticized because the F-scores reported for the moderate group were the lowest obtained so far (Christie, 1956). Moreover, Rokeach and Hanley (1956) argued that Eysenck's results could be explained on the basis of the content of the tough-mindedness scale, which was composed of anti-religiosity and anti-humanitarianism items. Rokeach and Hanley (1956) argued that communists obtain high scores on this scale because they express agreement with the anti-religiosity items, whereas fascists obtain high scores on this scale because they agree with the anti-humanitarianism items. Thus, adherents of both extremist groups are likely to obtain higher tough-mindedness scores than moderates who are likely to reject these statements.

In an attempt to overcome the latter problem, Rokeach (1960) developed the dogmatism scale to measure ideology-free authoritarianism. He obtained somewhat higher though non-significant dogmatism scores in communists ($\underline{N}$ = 13). However, in a study of the Italian Parliament, Di Renzo (1967) obtained the highest dogmatism levels among neofascists ($\underline{N}$ = 24), whereas communists ($\underline{N}$ = 25) obtained the lowest scores. Similar results were obtained by Knutson (1974) who studied the governing bodies of six American political parties, ranging form the Communist Party ($\underline{N}$ = 11) to the neo-nazi American Socialist White People's Party ($\underline{N}$ = 13). Moreover, Rokeach obtained high positive correlations (.54 < $\underline{r}$ < .77) between dogmatism and the F-scale, and other researchers reported positive correlations between dogmatism and Altemeyer's (1981) Right-Wing Authoritarianism scale (e.g., Van Hiel & Mervielde, in press A).

Some authors took the existence of left-wing authoritarianism for granted whereas others concluded that left-wing authoritarianism is a myth, and a fierce debate developed among scientists on the characteristics of political extremists (e.g., Christie, 1956; Eysenck, 1954, 1981; Ray, 1983; Rokeach & Hanley, 1956; Stone, 1980). This debate, however, was one for which hardly any empirical data were available. According to Stone and Smith (1993, p. 154), many political psychologists "... typically base their case on intuitive evi-

dence ... concerning apparent similarities between regimes of the far left and far right, rather than on a systematic review of the empirical data on any personality and ideology." Research explicitly designed to investigate the relationship between personality and political extremism could also be criticized. Most of these studies were conducted with social science students, and few studies used samples that were more or less representative for the electorate. It thus seems quite premature to generalize these findings to extremists. Of course, extremist samples are hard to obtain. One reason for this is that, almost by definition, "extremists" are not that numerous. Moreover, extremists have been reported to be unwilling to participate in empirical studies (e.g., Rosen, 1951).

Nevertheless, two recent lines of investigation tried to advance this debate. First, the fall of communist regime in the Soviet Union and Eastern Europe in the late 1980s provided extremism theorists with an excellent chance to prove that they were right. Studies of Hamilton, Sanders & McKearney (1995) and McFarland, Ageyev and Abalakina-Paap (1992) showed, as expected by extremism theory, that right-wing authoritarianism was strongly associated with support for communism. However, current thinking on right-wing authoritarianism has evolved to a "new position" quite similar to the position advocated by extremism theorists. For example, Altemeyer (1996, p. 218) argues that when he "began talking about "right-wing" authoritarianism, I was (brazenly) inventing a new sense, a social psychological sense that denotes submission to the perceived established authorities in one's life." This definition of right-wing authoritarianism leads to the prediction that adherents of hard-line communist ideology in the former Soviet Union should evince high authoritarianism levels, whereas communists in Western countries should obtain low scores. Thus, according to this view, ideal support for extremism theory would be obtained in samples of extreme left-wing party members who try to "throw over the bourgeoisie regime".

Altemeyer's (1996) attempt to develop a Left-Wing Authoritarianism scale (LWA) constitutes a second line of investigation that might advance the ongoing debate. Rather than searching for ideology-free measures of authoritarianism, Altemeyer (1996) developed a scale that identifies positive attitudes toward the adherence to rules and "party discipline", submission to left-wing movement leaders, and the ruining of enemies of the establishment. These attitudes respectively refer to (1) conventionalism, (2) submission and (3) aggression, which have been identified as the core themes of authoritarianism. However, in various Canadian samples of students (total $\underline{N}$ = 1,845) and their parents ($\underline{N}$ = 642), as well as among candidates of moderate political parties ($\underline{N}$ = 67), Altemeyer did not find a single person that could be classified as left-wing authoritarian (scoring on average at least 6.0 on 9-point scales). Moreover, somewhat surprisingly, positive correlations (.11 < $\underline{r}$ < .18) between LWA and RWA were obtained as well.

The present study

In the present study, an adapted LWA scale as well as various scales that measure political ideology were

administered. One of the West European samples was composed of activists of extreme and moderate political movements. A heterogeneous adult sample was also collected in both Western and Eastern Europe.

Method

Samples

Sample 1, the political activist sample (N = 69), consisted of militants of various political movements. Right-wing extremists were supporters of the "Vlaams Blok" (N = 11), a party that is very similar to other extreme right-wing European parties such as the Centrum Partij in the Netherlands, Le Pen's Front National in France, and the Republikaner in Germany (Ignazi, 1992). Left-wing extremists (N = 20) were communists affiliated to the Stalinist "Partij Van De Arbeid" (PVDA). A sample of anarchists (N = 21) was also collected because from a historical point of view, anarchists are assumed to support left-wing ideas but reject submission to any sort of authority. The anarchists were active in the anarchist movement and defined themselves as such. Members of all other "traditional" parties (the green, christian democrat, socialist and conservative party) are referred to as "moderates" (N = 17).

Sample 2 and 3 were recruited by undergraduate students asking their neighbors to participate in order to obtain a heterogeneous sample. Sample 2 collected in Flanders (N = 88) and sample 3 collected in Poland (N = 232) are referred to as "adult samples". The adult Flemish sample consisted of 53% males and the mean age was 40 years (SD=14.68). Of these participants, 57.6% endorsed a position on the left-side (one through three) of a six-point left/right self-placement scale, and 42.4 % indicated a position on the right-side (four through six) of the scale. The Polish adult sample consisted of 73% males and the mean age was 39 years (SD=15.22). Of these participants, 40.9% endorsed a position on the left-side of a six-point left/right self-placement scale, and 59.1% indicated a position on the right-side.

Measures

Left-wing authoritarianism (LWA)

An adaptation of Altemeyer's (1996) Left-Wing Authoritarianism (LWA) scale consisted of 12 items divided over the four-item facets aggression, submission and conventionalism. Each of these scales had an equal number of positive and negative statements. The items are reported in Table 1. For the construction of this scale, items from Altemeyer (1996) that clearly referred to one of the three facets of authoritarianism were selected. Some items were stated in a more direct language. The aggression items made explicitly mention of the use of violence against established regimes, whereas the submission items expressed positive attitudes toward submission to leaders of left-wing movements. The conventionalism items indicated adherence to norms of behavior endorsed by revolutionary authorities (especially statements referring to hostility

toward those presently in power). Because we were able to identify one item only that was restricted to the idea of conventionalism, items 6, 13 and 14 were newly written. The conventionality items were not administered in the Polish sample because of their limited validity for the East European situation. In particular, the statement "members of military regimes" might be understood as referring to communist leaders such as Jaruzelski, and the South-African Apartheid-regime has been given much less attention in Poland than in Western Europe. However, the item "Right-wing extremists have to be considered as dangerous troublemakers" was administered in Poland. Moreover, "Hitler and his gang should be tortured slowly to death" was also administered as it refers quite straightforwardly to Polish collective memory. The Polish LWA scale thus consisted of 10 items. In all samples, the LWA items were rated on 5-point Likert scales (1 = completely opposed, 3 = neutral, 5 = completely in agreement).

Other indicators of political beliefs

Participants also completed eleven items of the Right-Wing Authoritarianism Scale (RWA, Altemeyer, 1981; translated by Meloen, 1991 and Koralewicz, 1987) and the cultural and economic conservatism scales (De Witte, 1990; both 12 items). The cultural conservatism scale addresses issues such as upbringing, work ethic, the position of women in society, premarital sexual intercourse, abortion and euthanasia. The economic conservatism scale addresses issues such as the desirable impact of trade unions, level of government interventions in economics and income differences. Cronbach alpha's were .92, .86 and .84 for RWA, .91, .82 and .82 for cultural conservatism, and .94, .82 and .81 for economic conservatism, for the Flemish political activist sample, the Flemish adult sample and the Polish adult sample respectively. Finally, Flemish participants completed a 9 item racism scale (Billiet & De Witte, 1991). According to Billiet and De Witte (1991), this scale is comprised of two conceptually different components: xenophobia and racism. An example of a xenophobia item is "In general, immigrants are not to be trusted". An example of a racism item is "We have to keep our race pure and fight mixture with other races". However, a scree test (Cattell, 1966) clearly pointed to one component only (cf. Duriez, 2002a; Duriez & Hutsebaut, 2000; Duriez, et al., 2002). Cronbach alpha's were .94 and .92 for the political activist and adult sample respectively. The items of all these scales were rated on 5-point Likert scales (1 = completely opposed, 3 = neutral, 5 = completely in agreement).

An ideology-free authoritarianism scale

A 15-item ideology-free authoritarianism (IFA) scale was also administered in the Flemish samples. Twelve items of the IFA-scale were drawn from the qualitative part of The Authoritarian Personality in which they were explicitly mentioned as examples of the categories preoccupation with power (3 items), projection of unconscious impulses (5 items), and destructiveness (4 items). According to Adorno et al. (1950), these categories make up the core of the authoritarianism concept. Examples of items that measure the catego-

ries power, destructiveness and projection are, respectively: "I really admire Napoleon's great leadership", "I would experience great excitement to see on television how San Francisco would be like after an earthquake", and "People may suddenly become dangerous." The three remaining items of the IFA-scale were taken from the hostility scale of the Aggression Questionnaire (Buss & Perry, 1992). "When people are especially nice, I wonder what they want" is an example of such an item. The IFA-scale was previously tested in a Flemish adult sample ($\underline{N}$ = 381) and the internal consistency proved to be sufficient (Cronbach alpha = .73). The IFA items were also rated on 5-point Likert scales. Cronbach alpha's were acceptable for both the political activist sample (.63) and the adult sample (.67).

Results

Psychometric analyses of LWA

As can be seen in Table 1, reliability analyses of the Flemish LWA revealed sufficient internal consistencies for the political activist (.86) as well as the adult (.76) sample. Subsequent analyses revealed sufficient internal consistencies for both the aggression (.88 and .61) and the submission facet (.77 and .64). However, the conventionality facet only proved to be consistent in the political activist sample (.69), but not in the adult sample (.46). In general, the internal consistency of the LWA scale and its facets was much higher in the political activist sample, which corroborates the "attitude-constraint hypothesis" of expert political judgment (Converse, 1964). The correlations among the LWA-facets were highly positive ($\underline{r}$s > .30). In the Polish sample, reliabilities of the aggression and submission facets were insufficient (Cronbach alpha = .25 and .33 respectively), but Cronbach alpha was much better for the 10-item LWA scale (.63).

Extraction of three factors (accounting for 36.2%, 15.2% and 9.6% of the variance respectively) of the correlations among the aggression, submission and conventionality items in the Flemish samples (total $\underline{N}$ = 157) revealed that the items of the aggression and submission scale constituted the first and second factor. However, only three conventionality items loaded on the third factor and one item (item 5) erroneously loaded on the second factor. Table 2 reports the factor structures of the correlations among the aggression and submission items. Note that the conventionalism items were not included in these analyses because they were not administered in the Polish sample, and hence we could only compare the structure of the aggression and submission items. In the Flemish samples, the aggression items loaded on the first factor which accounted for 42.5% of the variance, and the submission items loaded on the second component which accounted for 21.1% of the variance. In the Polish sample, negative items loaded on the first factor which accounted for 24.2% of the variance, whereas positive items loaded on the second factor which accounted for 16.0% of the variance. Not surprisingly then, factor congruencies between the Flemish and Polish factor solutions were invariably low ($\underline{r}$s < |.35|), indicating that the underlying dimensions of the LWA-

items are entirely different for Western and Eastern Europe.

Table 1   *Item-subscale correlations and Cronbach alpha's of facets and total LWA scale*

#	Item	Political Sample	Adult Sample	Polish Sample
01	I agree with the communist idea of overthrowing the Establishment - with or without violence - and giving its wealth to the poor...	.72	.25	.10
02	A revolutionary movement is justified in using violence because the Establishment will never give up its power peacefully..	.84	.47	.14
09	It would be wrong to solve our problems by acts of violence against the conservative Establishment (-)...	.66	.44	.09
10	Even though the conservative Establishment who controls our country is repressive and unfair, society should be reformed through nonviolent means only (-).........	.75	.32	.18
Cronbach alpha Aggression subscale		*.88*	*.58*	*.25*
03	The Establishment has so much power and is so unfair that we have to submit to the leaders and rules of a revolutionary movement in order to destroy them..............	.45	.25	.25
04	A revolutionary movement is justified in demanding obedience and conformity of its members..	.66	.35	.09
11	Even a revolutionary left-wing movement that fights against the totally unjust right-wing system does not have the right to tell its members how to think and act (-)........	.63	.36	.18
12	A left-wing party is not justified in demanding too much conformity and obedience, even after a revolution (-)...	.57	.42	.18
Cronbach alpha Submission subscale		*.77*	*.56*	*.33*
05	The members of the conservative Establishment deserve to be dealt with harshly, without mercy, when they are finally overthrown..	.52	.26	----
06	Right-wing extremists have to be considered as dangerous troublemakers...............	.45	.29	----
13	War criminals and members of military regimes deserve a fair trial, despite all the pain and the suffering they have caused (-)..	.28	.30	----
14	A good thing in the South-African peace process is that people who supported the former Apartheid regime can be granted amnesty (-)..	.69	.21	----
Cronbach alpha Conventionality subscale		*.69*	*.46*	*----*
Cronbach alpha total LWA scale		*.86*	*.69*	*.63*

Table 2   *Factor-analysis of the LWA-items in the Flemish and Polish samples*

	Flemish samples		Polish samples	
	Aggression	Submission	Negative Items	Positive Items
Item 02	**.88**	.13	-.01	**.73**
Item 01	**.83**	-.01	.05	**.48**
Item 09	**.78**	.14	**.75**	.18
Item 10	**.76**	.11	**.47**	-.33
Item 03	**.50**	.43	-.31	**.58**
Item 12	.01	**.84**	**.55**	-.13
Item 11	.02	**.82**	**.66**	-.05
Item 04	.28	**.72**	-.08	**.57**

loadings greater than .40 in bold face

Table 3   Correlations among the ideological variables and LWA and its facets

	2	3	4	5	6	7	8	9
1. LWA	.83***	.74***	.85***	-.41***	-.25*	-.36**	-.61***	-.46***
	.82***	.77***	.76***	.34***	.35***	.12	-.13	.32**
	.81***	.80***	----	.45***	----	.39***	-.18**	----
2. Aggression	----	.31*	.55***	-.69***	-.36**	-.63***	-.71***	-.60***
		.44***	.46***	.04	.11	-.14	-.17	.04
		.40***	----	.33***	----	.28***	-.05	----
3. Submission		----	.58***	.06	-.06	.09	-.23	-.05
			.36***	.50***	.45***	.37***	.00	.44***
			----	.27***	----	.25***	-.12	----
4. Conventionalism			----	-.21	-.12	-.19	-.45***	-.38**
				.26**	.26**	.06	-.13	.27**
				----	----	----	----	----
5. RWA				----	.57***	.90***	.71***	.77***
					.57***	.69***	.15	.74***
					----	.66***	-.41***	----
6. IFA					----	.57***	.42***	.63***
						.52***	.03	.54***
						----	----	----
7. Cultural conservatism						----	.61***	.74***
							.22*	.57***
							-.43***	----
8. Economic conservatism							----	.74***
								.18
								----
9. Racism								----

Note: The first refers to the Flemish political activist sample, the second line refers to the Flemish adult sample and the third line refers to Polish sample.

* p<.05, ** p<.01, *** p<.001.

Relations between LWA and other indicators of ideology

Table 3 reports the correlations among the ideological variables. In the political activist sample, we obtained negative correlations between LWA on the one hand, and RWA (r=-.41, p<.001) and IFA (r=-.25, p<.05) on the other hand. These negative correlations were particularly high for the aggression facet (r=-.69, p<.001, and r=-.36, p<.01 respectively; rs < |.21|, n.s., for the other facets). In this sample, economic conservatism (r=-.61, p<.001), cultural conservatism (r=-.36, p<.01), and racism (r=-.46, p<.001) also correlated negatively with LWA. One would certainly expect these results to occur when people truly think in terms of political ideology. However, in the Flemish adult sample, a positive relationship between LWA on the one hand, and RWA (r=.34, p<.001) and IFA (r=.35, p<.001) on the other hand corroborated Altemeyer's (1996) findings. These positive relationships were primarily caused by the submission facet (r = .50 and .45 for RWA and IFA) and to a lesser extent by the conventionality facet (rs = .26 and .26 for RWA and IFA). Similar positive relationships were obtained between LWA on the one hand, and cultural conservatism and racism on the

other hand. A slightly negative correlations between LWA and economic conservatism was also found. In the Polish sample, the positive relationship between LWA and both RWA (r=.45, p<.001) and cultural conservatism (r=.39, p<.001), and the negative relationship between LWA and economic conservatism (r=-.18, p<.01) corroborated the results in the Flemish adult sample.

In order to further explore the relationships among the ideological variables, two factors were extracted from the correlations among the ideological variables in all samples (see Table 4). In both Flemish samples, RWA, racism, IFA and cultural conservatism loaded on the first component, whereas LWA and economic conservatism loaded on the second dimension. There were however some inconsistencies between both samples with respect to the secondary loadings of some variables. Factor-analysis of the Polish sample revealed that LWA loaded on the factor that consists of RWA and cultural conservatism, whereas economic conservatism loaded on a second factor. RWA had a secondary loading on this second factor. These results suggest that LWA primarily relates to economic progressivism in the Flemish samples, whereas RWA primarily relates to cultural conservatism. Conversely, in the Polish sample, LWA primarily relates to cultural conservatism, whereas RWA relates to both cultural conservatism and economic progressivism .

Table 4   *Factor-analysis of the ideological variables in the three samples*

	Political activist sample		Adult Sample		Polish sample	
	I	II	I	II	I	II
RWA	**.86**	.34	**.89**	-.01	**.71**	**.48**
IFA	**.80**	.04	**.77**	-.22	NA	NA
Racism	**.79**	**.45**	**.85**	-.01	NA	NA
Cultural conservatism	**.87**	.26	**.81**	.24	**.62**	**.55**
Economic conservatism	**.53**	**.73**	.25	**.81**	-.05	**-.92**
LWA	-.10	**-.94**	**.44**	**-.65**	**.88**	-.06
Eigenvalue	3.96	0.90	3.01	1.18	2.21	0.84

loadings greater than .40 in bold face.

Mean level differences in LWA between ideological groups

Table 5 reports the mean levels of LWA and its facets for the four ideological groups in the political activist sample. In general, these results confirm the validity of the LWA scale and its facets. As expected, the highest LWA levels (M = 3.20) were obtained by the group of left-wing extremists, whereas the right-wing extremist group exhibited the lowest LWA levels (M = 1.73). Moderates and anarchists scored somewhere in between (M = 2.21 and 2.69 respectively). Differences between the ideological groups were significant (F(3, 64) = 11.90, p<.01). With respect to authoritarian aggression, high scores were obtained by left-wing ex-

tremists and anarchists ($\underline{M}$ respectively 3.96 and 3.87), whereas moderates and right-wing extremists had much lower scores ($\underline{M}$ = 1.89 and 1.66 respectively; $\underline{F}$(3, 64) = 32.99, $\underline{p}$<.001). Quite interestingly, and as expected, anarchists obtained the lowest submission scores ($\underline{M}$ = 1.75), whereas left-wing extremists obtained the highest submission scores ($\underline{M}$ = 3.05). Moderates and right-wing extremists scored in between ($\underline{M}$ = 2.21 and 1.73 respectively; $\underline{F}$(3, 64) = 7.56, $\underline{p}$<.001). Right-wing extremists obtained significantly lower conventionalism scores ($\underline{M}$ = 1.50) than left-wing extremists, anarchists, and moderates who all obtained about equally high scores ($\underline{M}$ = 2.60, 2.45 and 2.38 respectively; $\underline{F}$(3, 64) = 4.91, $\underline{p}$<.01). For RWA, IFA, cultural and economic conservatism, and racism, left-wing extremists and anarchist generally obtained significantly lower scores than moderates and right-wing extremists.

Table 5   *Mean level differences with respect to the ideological variables in the Flemish political sample*

	Extreme left-wing ($\underline{N}$ = 20)		Moderate ($\underline{N}$ = 16)		Extreme right-wing ($\underline{N}$ = 11)		Anarchist ($\underline{N}$ = 21)		$\underline{F}$(3,64) =
Aggression	3.96[a]	(1.06)	1.89[b]	(0.71)	1.66[b]	(0.56)	3.87[a]	(0.88)	32.99***
Submission	3.05[a]	(1.29)	2.36[b]	(0.63)	2.02[b]	(0.83)	1.75[b]	(0.61)	7.56***
Conventional.	2.60[a]	(1.24)	2.38[a]	(0.61)	1.50[b]	(0.56)	2.45[a]	(0.38)	4.91**
LWA	3.20[a]	(1.12)	2.21[c]	(0.46)	1.73[c]	(0.49)	2.69[b]	(0.43)	11.90***
RWA	1.88[b]	(0.64)	3.49[a]	(0.83)	3.70[a]	(0.36)	1.54[b]	(0.35)	57.37***
IFA	2.01[b]	(0.50)	2.78[a]	(0.58)	2.84[a]	(0.48)	2.48[a]	(0.41)	9.87***
Economic cons.	1.38[c]	(0.51)	2.62[b]	(0.74)	3.45[a]	(0.70)	1.57[c]	(0.30)	44.07***
Cultural cons.	1.96[b]	(0.72)	3.08[a]	(0.76)	3.34[a]	(0.62)	1.39[c]	(0.37)	35.02***
Racism	1.35[a]	(0.62)	2.26[b]	(0.86)	3.83[c]	(0.69)	1.38[a]	(0.32)	45.41***

Note: *Standard deviations are written between parentheses. Mean levels with different subscripts are significantly different at the .05 level.*

* $\underline{p}$<.05, ** $\underline{p}$<.01, *** $\underline{p}$<.001

In order to conduct mean level analyses in the adult samples, three different categories were created. Participants who obtained a score of 1 or 2 on the 6-point left/right self-placement scale were considered left-wing adherents. Participants who obtained a score of 3 or 4 were considered moderates. A score of 5 or 6 resulted in an assignment to the right-wing category. As can be seen in Table 6, much less substantial differences were obtained between these different groups in the Flemish as well as the Polish adult sample. In the Flemish adult sample, no significant differences were obtained for LWA and its facets ($\underline{F}$s < 2.87). Significant higher scores for right-wing adherents than for moderates and left-wing adherents were found for RWA ($\underline{M}$ = 3.67, 2.87 and 2.79 respectively; $\underline{F}$(2, 81) = 6.09, $\underline{p}$<.01), IFA ($\underline{M}$ = 2.70, 2.47 and 2.53; $\underline{F}$(2, 81) = 3.88, $\underline{p}$<.05), economic conservatism ($\underline{M}$ = 2.63, 2.36 and 2.08; $\underline{F}$(2, 81) = 4.03, $\underline{p}$<.05), cultural conservatism ($\underline{M}$ = 3.17, 2.50 and 2.33; $\underline{F}$(2, 81) = 6.83, $\underline{p}$<.01) and racism ($\underline{M}$ = 2.64, 1.96 and 1.74; $\underline{F}$(2, 81) = 6.83, $\underline{p}$<.01). In the Polish sample, no significant differences were obtained for LWA and its facets ($\underline{F}$s < 1.54).

Higher levels of RWA were found among left-wing adherents (M = 2.98) than among moderates (M = 2.65) and right-wing adherents (M = 2.83; F(2, 211) = 3.28, p<.05). Left-wing adherents (M = 2.64) also showed lower levels of economic conservatism than moderates (M = 3.01) and right-wing adherents (M = 3.00; F(2, 211) = 3.08, p<.05). Finally, right-wing adherents scored higher on cultural conservatism (M = 3.17) than moderates (M = 2.86) and left-wing adherents (M = 2.86; F(2, 211) = 3.43, p<.05).

Table 6   _Mean differences with respect to the ideological variables in the Flemish and the Polish adult sample_

	Left-wing		Moderate		Right-wing		F =
Aggression	2.42[a]	(0.82)	2.06[a]	(0.62)	2.13[a]	(0.73)	1.78
	2.62[a]	(0.82)	2.48[a]	(0.60)	2.51[a]	(0.68)	0.49
Submission	2.31[a]	(0.68)	2.13[a]	(0.62)	2.48[a]	(0.75)	1.69
	2.74[a]	(0.82)	2.69[a]	(0.63)	2.87[a]	(0.68)	1.54
Conventionalism	2.61[a]	(0.80)	2.23[a]	(0.48)	2.48[a]	(0.81)	2.87
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LWA	2.45[a]	(0.60)	2.14[b]	(0.44)	2.37[b]	(0.65)	2.80
	2.72[a]	(0.66)	2.59[a]	(0.51)	2.73[a]	(0.62)	1.48
RWA	2.79[b]	(0.95)	2.87[b]	(0.78)	3.67[a]	(0.47)	6.09**
	2.98[a]	(0.58)	2.65[b]	(0.66)	2.83[b]	(0.69)	3.28*
IFA	2.53[b]	(0.53)	2.47[b]	(0.56)	2.70[a]	(0.67)	3.88*
	-------	---------	-------	---------	-------	---------	------
Economic conservatism	2.08[b]	(0.59)	2.36[a]	(0.51)	2.63[a]	(0.83)	4.03*
	2.64[b]	(0.60)	3.01[a]	(0.66)	3.00[a]	(0.76)	3.08*
Cultural conservatism	2.33[b]	(0.68)	2.50[b]	(0.68)	3.17[a]	(0.66)	6.83**
	2.86[ab]	(0.86)	2.86[b]	(0.80)	3.17[a]	(0.64)	3.43*
Racism	1.74[b]	(0.62)	1.96[b]	(0.73)	2.94[a]	(0.92)	10.36***
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Note: _The number of participants in the left-wing, moderate and right-wing group were 16, 55, and 13 for the adult sample and 25, 132, and 57 for the Polish sample. First and second line figures refer to the Flemish adult sample and the Polish sample respectively. Standard deviations are written between parentheses_

_* p<.05, ** p<.01, *** p<.001_

Discussion

The present results suggest the presence of authoritarianism among adherents of left-wing extremist parties. So, it seems that we achieved in finding "the Loch Ness Monster of political psychology" (Altemeyer, 1996, p. 218). This major finding, as well as the relationship between LWA and RWA is discussed first, after which attention is paid to the results obtained in the Polish sample.

LWA: The Loch Ness Monster of political psychology

Altemeyer (1996) reported that he could not identify <u>one</u> single left-wing authoritarian in various Canadian samples of students and their parents, as well as among candidates of moderate political parties. In the po-

litical activist sample, the maximum LWA score on a nine-point scale was 4.92. Only 12 students out of a total of 546 were found to score above the neutral point of 5.00, with a highest score of no more than 5.65. In the parents sample, only 20 participants out of a total of 642 scored above the midpoint, with a highest score of 5.85. Opposed to Altemeyer's (1996) results, the highest scoring individual in the political activist sample obtained the maximum score (5.00). Six participants obtained a score between 4.00 and 5.00, and 9 participants scored between 3.00 and 4.00. In other words, 23% of the participants of this sample generally agreed with the LWA items, and hence, can be considered true left-wing authoritarians. The aggression facet yielded higher scores than the submission and conventionality facets. Six participants obtained the maximum score, 20 participants had a score between 4.00 and 5.00, and 7 participants had a score higher than 3.00 but lower than 4.00. In other words, 48% of our participants strongly agreed with the use of violence to overthrow the Establishment. The submission facet elicited less agreement, with only 2 participants obtaining the maximum score and 5 participants obtaining a mean level between 4.00 and 5.00. The conventionality facet elicited least agreement: Only 1 participant obtained the maximum score and only 2 participants scored between 4.00 and 5.00.

Why did we find so many left-wing authoritarians in this sample, while Altemeyer (1996) did not find a single one of them in his studies? The answer is obvious: Altemeyer (1996) did construct a valid scale, but in order to establish left-wing authoritarianism, he should explicitly have administered this scale to left-wing extremists. As expected, the results in the Flemish adult sample mirror Altemeyer's (1996) conclusions: The highest LWA score was 3.42 with only 4 participants (4.5%) scoring above the 3.00 midpoint.

The left-wing extremists in our political activist sample, who generally obtained LWA scores above the 3.00 midpoint, were adherents of the PVDA. This political party has its roots in Stalinism, and might thus be called classic instead of neo-communist. Some statements on the web site of the PVDA (http://www.-pvda.be, Dutch language only) illustrate this. Under the heading "The historical experience of communism" it reads "Mao's revolutionary movement has opened the doors to the socialist movement in the third world." Chroetsjov is depicted as "The first step of revisionism that undermined the socialist state in the Soviet Union". Under the heading "Against who does the PVDA fight?", it is argued that "the PVDA fights against the world of high finance, banks, holdings and multinationals ... which cause exploitation and misery and the rise of fascism". Moreover, the police is depicted as "a private militia of the capitalists". Under the heading "What does the PVDA want?", it reads "the PVDA wants the destruction of the capitalist system and the foundation of the socialist state which bears on the working class." These statements reveal an admiration of harsh regimes known to have terrorized millions of people. However, although these messages do have an aggressive undertone, they do not call for the actual use of violence. In other words, the PVDA does not advocate violence, but it members might nevertheless infer the legitimacy of such actions because the Establishment is depicted as hostile, aggressive and illegitimate. Not surprisingly, these people obtain high

LWA scores, as well as high scores on both the aggression and the submission facet.

The anarchist movement in Flanders is less well organized. Rather it is constituted by loosely organized organizations and individuals. This movement does, however, has its own information channels. Since most participants of the anarchist sample read the anarchist magazine "De Nar", we figured that looking at this magazine's website might be informative (http://users.online.be/~pr002099/index2.htm, Dutch only). On this website, it is explained that the aim of "De Nar" is to provide information for, and to stimulate discussions among those who - from an anti-authoritarian viewpoint - attach importance to participatory democracy, solidarity, and direct action. "De Nar" supports the strive for a world based on mutual aid in which there is no room for either political or economical repression. It is explained that anarchists loath authority and the capitalist system (and, in fact, the System in general). Hence, not surprisingly, anarchists showed levels of anti-Establishment aggression similar to left-wing extremists, but obtained significantly lower scores on the submission facet and, as a consequence, on LWA in general. On average, anarchist were found to score below the midpoint on LWA, in spite of their high levels of left-wing authoritarian aggression.

Ideology and authoritarianism

The LWA scale not only proved to be successful in distinguishing those adhering an extremist left-wing ideology (i.e. anarchists & communists) from those who don't (the aggression facet is most fruitful for this purpose), but also in distinguishing those adhering an authoritarian left-wing ideology (i.e. communists) from those adhering an anti-authoritarian left-wing ideology (i.e. anarchists) (the submission facet is most fruitful for this purpose). These results substantiate Altemeyer's research efforts. Conversely, the ideology-free authoritarianism (IFA) scale yielded disappointing results despite the exclusive use of items which do not explicitly refer to any ideology. In the political activist sample, this measure related positively to RWA but negatively to LWA. Moreover, left-wing extremists obtained significantly lower IFA scores than moderates. These results corroborate the results of previous research using Rokeach's dogmatism scale. Thus, although the left-wing extremists in our sample can be regarded as left-wing authoritarians, there is a great difference between left-wing authoritarianism and authoritarianism as it is generally understood.

Authoritarians from the left seem prepared to submit themselves to authoritarian leaders, but only if these leaders adhere a left-wing extremist ideology. This ideology is essentially an economical theory about the redistribution of wealth, as becomes apparent when taking into account the overall negative correlations between LWA and economic conservatism and the inconsistent correlations between LWA and cultural conservatism. In contrast, right-wing authoritarians are primarily concerned about the conservation of the culture they live in. This becomes apparent from the overall high correlations between RWA and cultural conservatism, as well as the cultural specific correlations between RWA and economic conservatism. Right-wing authoritarians seem prepared to submit themselves to leaders adhering no matter what ideology, as

long as their aim is to protect their culture from the influences of outsiders (i.e. immigrants) as well as people with deviating opinions and/or life-styles.

Wild-Card Authoritarianism

According to Altemeyer (1996), the presence of "wild-card authoritarians" who score high on both LWA and RWA might explain the existence of hostility, dogmatism and authoritarianism among left-wing extremists. Moreover, Altemeyer (1996, p. 224) reported the highest levels of ethnocentrism and anti-gay attitudes among wild-card authoritarians, whom he attributed severe hostility. However, the results in the Flemish samples do not corroborate the idea that left-wing authoritarianism can be accounted for by the presence of hostile wild-card authoritarians. In the adult sample, the positive correlation between LWA and RWA is primarily caused by the submission facet, not the aggression facet. High scorers on RWA who "happen to be" at the extreme left-side would therefore be obedient and submissive rather than hostile, violent and aggressive. Moreover, the negative correlation between LWA and RWA in the political activist sample, suggests that the occurrence of wild-card authoritarianism is rather limited.

To investigate this in more detail, we distinguished between four groups of participants: (1) below median score on RWA and LWA, (2) below median score on RWA and above median score on LWA, (3) above median score on RWA and below median score on LWA, and (4) above median score on RWA and LWA. The fourth group most closely resembles the so called wild-card authoritarians. The results did not corroborate the hypothesis that especially wild-card authoritarians should exhibit higher levels of hostility and prejudice. In particular, univariate analysis in the adult sample, with racism as the dependent variable, revealed that both the third group ($\underline{M}$ = 2.68, $\underline{N}$ = 25) and the group of wild-card authoritarians ($\underline{M}$ = 2.65, $\underline{N}$ = 18) obtained significant higher scores than the other two groups ($\underline{M}$ = 1.51 and 1.52, $\underline{N}$ = 23 and 21, for group 1 and 2 respectively; $\underline{F}$(3, 83) = 21.64, $\underline{p}$<.001). In the political activist sample, the third group ($\underline{M}$ = 2.95, $\underline{N}$ = 27) had significant higher scores than the other three groups ($\underline{M}$ = 1.18, 1.28 and 1.79, $\underline{N}$ = 5, 29 and 7, for group 1, 2 and 4 respectively; $\underline{F}$(3, 65) = 25.62, $\underline{p}$<.001). Thus, high levels of LWA seem to inhibit the effects of RWA on racism in the political activist sample.

Left-wing authoritarianism in Poland

Before 1989, when communism was the official doctrine in the Soviet Union and Eastern Europe, right-wing authoritarianism was strongly associated with support for communism (Hamilton, Sanders & McKearney, 1995; McFarland, Ageyev & Abalakina-Paap, 1992). Due to the changing political climate however, this correlation has dissipated over time and nowadays right-wing authoritarians may adhere to other conventional alternatives such as nationalism and religionism (McFarland, Ageyev & Djintcharadze, 1996). Because of the omnipresence of the catholic church and the resurgence of nationalistic feelings (Inglehart, 1997), such "alternative" expressions of traditionalism seem to be widely available in Polish society. In line with these

ideas, the present results revealed a correlation between RWA and cultural conservatism as high as .66 (see also Duriez, Van Hiel & Kossowska, 2002; Van Hiel, Kossowska & Mervielde, 2000).

The correlation between economic and cultural conservatism actually showed a remainder of the former communist regime. That is, previous research in Western Europe and the present results in the Flemish samples revealed either positive correlations or zero correlations between these scales, but the present study revealed a highly negative correlation (r=-.42, p<.001) for the Polish sample. High levels of cultural conservatism are thus accompanied by high levels of economic progressivism. Analogously, RWA is negatively related to economic conservatism (r=-.41, p<.001). Thus, in Poland, both left-wing and right-wing authoritarians are likely to support trade unions and to prefer state intervention in economics rather than capitalism. Of course, support for state controlled economics may stem from different reasons for left-wing and right-wing adherents. Left-wing authoritarians might prefer communist economical principles because it is part of their ideological system, whereas right-wing authoritarians might have an orientation toward the past and might experience communist economics as a part of their culture, or, alternatively, might have started to re-appreciate communist economical principles after the first abrupt confrontation with capitalism, which has led to high unemployment rates and increased poverty. However, it should be noted that our conceptualization of left-wing authoritarianism might be invalid in Eastern Europe. The fact that LWA was only marginally related to economic conservatism, but instead, bore a higher correlation with cultural progressivism, suggests that one cannot consider the present LWA scale as very successful in detecting people preferring communist economical principles and extreme left-wing ideology. Moreover, compared to the Flemish samples, factor analysis of the LWA items yielded a other structure in the Polish sample than in the Flemish samples, hereby indicating that left-wing authoritarianism might have a different meaning in Poland. Thus, further elaboration of the concept of left-wing authoritarianism in former communist countries might be an interesting avenue for future research. Moreover, it might also be fruitful to try and include Polish political activists in future studies.

Appendix

An important question in the light of this doctoral dissertation, which focuses on religion in the social environment, is the impact of these findings vis à vis the relationship between religiosity and authoritarianism. In the second part of this chapter, we presented correlations between Right-Wing Authoritarianism (RWA) and the Social Dominance Orientation (SDO) on the one hand and the two dimensions of the religiosity domain that are measured by the Post-Critical Belief scale (Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic) on the other hand. It was shown that, whereas the Exclusion vs. Inclusion of Transcendence dimension relates positively to RWA and negatively to SDO, the Literal vs.

Symbolic dimension relates negatively to both RWA and SDO. The Ideology Free Authoritaranism (IFA) measure appears to relate to these dimensions in a quite similarly fashion as RWA, although the relationship with the Exclusion vs. Inclusion of Transcendence dimension is far less outspoken. In contrast, Left-Wing Authoritarianism (LWA) appears to be unrelated to the Exclusion vs. Inclusion of Transcendence dimension (r=.02, n.s. in the political activist sample and r=.14, n.s. in the adult sample) and negatively related to the Literal vs. Symbolic dimension (r=-.39, p<.001 in the political activist sample and r=-.38, p<.001 in the adult sample). In sum, it seems that whereas the relationship between the Exclusion vs. Inclusion of Transcendence dimension and authoritarianism is strongly dependent on how the concept of authoritarianism is operationalized, it seems that the Literal vs. Symbolic dimension is substantially related to authoritarianism no matter how this concept is operationalized. This seems to suggest that, whereas the relationship between RWA and the Exclusion vs. Inclusion of Transcendence dimension is due to the RWA components relating to conventionality (cf. the results of the studies on the relation between religiosity and value orientations that are presented later on in this doctoral dissertation), the relation between RWA and Literal vs. Symbolic is due to the cognitive rigidity implied in both RWA and approaching religiosity in a Literal fashion (cf. the results of the studies on the relation between cognitive functioning and motivated cognition on the one hand and authoritarianism and religiosity on the other hand that are presented later on in this doctoral dissertation).

The Color of the Grass

PART 1

Religion and Values 1

Abstract

Based on Schwartz' (1992) value theory, Fontaine, Luyten and Corveleyn (2000) found that the value patterns associated with five types of religiosity (religious commitment and Hutsebaut's (1996, 1997a) four religious attitudes) could largely be reduced to a combination of two theoretically meaningful value patterns: a Transcendence / mutual Care and a Social order / Uncertainty avoidance pattern. In this study, we examined whether we could replicate these findings in a larger sample, using a simplified measure of religious commitment and a more recent version of Hutsebaut's Post-Critical Belief scale (Duriez, Fontaine & Hutsebaut, 2000). Results were largely in line with the results of Fontaine et al. (2000), but seem to suggest that it might be better to disentangle the Transcendence / mutual Care pattern into a strict Transcendence and a strict mutual Care pattern in order to get a better understanding of the value patterns associated with different types of religiosity.

Introduction

The relationship between values and religion has been a central part in theories of theologians, philosophers, sociologists and psychologists (e.g., Durkheim, Marx, Weber & Freud) and interest in this relationship persists to date. An example of this continuing interest is the attention paid to the so-called "loss of values" in Western Society, which many scholars from different fields attribute to a decline in religiosity in our Western culture, especially throughout Europe. And although religion can't be reduced to a set of moral norms or values, they are an important part of each religion (Vergote, 1997a). Therefore, it is interesting to study the relation between personal religious commitment and religious attitudes, which we will refer to as religiosity, on the one hand, and personal value orientations on the other hand.

As Fontaine, Luyten and Corveleyn (2000) noted, the first empirical study of human values as transsituational (abstract) guiding principles in one's live and the investigation of their relation with religiosity has to be credited to Rokeach (1968, 1969a, 1969b). Rokeach asked participants to rank 18 instrumental and 18 terminal values as guiding principles in their lives, and compared religious and non-religious participants with respect to the average rank order of each value. He found that religious participants estimated the values salvation, forgiveness and obedience higher and the values pleasure, independence, intellectual and logical lower than non-religious participants did. Most of the subsequent empirical research on the relation between religiosity and value orientations was inspired by Rokeach's approach (e.g., Lau, 1989; Paloutzian, 1981). However, as Fontaine et al. (2000) have noted, this approach shows two shortcomings. First, religiosity is often merely defined in terms of belief vs. non-belief or research has been limited to comparisons between religious denominations. Thus, religiosity is often treated as a unidimensional characteristic. Researchers that did regard religiosity as a multidimensional characteristic (e.g., Tate & Miller, 1971) have relied on classic distinctions – such as intrinsic vs. extrinsic religiosity (Allport & Ross, 1967) – which have recently been criticized on both psychometric and conceptual grounds (see Kirkpatrick & Hood, 1990). Second, Rokeach treated each value as an isolate entity, which led to poorly organized results.

Recent developments in the conceptualization and the measurement of both religious attitudes (Hutsebaut, 1996, 1997a) and human values (Schwartz, 1992) offered Fontaine et al. (2000) the possibility to shed a new light on their relation. The study of Fontaine et al. (2000) provides an extension of the study of Schwartz and Huismans (1995), who found a theoretically meaningful pattern of associations between religious commitment and a representative set of values among adherents of four religions (Judaism, Protestantism, Roman Catholicism and Greek Orthodoxy). Fontaine et al. (2000) confronted the theory of Schwartz and Huismans with the religious attitudes developed by Hutsebaut (1996, 1997a), investigating whether and how the various religious attitudes relate to value priorities. The main

result of their study was that both the value pattern associated with religious commitment and the value pattern associated with the religious attitudes could largely be explained as a specific combination of two theoretically derived value patterns, namely a theologically derived Transcendence / mutual Care pattern and a socio-psychologically derived Social order / Uncertainty avoidance pattern. The aim of this article is to examine whether these findings can be replicated, using a simplified religious commitment measure and a recent elaboration of the Post-Critical Belief scale (Duriez, Fontaine & Hutsebaut, 2000).

Schwartz' Value Approach

Recently, Schwartz (1992) developed a comprehensive theory about the content and the structure of the value domain, which received empirical support in over 40 countries (Schwartz & Sagiv, 1995). Schwartz defines a value as a transsituational, desirable goal that varies in importance as a guiding principle in one's life. On the basis of theoretical analyses and empirical research, 10 different value types, each characterized by their own motivational goal, have been identified: Universalism, Benevolence, Tradition, Conformity, Security, Power, Achievement, Hedonism, Stimulation, and Self-Direction (see previous chapter). These value types can be organized into a two-dimensional circular circumplex structure on the basis of the mutual compatibility and conflicts between their respective motivational goals (see previous chapter). Value types that share compatible goals are most positively correlated and emerge adjacent to one another in the two-dimensional representation. Value types that are characterized by conflicting goals are less, or even negatively, correlated and are situated opposite one another. This allows researchers to easily make specific predictions with respect to the relations between these value types and external variables: these are expected to follow a sinusoid pattern. If the value type that is expected to be most positively and the value type that is expected to be most negatively related with an external variable can be identified, the order of all other relations with that external variable can be predicted on the basis of the circumplex structure.[14] Relations should systematically decrease as one goes from the most positively related to the most negatively related value type. Or vice versa, they should increase as one goes from the most negatively to the most positively related value type.

Religious Commitment and Values

According to a Christian theological analysis, religion is characterized by an orientation toward and a dependency on a personal God and a transcendence of material concerns and temporary affective desires (e.g., Niebuhr, 1935; Vergote, 1997a). This implies awe and respect for a God, which is expressed through regular worship and personal control over material and affective desires. Being centered on one's self, the material world and one's temporary affective desires should be rejected. However, the fo-

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[14]   However, the size of the correlations between the value types is not so large as to completely determine the order of correlations with external variables.

cus toward a transcendent God represents only one fundamental dimension of Christianity. The other fundamental dimension deals with the love for human beings, whether or not they belong to one's own social group. This love for fellow human beings is regarded as a divine commandment (Vergote, 1997a). This implies an orientation toward and a care for other humans. Thus, from a theological perspective, Christian religiosity should imply a value pattern characterized by Transcendence and mutual Care, a pattern which Fontaine et al. (2000) labeled the *TC value pattern*.

Fontaine et al. (2000) translated this value pattern in terms of Schwartz's value types. They hypothesized that, from this perspective, religiosity should correlate highest with Tradition and Benevolence and lowest (even negatively) with Hedonism and Achievement, with a gradual decrease of the correlations from Tradition over Conformity, Security and Power to Achievement and from Benevolence over Universalism, Self-Direction and Stimulation to Hedonism (see Table 1). The value type Tradition – characterized by commitment and acceptance of the customs and ideas provided by religion – expresses the striving for transcendence most clearly, while Benevolence – defined as preservation and enhancement of the welfare of people with whom one is in frequent personal contact – expresses the importance of mutual care the most. Conformity is compatible with an attitude of awe and respect for a transcendent reality, while Universalism, with its focus on the well being of all human beings, shares the mutual care perspective. Both Stimulation and Hedonism – expressing self-indulgence through their focus on pleasurable arousal – and Power and Achievement – expressing materialism through their focus on social status and personal success– should be in conflict with religiosity. For Self-Direction and Security no clear hypotheses can be made. Although Self-Direction can be conflicting with a focus on transcendence and mutual care, it can also be conflicting with materialism. Also Security can be both compatible and conflicting with religious teachings. To the extent that it implies in-group solidarity it is compatible with religious teachings. Though, since Security values are often in conflict with the well being of members from out-groups, there can be a conflict with religious teachings.

The relationship between religiosity and values can also be analyzed in terms of societal and personal needs that are being fulfilled by religion. Sociological theorizing has stressed the role of religion in supporting the acceptance and the stability of the existing social order (Durkheim, 1954; Marx, 1964). Although in some periods of revolt religion can be opposed to the existing social order, the dominant religion will tend to support and even treat as sacred the existing social order (Wilson, 1982; Schwartz & Huismans, 1995). From this point of view it can be expected that under normal conditions religious institutions will support respect for and reliance on the existing social order among its members, instead of creating a critical and independent opinion that can lead to social change. Psychological analyses of personal needs have pointed out that religion can fulfill the human need for certainty (Durkheim, 1954; Schwartz & Huismans, 1995). By offering a global worldview and a moral program, the complexity of

human life is reduced and clearly structured. Religion creates a psychologically safe environment. Thus, according to this point of view, people who have a need for certainty will be more attracted by religion. Although the sociological and psychological theories about the relationship between values and religion differ in a number of ways, their predicted associations of religiosity with individual values are highly compatible. Values that support the existing social order also lead to a well-defined environment. Thus, on the basis of the sociological and psychological analyses, religiosity should be associated with the importance of values that stress the acceptance of <u>S</u>ocial order and lead to <u>U</u>ncertainty avoidance. Fontaine et al. (2000) labeled this value pattern the *SU value pattern*.

Fontaine et al. (2000) also translated this value pattern in terms of Schwartz's value types. They hypothesized that, from this perspective, religiosity should correlate highest with Security and Conformity and lowest (even negatively) with Self-Direction and Stimulation, with decreasing correlations going from Security over Power, Achievement and Hedonism to Stimulation and with increasing correlations going from Self-Direction over Universalism, Benevolence and Tradition to Conformity (see Table 1). Security and Conformity most clearly express the need for a stable social environment. Self-Direction expresses most clearly an independent attitude towards the existing social system, while Stimulation – with its focus on a striving for novel experiences – indicates low uncertainty avoidance. Tradition implies acceptance of and reliance upon the existing social structure. The same can be said with regard to Power, with its emphasis on social status. Universalism, with its focus on the well being of all people, implies a critical attitude towards the existing social system within the in-group. Hedonism, although to a lesser extent than Stimulation, can lead to novel experiences and to uncertain environments. For Achievement and Benevolence no clear hypotheses can be made. Personal success can be reached within the existing social structure, but it can also be reached outside of this structure, and Benevolence can be both in accordance or in opposition with the existing social order, resulting respectively in certain or uncertain environments.

Conceptualization of Religious Attitudes

Fontaine et al. (2000) replicated the findings of Schwartz and Huismans (1995) concerning the relation between religiosity and values, but also tried to address the shortcomings of this study, using the multidimensional conceptualization and measurement of religious attitudes developed by Hutsebaut (1996, 1997a; Duriez, Fontaine & Hutsebaut, 2000). According to Duriez, Fontaine and Hutsebaut (2000), these attitudes can be situated in Wulff's (1991, 1997) overview of approaches and attitudes towards religion. Wulff (1991, 1997) summarizes these approaches in a two-dimensional space. The vertical axis specifies the degree to which the objects of religious interest are granted participation in a transcendent reality (inclusion vs. exclusion of transcendence). The horizontal axis indicates whether religion is inter-

preted literally or symbolically (literal vs. symbolic). These two dimensions thus define four attitudes toward religion. The upper left quadrant represents literal affirmation of the religious realm. The lower left quadrant represents a disaffirmation of the religious realm in which the possibility is lost out of sight that the religious language has a symbolic meaning. The lower right quadrant represents a disaffirmation of the religious realm in which a privileged perspective on the true but hidden meaning of religion's myths and rituals is claimed. The upper right quadrant represents an affirmation of the religious realm in which one tries to encompass and go beyond all possible reductive interpretations in order to find the symbolic meaning of the religious language. In this respect, Wulff (1991, 1997) speaks of a second naïveté. Inspired by Wulff's approach, Hutsebaut and his colleagues (Hutsebaut, 1996, 1997a; Duriez, Fontaine & Hutsebaut, 2000) developed the Post-Critical Belief scale, which captures four religious attitudes, which map into Wulff's scheme: Orthodoxy, External Critique, Relativism and Second Naïveté. According to Duriez, Fontaine and Hutsebaut (2000), Orthodoxy is located in the upper left quadrant, External Critique is located in the lower left quadrant, Relativism is located in the lower right quadrant, and Second Naïveté is located in the upper right quadrant.

Religious Attitudes and Values

According to Fontaine et al. (2000), the theological and socio-psychological analyses of the relationship between personal value orientations and religious commitment can straightforwardly be applied to the two dimensions of Wulff's (1991, 1997) model. The theological perspective directly relates to the dimension inclusion vs. exclusion of transcendence. Subjects that accept transcendence can be expected to be guided more by the TC value pattern than subjects who reject transcendence did. The analysis in terms of societal and psychological needs closely corresponds to the literal vs. symbolic dimension. In a literal mode of thinking there exists only one correct answer. In this way clarity and certainty are created. To the extent that religion is supportive of the existing social order, literal belief in religion will not only reduce uncertainty but will also support the existing social order. In the symbolic mode of thinking multiple interpretations are possible. This implies a tolerance for uncertainty and for interpretations that are critical of the existing social order. Thus, a literal mode of thinking about religion is hypothesized to be more compatible with the SU value pattern than a symbolic mode of thinking.

Since Hutsebaut's religious attitudes are derived from Wulff's model, Fontaine et al. (2000) reasoned that predictions could be made with regard to the relation between these attitudes and their respective value patterns. Subjects that score high on Orthodoxy (inclusion of transcendence, literal approach) should be characterized by a combination of a TC and a SU value pattern. Subjects that score high on External Critique (exclusion of transcendence, literal approach) should be characterized by a combination of a reversed TC pattern and a SU value pattern. Subjects that score high on Relativism (exclusion

of transcendence, symbolic approach) should be characterized by a reversed SU value pattern and a reversed TC pattern. Subjects that score high on Second Naïveté (inclusion of transcendence, symbolic approach) should be characterized by a TC value pattern and a reversed SU value pattern. However, the results of Fontaine et al. (2000) did not support all of these hypotheses. Orthodoxy was characterized by the SU value pattern, but only slightly by the TC value pattern. External Critique was characterized by the reversed TC value pattern, but not by the SU value pattern. Relativism was not only characterized by the reversed SU value pattern, but also (unexpectedly) by the TC value pattern. Second Naïveté was characterized by the TC value pattern, but also slightly (contrary to expectations) by the SU value pattern. Possibly, this was due to the operationalization of the religious attitude dimensions. This operationalization was recently improved by Duriez, Fontaine and Hutsebaut (2000). The items belonging to the External Critique dimension were reworded in order to more clearly measures a stance of disbelief and extra items were formulated in order to measure both the Relativism dimension and the Second Naïveté dimension in a more stable way. The Orthodoxy dimension was largely left unaltered.

Method

Sample

Participants were 389 first year psychology students at the Katholieke Universiteit Leuven (Belgium). All of them were Flemish-speaking Belgians, ranging in age from 17 to 23 years old (Mean=18); 79% were female. Participation was obligatory and all participants received course credit. Full confidentiality and anonymity were guaranteed. Of all participants, 97 persons (25%) indicated to go to church weekly or at least often (compared to about 10% in the general Flemish population), 167 persons (43%) indicated to go to church at special occasions only, and 122 persons (32%) indicated to never go to church.

Measures

The Dutch translation of the Schwartz value survey consisted of 54 values (see Fontaine et al., 2002). Each value was rated in terms of its importance as a guiding principle in one's life on a 9 point scale, ranging from "opposed to my principles" (-1) trough "not important" (0) to "of supreme importance" (7). Estimates of internal consistency (Cronbach's alpha) were .69 for Power (Mean=2.30, SD=1.08), .73 for Achievement (Mean=3.54, SD=1.08), .76 for Hedonism (Mean=4.44, SD=1.15), .78 for Stimulation (Mean=3.42, SD=1.36), .60 for Self-Direction (Mean=4.69, SD=0.82), .80 for Universalism (Mean=4.54, SD=0.97), .70 for Benevolence (Mean=5.12, SD=0.75), .60 for Tradition (Mean=2.56, SD=1.03), .70 for Conformity (Mean=3.98, SD=1.12) and .66 for Security (Mean=3.96, SD=0.91). As in Schwartz and Huismans (1995) the value scales were computed after correction for the mean score for each subject.

This was done in order to control for systematic response sets.

As a measures of religious commitment, people were asked how often they go to church (never, only at special occasions, or weekly or at least often). A measure of church attendance is often used in the Low Countries as an indication of belief salience (see Duriez & Hutsebaut, 2000). As a multidimensional measure of religiosity, participants completed the Post-Critical Belief scale (Duriez, Fontaine & Hutsebaut, 2000; 31 items), measuring four religious attitudes. A multidimensional scaling (Kruskal & Wish, 1978) on the Pearson correlations between these 31 items for the present participants substantiated the existence of four religiosity types which can be situated in Wulff's (1991, 1997) two-dimensional space (cf. Duriez, Fontaine & Hutsebaut, 2000). Estimates of internal consistency (Cronbach's alpha) were .62 for Orthodoxy (Mean=2.06, SD=0.78), .73 for External Critique (Mean=3.50, SD=0.99), .51 for Relativism (Mean=5.38, SD=0.72), and .84 for Second Naïveté (Mean=3.68, SD=1.32).

Results

Bivariate Correlations

The relations between the various measures of religiosity and the value types were investigated for each religiosity measure separately by means of bivariate correlations (see Table 1). For each religiosity scale it was examined whether or not the pattern of correlations followed a sinusoid pattern.

Table 1 *Theoretical Transcendence / mutual Care (TC) and Social order / Uncertainty avoidance (SU) value patterns and bivariate correlations between the religiosity scales and the 10 value types*

Value	Value pattern		Religiosity Scales								
Type	TC	SU	RC		O		E		R		S	
Power	-.59	.59	.04		.10	*	.12	*	-.12	*	-.05	
Achievement	-.95	.00	-.04		.04		.03		-.22	****	-.14	**
Hedonism	-.95	-.59	-.26	****	-.20	****	.23	****	-.08		-.26	****
Stimulation	-.59	-.95	-.18	***	-.09		.09		-.14	**	-.20	****
Self-Direction	.00	-.95	-.22	****	-.17	***	.16	**	.05		-.18	***
Universalism	.59	-.59	.00		-.04		-.12	*	.18	***	.12	*
Benevolence	.95	.00	.01		-.09		-.09		.19	***	.04	
Tradition	.95	.59	.36	****	.26	****	-.32	****	.02		.42	****
Conformity	.59	.95	.13	*	.12	*	-.02		-.03		.18	***
Security	.00	.95	.07		.11	*	.09		-.07		-.04	

*p<.05, **p<.01, ***p<.001, ****p<.0001*

First, Religious Commitment correlated significantly positively with Tradition and Conformity, and significantly negatively with Hedonism, Stimulation and Self-Direction (see Table 1). Tradition was correlated

most positively and Self-Direction was correlated most negatively with Religious Commitment. All other correlations (except Self-Direction), were situated in between these two in the order predicted by Schwartz's theory. Correlations decreased from Tradition over Conformity, Security, Power and Achievement to Hedonism, and increased from Hedonism over Stimulation, Universalism and Benevolence to Tradition. Self-Direction formed a small exception: it correlated slightly more negatively with Religious Commitment than Stimulation.

Second, each of the four religious attitude dimensions from the Post-Critical Belief scale was characterized by an at least partly different value pattern. Orthodoxy correlated significantly positively with Tradition, Conformity, Security and Power, and significantly negatively with Hedonism and Self-Direction (see Table 1). Tradition was correlated most positively and Hedonism most negatively with Orthodoxy. All correlations (except Stimulation and Benevolence) followed a sinusoid pattern. Correlations decreased from Tradition over Conformity, Security, Power and Achievement to Hedonism, and increased from Hedonism over Self-Direction and Universalism to Tradition. Stimulation and Benevolence formed small exceptions: Stimulation correlated slightly less negatively with Orthodoxy than Self-Direction, and Benevolence correlated slightly more negatively with Orthodoxy than Universalism. External Critique correlated significantly positively with Hedonism, Self-Direction and Power, and significantly negatively with Tradition and Universalism (see Table 1). Hedonism was correlated most positively and Tradition most negatively with External Critique. All correlations (except Self-Direction, Benevolence and Achievement) followed a sinusoid pattern. Correlations decreased from Hedonism over Stimulation, and Universalism to Tradition, and increased from Tradition over Conformity, Security and Power to Hedonism. Self-Direction, Benevolence and Achievement formed small exceptions: Self-Direction correlated slightly more positively with External Critique than Stimulation, Benevolence correlated slightly less negatively with External Critique than Universalism, and Achievement correlated slightly less positively with External Critique than Power. Relativism correlated significantly positively with Universalism and Benevolence, and significantly negatively with Achievement, Power and Stimulation (see Table 1). Benevolence correlated most positively and Achievement most negatively with Relativism. All correlations (except Stimulation) followed a sinusoid pattern. Correlations decreased from Benevolence over Tradition, Conformity, Security and Power to Achievement, and increased from Achievement over Stimulation, Self-Direction and Universalism to Benevolence. Stimulation formed a small exception: it correlated slightly more negatively with Relativism than Hedonism. Second Naïveté correlated significantly positively with Tradition, Conformity and Universalism, and significantly negatively with Hedonism, Stimulation, Self-Direction and Achievement (see Table 1). Tradition was correlated most positively and Hedonism most negatively with Second Naïveté. All correlations (except Benevolence) followed a sinusoid pattern. Correlations decreased from Tradition over Conformity, Security, Power and Achievement to Hedonism,

and increased from Hedonism over Stimulation, Self-Direction and Universalism to Tradition. Benevolence formed a small exception: it correlated slightly less positively with Second Naïveté than Universalism.

Regression Analyses

In order to investigate the extent to which the observed value patterns could be attributed to the theoretically derived value patterns, regression analyses were performed with the observed value patterns as dependent variables and the two hypothetical value patterns (the TC and the SU pattern) as independent variables (see Table 1). Given the assumption that all value types are situated on a perfect circle and that all adjacent value types are equidistant from one another, the expected value pattern could be obtained by computing the sine of the angle of the value type on the circle (see Table 1).[15]

Up to 79% of the value pattern associated with the Religious Commitment measure could be accounted for by the two theoretical value patterns. The TC value pattern could account for 18% and the SU value pattern for 61% of the value pattern associated with Religious Commitment. (see Table 2). Concerning Orthodoxy, 67% of the associated value pattern could be accounted for by the two theoretical value patterns. The TC value pattern could account for 2% and the SU value pattern for 66% of the value pattern associated with Orthodoxy (see Table 2). Concerning External Critique, 62% of the associated value pattern could be accounted for by the two theoretical value patterns. The reversed TC value pattern could account for 61% and the reversed SU value pattern 1% of the value pattern associated with External Critique (see Table 2). Concerning Relativism, 82% of the associated value pattern could be accounted for by the two theoretical value patterns. The TC value pattern could account for 65% and the reversed SU value pattern for 17% of the value pattern associated with Relativism (see Table 2). Concerning Second Naïveté, 77% of the associated value pattern could be accounted for by the two theoretical value patterns. The TC value pattern could account for 66% and the SU value pattern for 10% of the value pattern associated with Second Naïveté (see Table 2).

Discussion

Results replicate the finding of Fontaine et al. (2000) that, while the value pattern associated with Religious Commitment can best be understood in terms of a combination of the theological and the socio-psychological value patterns, there is an overweight of the SU value pattern.

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[15]   The latter assumption cannot be fully justified by Schwartz' value theory. Research using the Schwartz value scale supports the rank order of the value types only, and not equidistant positions from a common origin and adjacent value types (e.g., Schwartz, 1992). Therefore, besides a classical regression analyses with the perfect sinusoid value pattern, an optimal scaling regression analysis was also performed. In optimal scaling regression analysis, only the ordinal information in the independent variables is taken into account. The results of optimal scaling regression analyses were highly comparable with the results reported in this paper.

Table 2   *Multiple regression analyses of the sinusoid Transcendence / mutual Care (TC) and Social order / Uncertainty avoidance (SU) on value patterns associated with the religiosity scales: partial R², standardized weights (β) and total R²*

Religiosity Scales	TC pattern		SU pattern		
	Partial R²	β	Partial R²	β	Total R²
Religious Commitment	.18	.45	.61	.64	.79
Orthodoxy	.02	.13	.66	.77	.67
External Critique	.61	-.75	.01	-.10	.62
Relativism	.65	.94	.17	-.43	.82
Second Naïveté	.66	.72	.10	.33	.77

The religious attitude dimensions were found to be partly differently related to the value orientations. In line with what Fontaine et al. (2000) found the value pattern associated with Orthodoxy could best be understood in terms of the SU value pattern. This supports the hypothesis that an Orthodox approach to religion is mainly characterized by a striving for social safe environments and certainty. The TC value pattern was only of minor importance. Nevertheless, the bivariate correlations (see Table 1) show that Orthodoxy is positively related to Tradition, and negatively related to Hedonism, as could be expected on the basis of the TC value pattern, but that Orthodoxy is not positively related to Benevolence and Universalism, not negatively related to Achievement and Power, and not unrelated to Self-Direction and Security, as could also be expected on the basis of the TC value pattern. Thus, although the Orthodox value pattern shows little resemblance with the TC value pattern as a whole, it does share its focus on Tradition and on Hedonism (see Table 1). This might suggests that the transcendence perspective is of some importance for Orthodoxy but the focus on mutual care (which is most strongly expressed through the values of Benevolence) is not.

In line with the findings of Fontaine et al. (2000), the value pattern associated with External Critique can best be understood in terms of the reversed TC value pattern. However, while External Critique correlated the lowest with tradition, it hardly correlated at all with Benevolence (see Table 1). This suggests that it is the anti-transcendence perspective that is important, and not so much the mutual care issue. The contribution of the socio-psychological value pattern was only of minor importance and did not really show a consistent pattern (see Table 1). As put forward by Fontaine et al. (2000), the absence of an association between the SU value pattern and the External Critique value pattern might be due to the fact that people who score high on External Critique form a heterogeneous group that only share the rejection of transcendence and the typical value orientation implied by this rejection.

In line with the findings of Fontaine et al. (2000), the value pattern associated with Relativism can, contrary to expectations, best be understood in terms of the TC value pattern. It must be noted, however,

that the bivariate correlations (see Table 1) show some important deviations from the TC value pattern. While Relativism correlated the highest with Benevolence and Universalism, it hardly correlated at all with tradition. Moreover, Relativism did not correlate significantly negatively with Hedonism. For the relativist position, the transcendence perspective appears to be less important than the focus on mutual care. Thus, the results of our study seem to suggest that it is not an explicit positive attitude towards transcendence – as is characteristic of Orthodoxy (see above) and Second Naïveté (see below) – that is associated with Relativism, but that it is mutual care that is associated with Relativism. When taking the mean scores on the Relativism dimension into account, the fear for the loss of (secularized Christian) values that would be associated with the declining importance attached to religion seems unfounded (cf. Vergote, 1999). The reversed SU value pattern also contributed to the value pattern associated with Relativism, but, contrary to expectations and contrary to the results of Fontaine et al. (2000), this contribution was less outspoken. This difference might be due to sample characteristics, or might simply be due to the difference in operationalization of this concept (as we have already noted before, we have used a more elaborate measure of Relativism).

In line with the findings of Fontaine et al. (2000), the value pattern associated with Second Naïveté can best be understood in terms of the TC value pattern. This supports the hypothesis that a Second Naïveté approach to religion implies a positive attitude towards transcendence and mutual care. However, the bivariate correlations (see Table 1) show some deviations from the predicted TC value pattern. While Second Naïveté correlated the highest with tradition, it hardly correlated at all with Benevolence. This suggests that the mutual care perspective is less important than the focus on transcendence. Contrary to expectations but in line with the findings of Fontaine et al. (2000), the SU value pattern (instead of the reversed SU value pattern) also contributed to the value pattern associated with Second Naïveté, but only to a minor extent. Nevertheless, this suggests that Second Naïveté is definitely not characterized by low uncertainty avoidance and a de-emphasis on social order. Rather on the contrary, our results, as well as the results of Fontaine et al. (2000), suggest that Second Naïveté seems to be characterized by a strive for certainty and predictability, as becomes apparent from the positive associations with Tradition and Conformity and the negative associations with Hedonism, Stimulation and Self-Direction (see Table 1).

Conclusions

The present study globally replicates the systematic patterns of association found by Fontaine et al. (2000) between value patterns and types of religiosity. The refinement of Schwartz & Huismans' (1995) theoretical rationale for deriving hypotheses about the relationship between religiosity and value patterns, which led to

the isolation of two different theoretically expected value patterns instead of only one, was again empirically supported. However the results of this study seem to suggest that it might be fruitful in the future to disentangle the Transcendence / mutual Care value pattern in a pure mutual care and a pure transcendence pattern in order to come to a better understanding of the association between religiosity and personal value orientation.

PART 2

Religion and Values 2

Abstract

Based on both a theological and a socio-psychological analysis, the goals of Roman Catholic religion were identified and translated in terms of Schwartz' (1992) value types. Predictions regarding the relations between these value types and Wulff's (1991, 1997) religiosity dimensions, as measured by the Post-Critical Belief scale (Fontaine et al., in press), were tested in seven samples (N = 1695) gathered in Flanders (Belgium). The value pattern associated with the Exclusion vs. Inclusion of Transcendence dimension could be interpreted in terms of the conflict between hedonism and openness to change on the one hand and tradition and conformity on the other hand. The value pattern associated with the Literal vs. Symbolic dimension could be interpreted in terms of the conflict between self-enhancement and self-transcendence.

Introduction

The empirical study of religiosity-value relations has to be credited to Rokeach (1968, 1969a, 1969b) who asked subjects to rank 18 instrumental and 18 terminal values and compared religious and non-religious subjects with respect to the average rank order of each value. He found religious subjects to estimate certain values (e.g., salvation, forgiveness & obedience) higher and other values (e.g., independence, pleasure, intellectual & logical) lower than non-religious subjects. Most of the research on the religiosity-value relation was inspired by this approach (e.g., Lau, 1989; Paloutzian, 1981). However, this approach shows two shortcomings. First, since values are treated as isolated entities, the multitude of relations with religiosity leads to poorly organized results. A solution to this problem was proposed by Schwartz (1992), who has shown that, within the value domain, ten different value types can be distinguished which are organized in a circular fashion. Using these value types, Schwartz and Huismans (1995) found an integrated pattern of religiosity-value relations in four different religious groups (Jews, Protestants, Catholics & Orthodox). A second shortcoming is that religiosity was most often treated as a unidimensional construct or that research was limited to comparing religious denominations. Researchers that did regard religiosity as multidimensional (e.g., Tate & Miller, 1971) relied on distinctions such as intrinsic vs. extrinsic religiosity (Allport & Ross, 1967), which have been severely criticized on both conceptual and psychometric grounds (Batson, 1976; Kirkpatrick & Hood, 1990). However, recently, the construction of the Post-Critical Belief scale (Duriez, Fontaine & Hutsebaut, 2000; Fontaine et al., in press; Hutsebaut, 1996, 1997), which operationalizes Wulff's (1991, 1997) two-dimensional model of approaches to religion, opened new perspectives for studying religiosity-value relations. According to Wulff, interindividual differences in religiosity can be differentiated along two dimensions (Exclusion vs. Inclusion of Transcendence & Literal vs. Symbolic). The present study investigates how interindividual differences in these dimensions relate to value priorities in seven Flemish samples.

First, Schwartz' (1992) value theory will be presented. Then, the theoretical framework of Wulff (1991, 1997) and the Post-Critical Belief scale (Fontaine et al., in press), which operationalizes Wulff's concepts, will be introduced. Finally, on the basis of both a theological and a socio-psychological analysis, predictions will be made concerning the relations between Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic on the one hand and Schwartz's value types on the other hand.

Schwartz' value theory

Schwartz (1992) defines a value as a transsituational goal that varies in importance as a guiding principle in one's life, and developed a theory about the structure of the value domain that received support in over 40 countries (Schwartz & Sagiv, 1995). Ten value types, each characterized by their own motivational goal, were identified: Hedonism, Stimulation, Self-Direction, Universalism, Benevolence, Tradition,

Conformity, Security, Power, and Achievement (see previous chapter). These value types can be organized in a two-dimensional circular circumplex structure based on a theoretical analysis of the compatibilities and conflicts between their motivational goals (see Figure 1). Value types with compatible goals are positively related and emerge adjacent to one another in the two-dimensional representation. Value types with conflicting goals are negatively related and are situated opposite one another.

Figure 1   *Theoretical model of relations between types of values*
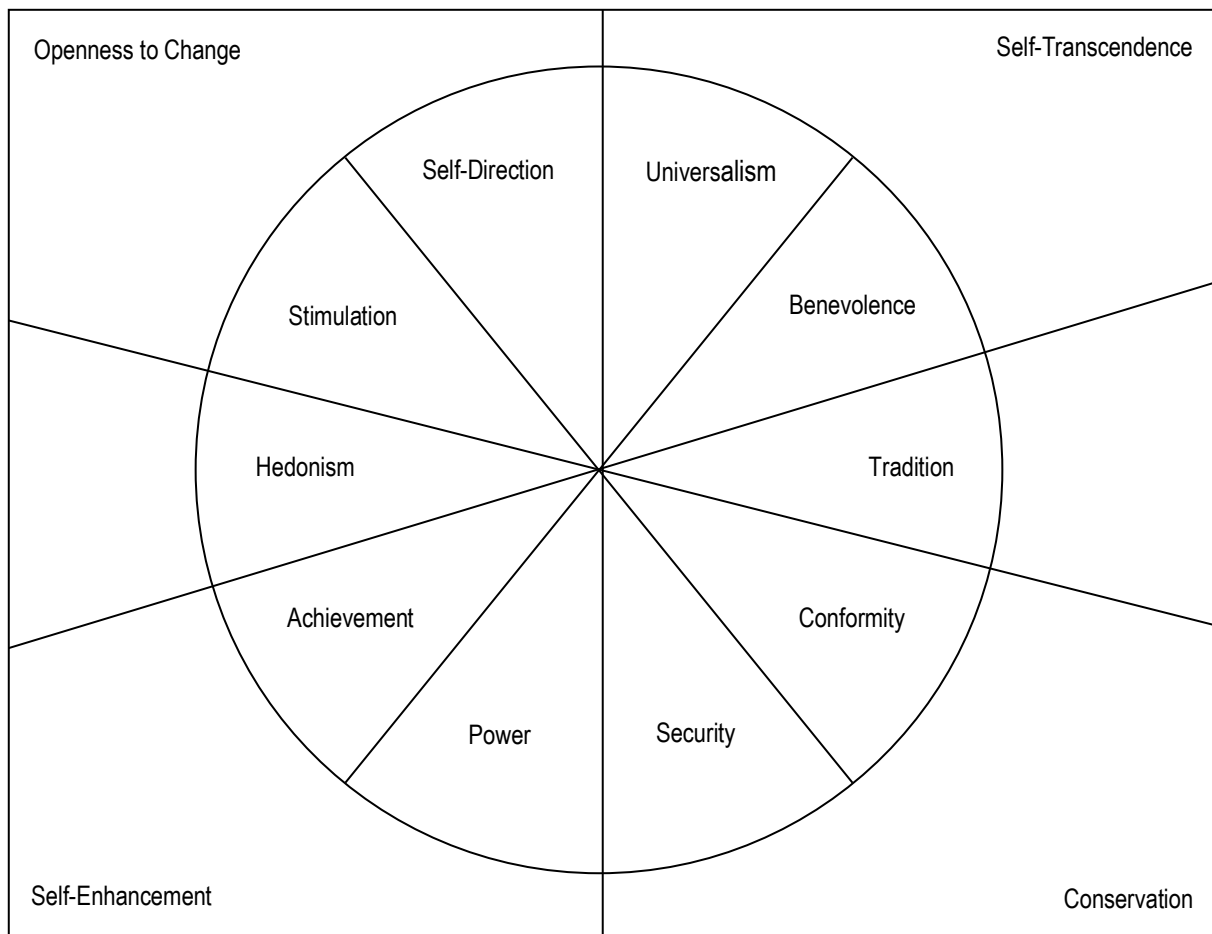
Note: *From "Value Priorities and Religiosity in four Western Religions," by S.H. Schwartz and S. Huismans, 1995, Social Psychology Quarterly, June p. 91. Copyright 1995 by the American Sociological Association. Adapted with permission.*

Schwartz (1992) identified three main conflicts within this value structure (see Figure 1). The first is a conflict between openness to change and conservation, which opposes value types referring to novelty and personal autonomy (Stimulation & Self-direction) to value types leading to stability, certainty and social order (Tradition, Conformity & Security). The second is a conflict between self-enhancement and self-transcendence, which opposes value types referring to the pursuit of selfish interests (Achievement

& Power) to value types promoting the welfare of close and distant others (Benevolence & Universalism). The third is a conflict between values referring to the gratification of one's desires (Hedonism) and values implying self-restraint and the acceptance of external limits (Tradition & Conformity).

By imposing two additional restrictions on the value domain, namely the restriction that all value types are situated on a perfect circle and the restriction that all value types are situated at an equidistant position from one another, it is possible to construct integrated hypotheses about how external variables should relate to the value types. The correlations with an external variable should follow a sinusoid pattern. They should decrease from the most positively related to the most negatively related value type and vice versa. In this way, three possible patterns of correlations with the value types can be defined that relate to the major conflicts in the value domain.[16] First, an external variable that relates most positively to Tradition should relate to the conflict between Hedonism and Tradition. In that case, one can expect that variable to relate most negatively to Hedonism, with correlations decreasing from Tradition over Benevolence, Universalism, Self-Direction and Stimulation to Hedonism and increasing from Hedonism over Achievement, Power, Security and Conformity to Tradition (see Figure 2 & Table 1). This pattern of relations will be referred to as the Hedonism vs. Tradition pattern. Second, an external variable that relates most positively to the self-transcendence value types Benevolence and Universalism should relate to the conflict between self-transcendence and self-enhancement. In that case, one can expect that variable to relate most negatively to the self-enhancement value types Power and Achievement, with correlations decreasing from Universalism over Self-Direction, Stimulation and Hedonism to Achievement and increasing from Power over Security, Conformity and Tradition to Benevolence (see Figure 2 & Table 1). This pattern of relations will be referred to as the Self-Enhancement vs. Self-Transcendence pattern. Third, an external variable that relates most positively to the conservation value types Conformity and Security should relate to the conflict between conservation and openness to change. In that case, one can expect that variable to relate most negatively to the openness to change value types Stimulation and Self-direction, with correlations decreasing from Security over Power, Achievement and Hedonism to Stimulation and increasing from Self-Direction over Universalism, Benevolence and Tradition to Conformity (see Figure 2 & Table 1). This pattern of relations will be referred to as the Openness vs. Conservation pattern.[17] The present study investigates which of these patterns

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[16]   Albeit research on the internal structure of the value domain does support a circular ordering of the value types, this research does not support the assumption that the value types are situated on equidistant positions on a perfect circle (Schwartz, 1992; Schwart & Huismans, 1995). Nevertheless, assuming that they are situated on equidistant positions on a perfect circle does not imply substantial deviation from the observed structure.

[17]   The Hedonism vs. Tradition pattern closely corresponds to the value conflict between Hedonism on the one hand and Tradition and Conformity on the other hand and the Openness vs. Conservation pattern closely corresponds to the conflict between Self-Direction and Stimulation on the one hand and Tradition, Conformity and Security on the other hand (see Schwartz, 1992). However, as Figure 2 shows, it is possible to disentangle both value conflicts more sharply by con-

describes the value patterns associated with Wulff's (1991, 1997) religiosity dimensions the best.[18]

A multidimensional approach of religion

Wulff (1991, 1997) has constructed a comprehensive framework to identify various possible approaches to religion. According to Wulff, all approaches to religion can be summarized along two bipolar dimensions. The Exclusion vs. Inclusion of Transcendence dimension specifies whether the objects of religious interest are granted participation in a transcendent reality. The Literal vs. Symbolic dimension indicates whether the expressions of religion are interpreted literally or symbolically. These two dimensions define four basic attitudes toward religion, which Wulff labeled Literal Affirmation, Literal Disaffirmation, Reductive Interpretation and Restorative Interpretation. Literal Affirmation represents a position most clearly embodied by religious fundamentalism. Literal Disaffirmation represents a disaffirmation of the religious realm in which the possibility is lost out of sight that this realm could have a symbolic meaning. Reductive Interpretation represents a disaffirmation of the religious realm in which a privileged perspective on the true meaning of religion's myths and rituals is claimed. Restorative Interpretation represents an affirmation of the religious realm in which one tries to encompass and go beyond reductive interpretations in order to find religion's symbolic message. Building on Wulff's theory, Hutsebaut and his colleagues (Duriez, Fontaine & Hutsebaut, 2000; Hutsebaut, 1996, 1997) constructed the Post-Critical Belief scale which captures four approaches to Christian religion that map onto Wulff's scheme: Orthodoxy, External Critique, Relativism and Second Naiveté (see Duriez, Fontaine & Hutsebaut, 2000). These approaches equal Literal Affirmation, Literal Disaffirmation, Reductive Interpretation and Restorative Interpretation respectively. In a recent study in 16 samples ($\underline{N}$ = 4648), the Post-Critical Belief scale was shown to reliably capture the dimensions Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic (Fontaine et al., in press).

Religiosity dimensions and value conflicts

In line with Schwartz and Huismans (1995), predictions about the relations between the religiosity dimensions and value priorities will be based on a theological and a socio-psychological analysis. However, our analyses differ from their analyses in that we use a multi-dimensional conceptualization of religiosity, and in that our theological analysis is restricted to Flemish Roman Catholicism.

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trasting Hedonism with Tradition only and by contrasting Self-Direction and Stimulation with Conformity and Security only, which is exactly what we have done in this article.

[18]   The predicted relation between each of the three value patterns and the ten value types was computed as the sine of the angle between the point on the circle representing the most positive relation and each of the points representing the ten value types. The point on the circle representing the most positive relation coincides with the value type Tradition for the Hedonism vs. Tradition pattern, falls in between the value types Universalism and Benevolence for the Self-Enhancement vs. Self-Transcendence pattern, and in between the value types Conformity and Security for the Openness vs. Conservation pattern.

Figure 2   *Hypothetical model of correlations between religiosity and the value types*
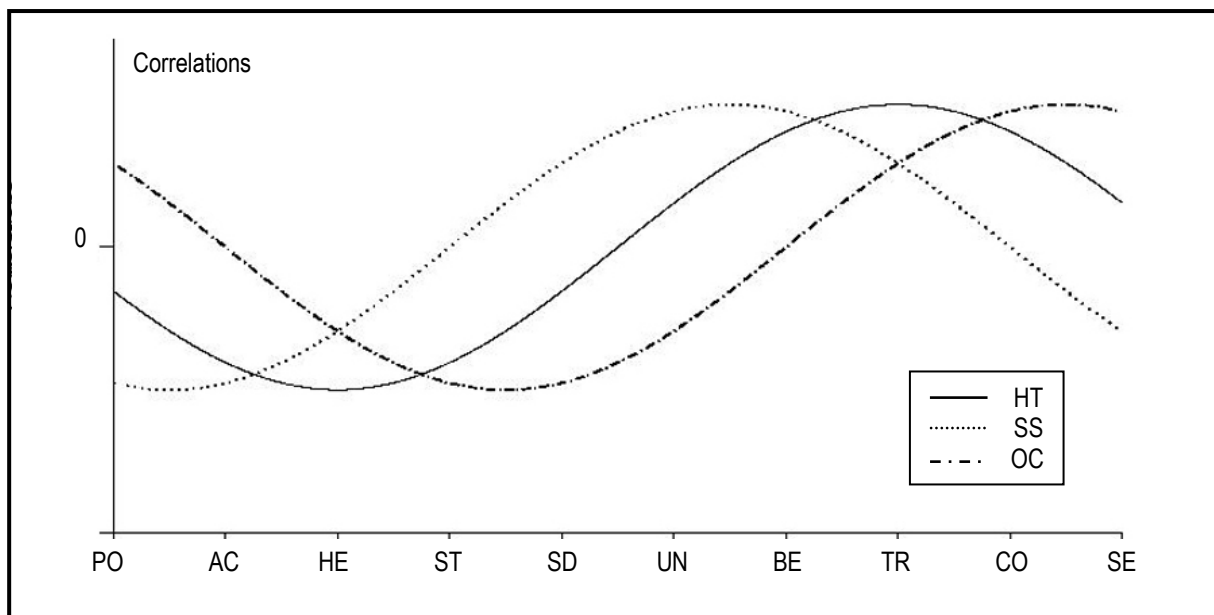
Note: PO=Power, AC=Achievement, HE=Hedonism, ST=Stimulation, SD=Self-Direction, UN=Universalism, BE=Benevolence, TR=Tradition, CO=Conformity, SE=Security, HT=Hedonism vs. Tradition, SS=Self-Enhancement vs. Self-Transcendence, OC=Openness vs. Conservation.

Exclusion vs. Inclusion of Transcendence

From a theological point of view, the orientation towards and the development of a personal relationship with God forms a central dimension in Roman Catholicism (e.g., Niebuhr, 1935; Vergote, 1988, 1997a). This dimension, which can be referred to as the vertical dimension of Roman Catholicism, implies acceptance of and submission to a divine authority. Schwartz's Tradition value type, encompassing items such as "devout" and "accepting one's portion in life", represents this orientation the best. Thus, based on this analysis, Exclusion vs. Inclusion of Transcendence should relate most clearly to the Hedonism vs. Tradition conflict. However, Roman Catholic theology also stresses the importance of a horizontal dimension which refers to universal brotherly love and care for one's fellow man. This universal brotherly love is considered of central importance, not only because it is regarded as a divine commandment, but also because it is seen as a privileged way of meeting God (Rahner, 1976). This universal brotherly love is best represented by the Self-Transcendence value types Benevolence and Universalism. Thus, from this point of view, Exclusion vs. Inclusion of Transcendence should relate most clearly to the Self-Enhancement vs. Self-Transcendence conflict. From a sociological point of view, the role of religion in supporting the social order has been stressed (Durkheim, 1912/1954; Marx, 1848/1964). Although in some periods of revolt, religion can be opposed to the existing social order, religion tends to support this order (Wilson, 1982; Schwartz & Huismans, 1995). This is also the case in Flanders-Belgium. The Ro-

man Catholic Church, which is the most important religious institution in Belgium, has played an important role in the creation of the Belgian state in 1830 and, ever since, a good church-state relation has been maintained within the institutional framework of a Napoleonic division between church and state (Dobbelaere, 1995). This sociological analysis, stressing social order, can be complemented by a psychological analysis. From this point of view, religion is often seen as fulfilling the human need for certainty (Schwartz & Huismans, 1995). By offering a global worldview and a moral program, the complexity of life is reduced and a psychologically safe environment is created. Since the conservation value types Conformity and Security refer most clearly to the importance of social order, a smooth social functioning and a stable and predictable environment, from a socio-psychological perspective, Exclusion vs. Inclusion of Transcendence should relate most clearly to the Openness vs. Conservation conflict.

The abovementionned analyses thus show that, depending on the theoretical perspective (theological-vertical, theological-horizontal or socio-psychological), Exclusion vs. Inclusion of Transcendence can be expected to relate to each of the major conflicts in the value domain. But since the Hedonism-Tradition conflict shares some characteristics with both the Self-Enhancement vs. Self-Transcendence and the Openness vs. Conservation value conflicts (see Figure 2 & Table 1), the Hedonism vs. Tradition pattern can be expected to best describe the value priorities related to interindividual differences in Exclusion vs. Inclusion of Transcendence (cf. Schwartz & Huismans, 1995).

Literal vs. Symbolic

Since Roman-Catholic theology encompasses a broad range of both literal and symbolical approaches to religion (Schillebeeckx, 1989), little can be said about the Literal vs. Symbolic dimension from this perspective. The socio-psychological perspective, however, can easily be related to this dimension (see also Duriez, Fontaine & Luyten, 2001; Fontaine et al., 2000). In a literal mode of thinking only one correct answer to each question exists. In this way, certainty is created. In the symbolic mode, multiple interpretations are possible. This implies a tolerance for ambiguity as well as for interpretations that can be critical of the existing social order. Since social stability and certainty are most clearly embodied in the Conservation value types Conformity and Security, the Literal vs. Symbolic dimension can be expected to relate most clearly (i.e., negatively) to the Openness vs. Conservation conflict.

Method

Samples

In total, seven different samples (N = 1695) were assembled in Flanders (Belgium). All 1695 participants had Belgian nationality and belonged to the Flemish-speaking part of the country. Sample 1 consisted of

183 pupils from a secondary school who were contacted by an undergraduate student (mean age = 16; SD=02; 36% male). Samples 2, 3, 4 and 5 consisted of, respectively, 210, 389, 113 and 338 university students following a psychology course. Their participation was obligatory and they received full course credit. The mean age of the participants was 22 (SD=02; 42% male), 18 (SD=01; 20% male), 21 (SD=03; 40% male) and 18 (SD=01; 18% male) respectively. Sample 6 consisted of 161 adults (mean age = 31; SD=08; 69% male) who were gathered by undergraduate students who asked their neighbors to participate in order to obtain a heterogeneous sample. Sample 7 consisted of 301 religiously affiliated adults (mean age = 45; SD=13; 35% male) who were contacted by undergraduate students.

Measures

The Post-Critical Belief scale was used for the measurement of Wulff's religiosity dimensions. Since its first development (Hutsebaut, 1996), this scale has been subjected to a process of partial revision (Duriez, Fontaine & Hutsebaut, 2000). However, Fontaine et al. (in press) have shown that the internal structure of the Post-Critical Belief scale is stable across the different versions that were used over time. Version 2 (23 items) was presented to sample 2, version 3 (31 items) was presented to samples 3, 4 and 6, and version 4 (33 items) was presented to samples 1, 5 and 7. Items were scored on a 7-point Likert scale (1=completely opposed, 4=neutral, 7=completely in agreement). A principal component analysis was executed by sample after correcting for response sets. In all samples, based on the theoretical model, two components were extracted. A scree test (Cattell, 1966) pointed to a two-componential solution for all samples as well. Component scores were computed after orthogonal Procrutes rotation towards the average componential structure that was computed across 16 samples (Fontaine et al., in press). The Tucker's Phi's congruence measures between the sample specific and the average configuration exceeded the rule-of-thumb recommendation of .90 (Bentler & Bonett, 1980; Van de Vijver & Leung, 1997) for both components in all samples.

Participants also completed the Dutch version of Schwartz' (1992) Value Survey, consisting of 54 values (see Fontaine et al., 2002). Each value was rated in terms of its importance as a guiding principle in on a 9 point scale, ranging from "opposed to my principles" (-1) over "not important" (0) to "of supreme importance" (7). As in Schwartz and Huismans (1995) value scales were computed after correction for the mean score for each subject in order to control for systematic response sets.[19]

All subjects having over two missing values on either the Post-Critical Belief scale or Schwartz' Value Survey were excluded from further analyses. In total, only 2.3% (N = 39) of the subjects needed to be removed across the seven samples. For subjects that were not removed, missing values were replaced

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[19]   As in Schwartz and Huismans (1995), the values self-respect, wisdom, accepting my portion in life, self-discipline, true friendship, mature love, detachment, sense of belonging, healthy, social recognition and intelligent were not used in computing the indexes for the value types.

by the sample-specific mean of the item. In total only 256 missing values were replaced (< 0.25% of the individual scores included in this study).

Results

Bivariate correlations

<u>Exclusion vs. Inclusion of Transcendence.</u> On average, this dimension related most positively to Tradition (see Figure 3 & Table 1). The other correlations followed the sinusoid pattern implied by the Hedonism-Tradition value conflict: They decrease from Tradition over Conformity, Security, Power and Achievement to Hedonism and increase from Hedonism over Stimulation, Universalism and Benevolence to Tradition. However, the correlation with Self-Direction was more negative than could be expected on the basis of a sinusoid pattern. In two samples (4 & 7), the correlations were perfectly in line with a circular ordering, in four samples (1, 2, 5 & 6) there was one deviation from a circular ordering, and in one sample there were two deviations (3). Tradition related most positively to Exclusion vs. Inclusion of Transcendence. However, there is no consensus as to which value type relates most negatively to this dimension. In four samples (1, 4, 5 & 6) Self-Direction was the most negatively related value type and in three samples (2, 3 & 7) Hedonism was the most negatively related value type.

<u>Literal vs. Symbolic.</u> On average, Literal vs. Symbolic related most positively to Universalism (see Figure 4 & Table 1). Correlations followed a sinusoid pattern: They decreased from Universalism over Self-Direction, Stimulation and Hedonism to Power and increased from Security over Conformity, Tradition and Benevolence to Universalism. However, the correlation with Achievement was somewhat less negative than could be expected on the basis of a sinusoid pattern. In one sample (4), there were two deviations from a circular ordering, whereas in the other samples, there was only one deviation. In one sample (2) Benevolence related most positively to the Literal vs. Symbolic dimension, whereas in the other samples, Universalism related most positively to this dimension. However, there was no consensus as to which value type related most negatively to this dimension. The most negatively related value type was Hedonism in sample 2 and 4, Security in sample 1 and 7, and Achievement in sample 3 and 6. In sample 5, Hedonism, Security and Power related equally negatively to this dimension.
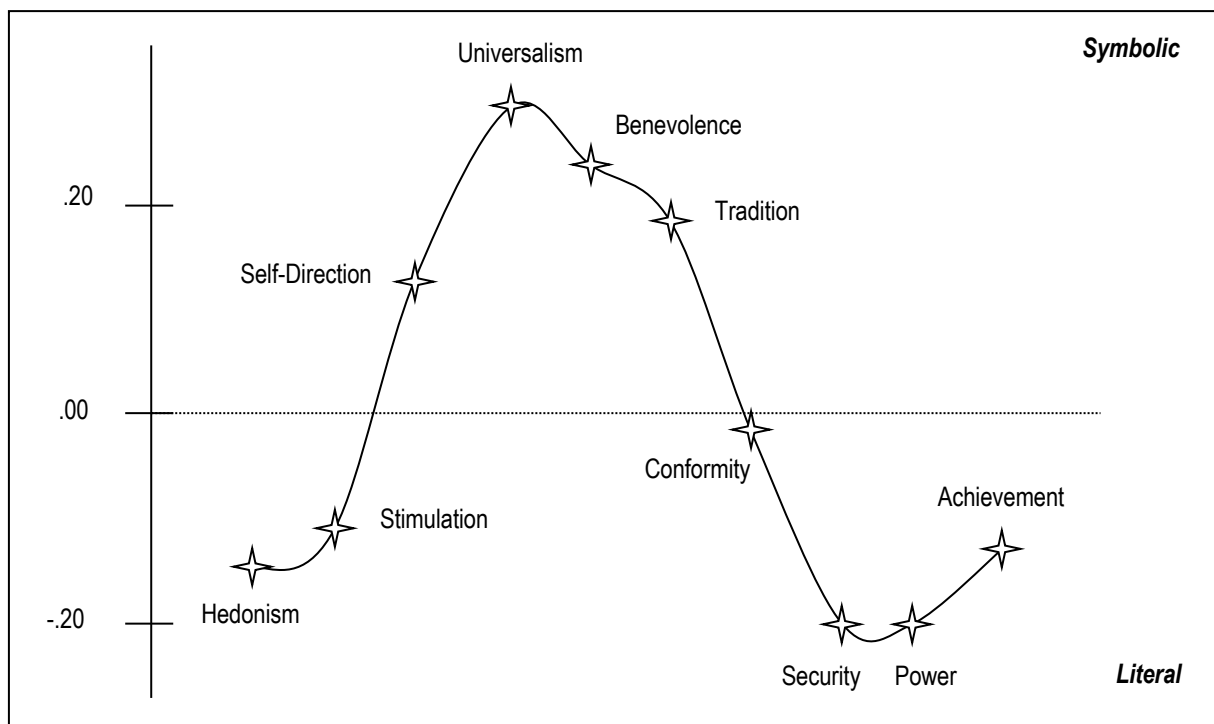
Value patterns

In order to test the hypotheses in a concise way, we computed the correlation between the value patterns associated with the two religiosity dimensions (= the observed value patterns) and each of the three theoretically derived value patterns (see Table 2). Both the theoretical patterns and observed patterns can be found in Table 1. Note that the theoretical patterns are related to one another. The Tradi-

Figure 3   Average correlations between Exclusion vs. Inclusion of Transcendence and Schwartz' value types
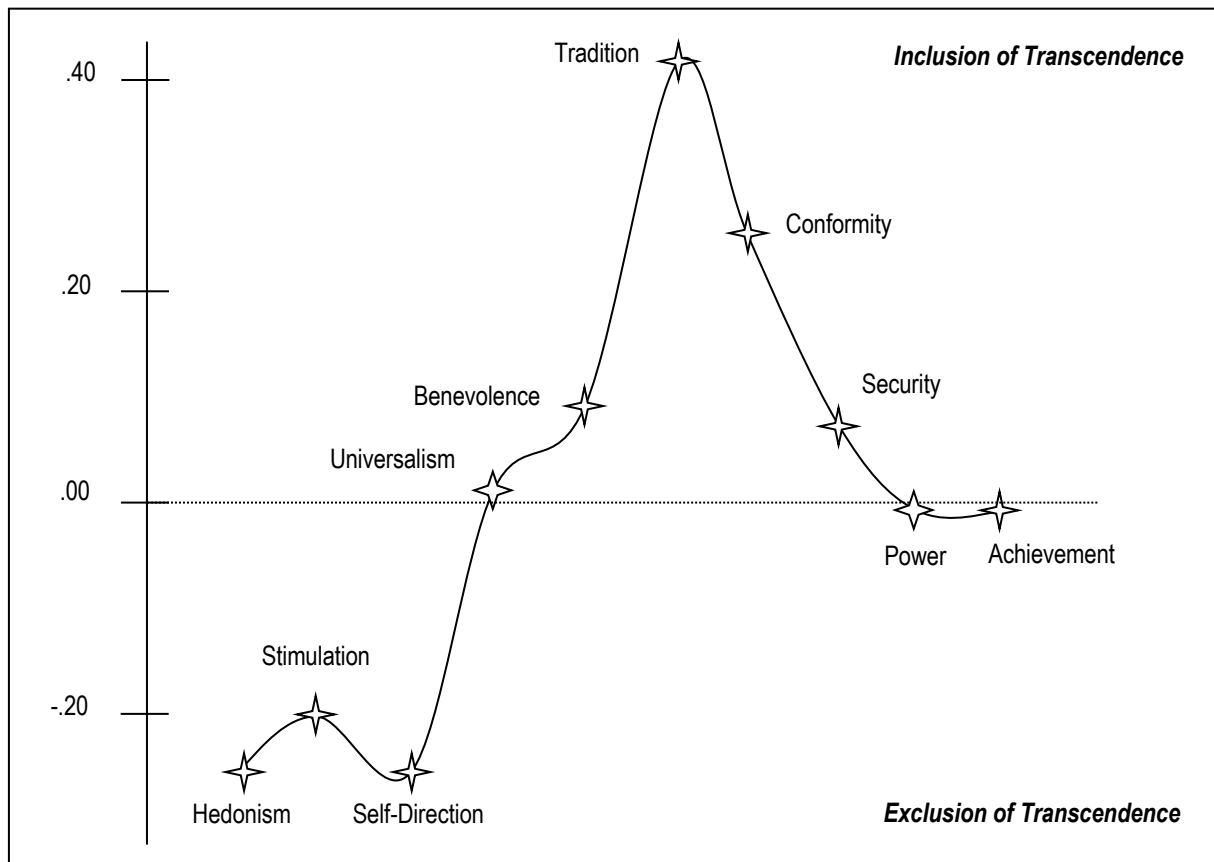
Figure 4   Average correlations between Literal vs. Symbolic and Schwartz' value types

Table 1   *Theoretical patterns, mean correlations and correlations for each sample between the value types on the one hand and Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic on the other hand*

Value	Theoretical Pattern				Exclusion vs. Inclusion of Transcendence						
Type	HT	SS	OC	Mean	1	2	3	4	5	6	7
HE	-1.00	-0.59	-0.59	-.25	-.16 [1]	-.17 [1]	-.25 [4]	-.22 [1]	-.20 [3]	-.18 [1]	-.44 [4]
ST	-0.81	0.00	-0.95	-.20	-.30 [4]	.02	-.11 [1]	-.26 [2]	-.14 [2]	-.18 [1]	-.43 [4]
SD	-0.31	0.59	-0.95	-.25	-.41 [4]	-.15 [1]	-.22 [4]	-.29 [2]	-.23 [4]	-.40 [4]	-.20 [3]
UN	0.31	0.95	-0.59	.01	-.04	-.05	-.04	.03	-.03	-.01	.17 [2]
BE	0.81	0.95	0.00	.09	.26 [3]	-.01	-.03	.11	.10	.10	.17 [2]
TR	1.00	0.59	0.59	.41	.45 [4]	.31 [4]	.35 [4]	.49 [4]	.36 [4]	.35 [4]	.56 [4]
CO	0.81	0.00	0.95	.24	.40 [4]	.12	.16 [2]	.11	.19 [3]	.27 [3]	.38 [4]
SE	0.31	-0.59	0.95	.08	.07	.04	.03	.06	.03	.08	.25 [4]
PO	-0.31	-0.95	0.59	-.01	-.10	-.05	.06	.02	-.02	-.01	-.05
AC	-0.81	-0.95	0.00	-.01	-.06	-.08	.06	-.02	-.02	.07	-.08

Value	Theroretical Pattern				Literal vs. Symbolic						
Type	HT	SS	OC	Mean	1	2	3	4	5	6	7
HE	-1.00	-0.59	-0.59	-.16	-.19 [1]	-.29 [4]	-.12 [1]	-.20 [1]	-.21 [4]	-.16 [1]	-.03
ST	-0.81	0.00	-0.95	-.09	-.05	-.14 [1]	-.14 [2]	-.14	-.12 [1]	-.09	-.01
SD	-0.31	0.59	-0.95	.15	.28 [3]	.07	.06	.05	.17 [2]	.22 [2]	.20 [3]
UN	0.31	0.95	-0.59	.30	.40 [4]	.24 [3]	.33 [4]	.31 [3]	.30 [4]	.32 [4]	.24 [4]
BE	0.81	0.95	0.00	.23	.15 [1]	.26 [3]	.26 [4]	.03	.27 [4]	.22 [2]	.23 [3]
TR	1.00	0.59	0.59	.18	.13	.23 [3]	.18 [3]	.25 [2]	.21 [4]	.21 [2]	.07
CO	0.81	0.00	0.95	-.03	-.03	.06	.06	.05	-.03	-.13	-.21 [3]
SE	0.31	-0.59	0.95	-.19	-.32 [4]	-.03	-.16 [2]	-.11	-.21 [4]	-.19 [1]	-.28 [4]
PO	-0.31	-0.95	0.59	-.19	-.23 [2]	-.23 [3]	-.19 [3]	-.13	-.21 [4]	-.13	-.18 [2]
AC	-0.81	-0.95	0.00	-.12	-.13	-.05	-.22 [4]	-.11	-.19 [2]	-.20 [1]	-.00

Note: HE=Hedonism, ST=Stimulation, SD=Self-Direction, UN=Universalism, BE=Benevolence, TR=Tradition, CO=Conformity, SE=Security, PO=Power, AC=Achievement, HT= Hedonism vs. Tradition, SS= Self-Enhancement vs. Self-Transcendence, OC= Openness vs. Conservation.

[1] *p<.05,* [2] *p<.01,* [3] *p<.001,* [4] *p<.0001*

tion vs. Hedonism pattern is positively related to the two other patterns (r=.59 with both patterns) as can be expected for a value pattern that integrates the several possible predictions about which values relate to religion. The Self-Transcendence vs. Self-Enhancement and the Conservation vs. Openness pattern are slightly negatively related (r=-.31). The analyses provide information by sample. However, since there are only ten value types, it is possible to find a high correspondence between an a priori and an observed value pattern, even if there is no relationship at all in the population. However, when the correspondence between an a priori and an observed value pattern is stable across different samples, this can not be accounted for by mere coincidence. Moreover, in order to minimize the impact of random sampling fluctuation and sample specific information even further, average correlations across the sam-

ples were also computed.[20]

Table 2 *Mean correlations and correlations for each sample between the theoretical patterns and the value patterns associated with Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic*

	Exclusion vs. Inclusion of Transcendence							
Pattern	Mean	1	2	3	4	5	6	7
HT	.85 [2]	.83 [2]	.72 [1]	.67 [1]	.79 [2]	.83 [2]	.72 [1]	.93 [4]
SS	.22	.23	.25	.03	.19	.23	.04	.35
OC	.78 [2]	.76 [1]	.64 [1]	.76 [1]	.74 [1]	.74 [1]	.81 [2]	.74 [1]
	Literal vs. Symbolic							
Pattern	Mean	1	2	3	4	5	6	7
HT	.57	.37	.80 [2]	.73 [1]	.70 [1]	.63	.50	.08
SS	.95 [4]	.90 [3]	.84 [2]	.88 [3]	.80 [2]	.91 [3]	.93 [2]	.77 [2]
OC	-.27	-.47	.09	-.03	.03	-.18	-.34	-.63

Note: *HT = Hedonism/Tradition, SS = Self-Enhancement/Self-Transcendence, OC = Openness/Conservation*

[1] *p<.05,* [2] *p<.01,* [3] *p<.001,* [4] *p<.0001*

Exclusion vs. Inclusion of Transcendence. On average, the value pattern associated with this dimension corresponded most closely to the Hedonism vs. Tradition pattern (r=.85) (see Table 2). This value pattern also corresponded substantially to the Openness vs. Conservation pattern (r=.78). Both findings were in line with our expectation. However, contrary to expectations, there was only a marginal correspondence with the Self-Enhancement vs. Self-Transcendence pattern (r=.22). In five samples (1, 2, 4, 5 & 7), the value pattern associated with the Exclusion vs. Inclusion of Transcendence dimension related most strongly to the Hedonism vs. Tradition pattern and second most to the Openness vs. Conservation pattern (see Table 2). In the two other samples (3 & 6), the pattern associated with the Exclusion vs. Inclusion of Transcendence dimension related most strongly to the Openness vs. Conservation pattern and second most to the Hedonism vs. Tradition pattern. The relation between the value pattern associated with the Exclusion vs. Inclusion of Transcendence dimension and the Self-Enhancement vs. Self-Transcendence pattern, albeit non-negative, tended to zero in all samples.

Literal vs. Symbolic. On average, contrary to expectations, the value pattern associated with the Literal vs. Symbolic dimension corresponded quasi perfectly to the Self-Enhancement vs. Self-Transcendence pattern (r=.95), whereas it corresponded only marginally to the inverse Openness vs. Conservation pat-

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[20] The average pattern across the samples was computed after applying a Fisher-z transformation to the correlations observed in the separate samples and after weighting for sample size.

tern (r̲=-.27) (see Table 2). Moreover, there was a substantial correspondence to the Hedonism vs. Tradition pattern (r̲=.57). In all samples, the value pattern associated with Literal vs. Symbolic was most strongly related to the Self-Enhancement vs. Self-Transcendence pattern. In three samples (2, 3 & 4), a substantial correspondence to the Hedonism vs. Tradition pattern was observed, whereas this relation was small but positive in the other samples (see Table 2). The relation between the value pattern associated with the Literal vs. Symbolic dimension and the Openness vs. Conservation pattern was nonsignificant in all samples.

Discussion

Although some of the results of this study differ according to the sample that was used, we will refrain from interpreting these differences among the samples in this discussion section, because they can be the result of differences in sample type but also of mere random sampling fluctuation. Instead, we will focus on the convergences across the samples. The value patterns associated with Wulff's religiosity dimensions were found to be relatively stable across the different samples. This stability excludes a possible interpretation of these results in terms of random sampling fluctuation. Hence, we will primarily focus on the extent to which the average observed value patterns support the a priori hypotheses for both the Exclusion vs. Inclusion of Transcendence and the Literal vs. Symbolic dimension.

Exclusion vs. Inclusion of Transcendence.

The value pattern associated with individual differences in Exclusion vs. Inclusion of Transcendence corresponded closely with the Hedonism vs. Tradition pattern that was expected to be associated with this dimension from a vertical theological analysis. To a lesser extent, this pattern also showed substantial correspondence with the Openness vs. Conservation pattern that was expected from a sociopsychological analysis (see Table 2). An inspection of the correlations (see Table 1) supports these findings: The Exclusion vs. Inclusion of Transcendence dimension related most positively to Tradition and, to a lesser extent, Conformity and most negatively to Hedonism, Stimulation and Self-Direction. However, Security, which contains value items referring to social stability, was only marginally related to Exclusion vs. Inclusion of Transcendence. Hence, the dependence-autonomy conflict rather than the openness vs. conservation conflict seems to be the central intra-personal conflict concerning religiosity (Vergote, 1997b). These findings replicate the findings of Schwartz and Huismans (1995) who found that religiosity correlated most negatively with Hedonism, Stimulation and Self-Direction and most positively with Tradition and Conformity (see above). The value pattern associated the Exclusion vs. Inclusion of Transcendence dimension showed virtually no correspondence with the Self-Enhancement vs. Self-Transcendence pattern that was expected to be associated with this dimension from a horizontal theo-

logical analysis (see Table 2). An inspection of the correlations (see Table 1) supports this finding: Exclusion vs. Inclusion of Transcendence related only marginally to Universalism and Benevolence as well as to Power and Achievement. Since the Exclusion vs. Inclusion of Transcendence dimension was controlled for differences in the Literal vs. Symbolic dimension, which could otherwise been held responsible for obscuring the observed relations, this finding indicates that universal brotherly love is not of central importance in how Roman Catholicism is lived. Apparently, being religious does not make a person more sensitive for the well-being of others. These findings are in line with the findings of Duriez (2002a, 2002b, in press A), who found that this dimension is essentially unrelated to racism, moral attitudes and moral competence, and empathy.

Literal vs. Symbolic

The value pattern associated with individual differences in the Literal vs. Symbolic dimension showed virtually no correspondence with the Openness vs. Conservation pattern that was expected to be associated with this dimension from a socio-psychological analysis (see Table 2). An inspection of the correlations (see Table 1) supports this finding. Hence, the socio-psychological analysis appears to be inadequate to understand the relation between the Literal vs. Symbolic dimension and value priorities. Nevertheless, a clear pattern of relations between the value priorities and the Literal vs. Symbolic dimension showed up. The Self-Enhancement vs. Self-Transcendence pattern described the value pattern associated with Literal vs. Symbolic almost perfectly. A post-hoc explanation for this finding might be found in the concept of Perspective Taking. Perspective Taking refers to the cognitive component of Empathy and can be defined as the tendency to spontaneously adopt the psychological point of view of others (Davis, 1983). On the one hand, there is evidence that Perspective Taking relates positively to prosocial behavior (e.g., Barnett & Thompson, 1985; Bengtsson & Johnson, 1992; Cho, 1993). On the other hand, there is also evidence that a symbolic approach to religion relates to Perspective Taking. Watson et al. (1985) found Batson's Quest dimension, which Wulff (1997) situated at the symbolic side of his model, to be positively related to Perspective Taking, and Duriez (2002b) found that the Literal vs. Symbolic dimension relates to differences in Perspective Taking and Empathy in general. Future research should address whether differences in Perspective Taking ability can indeed account for the relationship between value priorities and the Literal vs. Symbolic dimension.

General conclusions

The present results lend considerable support for studying the religiosity-value relationships from both Schwartz's integrated value structure and Wulff's two-dimensional framework. The observed value patterns were largely in line with a circular organization of the value domain as presented by Schwartz

(1992), allowing for a better organization of the religiosity-value relationships. Moreover, interindividual differences in Wulff's religiosity dimensions were accompanied by vast differences in the associated value patterns. On the one hand, the value pattern associated with the Exclusion vs. Inclusion of Transcendence dimension supported the central importance of the conflict between Hedonism and Tradition in the religiosity domain (cf. Schwartz & Huismans, 1995). On the other hand, the Literal vs. Symbolic dimension, which accounts for a substantial part of the variability in responses to religiosity items, is characterized by a very different value pattern. The present findings underscore the need for a multidimensional approach to religiosity. Moreover, the finding that value pattern associated with the Literal vs. Symbolic dimension is characterized by a conflict between Self-enhancement and Self-transcendence sheds a new light on the relation between religiosity and altruism and should instigate new research in this field. Future research should also examine whether the observed relationship between the two religiosity dimensions and value priorities also holds in other Christian denominations and in sociological contexts with different church-state relationships (cf. Roccas & Schwartz, 1997).

PART 3
Religion, Values and Ideology

Abstract

It has often been argued that religions influence political attitudes only indirectly by their influence on the value system of believers. This value system, in turn, is supposed to be used as a guideline in forming political attitudes. Thus, in this view, it should be sufficient to focus on value orientations if one wants to examine religion's influence on political attitudes. However, results of this study among first year psychology students (N = 389) show that, although value orientations hold greater predictive strength than religiosity towards political attitudes in Flanders (Belgium), religiosity, even apart from values, does provide additional information in predicting political attitudes. Thus, our results suggest that, at least in Flanders, religion, even apart from values, is still a politically important force. The most important value types, as measured by the Schwartz' Value Inventory (Schwartz, 1992), and religiosity dimensions, as measured by the Post-Critical Belief scale (Desimpelaere et al., 1999), associated with political attitudes were identified. Results show that each political attitude included in this study (economic conservatism, cultural conservatism, racism and nationalism) is predicted by a more or less unique pattern of religiosity dimensions and value orientations.

Introduction

Sociological theorizing has stressed the role of religion and religious leaders in supporting the acceptance and stability of the existing social order (e.g., Durkheim, 1912/1954; Marx, 1848/1964). Although in some periods of revolt religion can be opposed to the existing social order, on the whole the dominant religion tends to support the existing social order over longer periods of time (Wilson, 1982). Thus religions are considered to influence their members' political attitudes. However, there at least two possible pathways as to how religion can influence political attitudes. On the one hand, some have argued that religions influence political attitudes because religious teachings stress the importance of some values and denigrate the importance of others, and, in this way, shape their members' value system (e.g., Schwartz & Huismans, 1995). This value system would then in turn influence the political attitudes people hold, since people are supposed to use values as a guideline in forming their political attitudes (Van Gyes & De Witte, 1999). Hence, this view suggests that, if one wants to examine religion's impact on political attitudes, it should be sufficient to focus on personal value orientations. Apart from values, religion is considered to have no influence on political attitudes. On the other hand, however, it could also be argued that religions influence political attitudes more directly. For instance, a lot of Roman Catholics in Flanders (Belgium) only vote for the Christian-democrat party CVP because they are considered to be the political representatives of Roman Catholics in Flanders. Thus, a vote for the Christian democrat party might directly stem from one's sense of belonging to the group of Roman Catholics, rather than from the specificity of one's value system. In a similar vein, certain political ideas and attitudes may follow from belonging to a certain group. The main aim of this article is to examine whether or not religiosity, apart from values, separately contributes to people's political attitudes in Flanders (Belgium). A second aim of this paper is to identify the relative importance of specific value orientations and/or dimensions of religiosity as predictors of political attitudes in Flanders.

Religiosity and Values

The first empirical approach to human values as transsituational guiding principles in one's life and the investigation of their relationship with religiosity has to be credited to Rokeach (1968, 1969a, 1969b). Rokeach asked participants to rank 18 instrumental and 18 terminal values as guiding principles in their lives and compared religious and non-religious participants with respect to the average rank order of each value item. He found that religious participants estimated the value terms salvation, forgiveness and obedience higher and the value terms pleasure, independence, intellectual and logical lower than non-religious participants. Most of the subsequent research on the relation between religiosity and values was inspired by Rokeach's approach (e.g., Lau, 1989; Paloutzian, 1981). However, as Fontaine et al. (2000) have noted, Rokeach's approach shows two important shortcomings. First, religiosity is often

merely defined in terms of belief vs. non-belief or research has been limited to comparisons between religious denominations. Thus, religiosity is often treated as a unidimensional characteristic. Moreover, studies that did use multidimensional operationalizations of religiosity (e.g., Tate & Miller, 1971) have relied on classic distinctions between different religious attitudes, such as intrinsic vs. extrinsic religiosity (Allport & Ross, 1967), which have recently been criticized on both psychometric (e.g., Maltby & Lewis, 1996) and conceptual grounds (e.g., Kirkpatrick & Hood, 1990). A second shortcoming of Rokeach's approach is that, in this line of research, each value is considered as an isolate entity, which leads to poorly organized results. New developments both in the conceptualization and the measurement of religious attitudes (Duriez, Fontaine & Hutsebaut, 2000) and human values (Schwartz, 1992), provide a potentially more interesting perspective to investigate the religiosity-values relation.

Schwartz (1992) developed a comprehensive theory about the content and the structure of the value domain, which received support in over 40 countries (Schwartz & Sagiv, 1995). Schwartz (1992) defines a value as a transsituational goal that varies in importance as a guiding principle in one's life. On the basis of theoretical analyses and extensive empirical research, he identified 10 different value types, each characterized by their own motivational goal: Universalism, Benevolence, Tradition, Conformity, Security, Power, Achievement, Hedonism, Stimulation, and Self-Direction (see previous chapter). According to Schwartz (1992), these value types can be organized into a two-dimensional circular circumplex structure on the basis of the mutual compatibilities and conflicts between their respective motivational goals (see previous chapter). Value types that share compatible goals are positively correlated and emerge adjacent to one another in this two-dimensional representation. Value types that are characterized by conflicting goals are negatively correlated and are situated opposite to one another. Schwartz (1992) also proposed a simpler way to view this value structure, summarizing the relationships among the value types in terms of a two bipolar dimensions: Openness to change vs. conservation and self-enhancement vs. self-transcendence (see previous chapter).

In a study on the relationship between religiosity and value priorities among adherents of four religions (Judaism, Protestantism, Roman Catholicism and Greek Orthodoxy), Schwartz and Huismans (1995) found a theoretically meaningful pattern of associations between the Schwartz value orientations and religious commitment. For each religious denomination, religiosity was associated with the importance of "respect, commitment, and acceptance of the customs and ideas that traditional culture and religion provide" (Schwartz & Huismans, 1995, p. 90) and a de-emphasis on "pleasure and sensuous gratification for oneself" (Schwartz & Huismans, 1995, p. 90). Fontaine et al. (2000) replicated these findings, and addressed the shortcoming of this study by using the multidimensional measurement of religious attitudes developed by Hutsebaut and his colleagues (1996, 1997a, 1997b; Duriez, Fontaine & Hutsebaut, 2000). This measurement is based on Wulff's (1991, 1997) scholarly overview of the various possible at-

titudes towards religion. According to Wulff, the various approaches to religion can be located in a two-dimensional space. The vertical axis specifies the degree to which the objects of religious interest are granted participation in a transcendent reality (Inclusion vs. Exclusion of Transcendence). The horizontal axis indicates whether religion is interpreted literally or symbolically (Literal vs. Symbolic). These dimensions define four quadrants, each covering a specific attitude toward religion: Literal Affirmation, Literal Disaffirmation, Reductive Interpretation and Restorative Interpretation. The upper left quadrant, Literal Affirmation, represents affirmation of the literal existence of religious objects. The lower left quadrant, Literal Disaffirmation, represents a position in which one neither believes in the literal meaning of religious words nor in the possibility that these words refer to truths for which there is no literal language. The lower right quadrant, Reductive Interpretation, represents a position in which one denies reality to the transcendent referent of religious language and claims a privileged perspective on the meaning of religion's myths and rituals. The upper right quadrant, Restorative Interpretation, represents a position in which one posits the transcendent realm as real, but in which one searches for the symbolic meaning instead. Inspired by Wulff's (1991, 1997) approach, Hutsebaut and his colleagues (1996, 1997a, 1997b; Duriez, Fontaine & Hutsebaut, 2000) developed the Post-Critical Belief scale, which captures four different approaches to Roman Catholic religion that map onto Wulff's shame: Orthodoxy, External Critique, Relativism and Second Naiveté (see Duriez, Fontaine & Hutsebaut, 2000). Orthodoxy is located in the upper left quadrant, External Critique is located in the lower left quadrant, Relativism is located in the lower right quadrant, and Second Naiveté is located in the upper right quadrant.

In a study of young adults, Fontaine et al. (2000) found that these religious attitudes were differentially related to value priorities, and that the associated value priorities could largely be explained as a specific combination of two theoretically derived value patterns, namely a Transcendence / Mutual Care pattern and a Social order / Uncertainty Avoidance pattern. The Transcendence / Mutual Care pattern was derived from a theological analysis of the relationship between values and religiosity and implies awe and respect for a God which is expressed through regular worship and personal control over material and affective desires, as well as the rejection of self-centeredness and care for other humans (Fontaine et al., 2000). The Social order / Uncertainty Avoidance pattern on the other hand was derived from a socio-psychological analysis of the relationship between values and religiosity and implies respect for and reliance upon the social order, which leads to a clear structuring and a reduction of the complexity of human life (Fontaine et al., 2000).[21]

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[21]   Recently, Duriez, Fontaine and Luyten (2001) argued that it would be fruitful to disentangle the Transcendence / Mutual Care pattern into a pure Transcendence and a pure Mutual Care pattern in order to come to a better understanding of the association between religiosity and values.

Values and Political Attitudes

In the past, researchers often assumed that both political parties and political attitudes could be arrayed on a single left-right dimension (e.g., Lipset, 1960; McClosky, 1958). However, more recently it has been argued that the meaning of the left-right dimension varies across nations and over time and is thus often insufficient to represent the relevant political dimensions in a given society (e.g., Inglehart, 1990; Rokeach, 1973). Middendorp (1978), for instance, analyzed the ideological components of this left-right dimension and of basic political conflicts and distinguished two dimensions rather than one: a liberalism-egalitarianism dimension (economic conservatism vs. progressivism) that concerns the desirable degree of economic equality among people and an authoritarianism-libertarianism dimension (cultural conservatism vs. progressivism) that concerns readiness for social change and individual rights and freedoms.

According to Middendorp (1978), economic conservatism is characterized by opposition to the value 'equality' whereas economic progressivism is based on it, and cultural conservatism is characterized by opposition to the value 'freedom' whereas cultural progressivism is based on it.

But although Middendorp (1978), as well as Rokeach (1973, 1979), singled out the values equality and freedom as the paramount political values, some researchers noted that other values should also be taken into account (e.g., Cochrane, Billig & Hogg, 1979; Inghlehart, 1977, 1990). Hence, Barnea and Schwartz (1995) set out to study the influence of other values on voting, using Schwartz' (1992) value approach. Their results pointed out that supporters of different political parties could be discriminated on value-based functions that correspond to the two ideological dimensions that turned out to be relevant in Israel: state vs. religion and libertarianism-authoritarianism. Thus, they concluded that all value types identified in Schwartz' (1992) value theory may be politically relevant depending on context.

Barnea and Schwartz (1995) indicated that politically relevant dimensions might differ over countries, and that it is important to consider the specific political context. In a series of studies, De Witte and Billiet (1999) identified four dimensions that are politically relevant in Flanders (Belgium). A first is based on the difference between Catholics and non-Catholics, a second is based on the conflict between capital and labor, a third is based on the communitarian conflict between the Flemish and French speaking part of Belgium, and a fourth is based on the conflict between left-libertarians and right-authoritarians. However, it is also a well documented finding that voting for the fascist Vlaams Blok is largely determined by one single issue only, namely the negative attitude towards immigrants (e.g., Billiet & De Witte, 1991; De Witte & Billiet, 1999). Hence, the attitude towards immigrants can be considered as a politically relevant dimension in its own right. According to De Witte and Billiet (1999) the first dimension reflects the distinction cultural conservatism vs. progressivism (Middendorp, 1978), whereas the second reflects economical conservatism vs. progressivism (Middendorp, 1978). The third dimension is reflect-

ed in the concept of Flemish nationalism. The fourth dimension is largely reducible to a combination of cultural and economic conservatism vs. progressivism. The fifth dimension is reflected in the concept of racism.

Religiosity, Values and Political attitudes

As mentioned before, various authors (e.g., Schwartz & Huismans, 1995) have suggested that religion influences political attitudes only indirectly, and attribute religion's influence on political attitudes mainly to the fact that religious teachings stress the importance of some values and denigrate the importance of others, and, this way, shape the value systems of their members. This value system is then likely to influence the (political) attitudes people hold, since people will use it as a guideline to form their political attitudes (Van Gyes & De Witte, 1999). This suggests that the study of the impact of religion on political attitudes can, theoretically speaking, be restricted to the study of the impact of personal value orientations on political attitudes. For instance, Billiet and Dobbelaere (1976) examined the discourse of the Roman Catholic Church in Flanders. They concluded that this church is upholding an entire value system, which can be referred to as Socio-Cultural Christianity and which is likely to influence the political attitudes of Roman Catholics in Flanders. However, it is our contention that the claim that the influence of religion on political attitudes is only mediated by values should not be taken for granted a priori, but should be empirically investigated. Religion could also influence political attitudes in a more direct way. For instance, we already mentioned the fact that certain political ideas and attitudes could be held in function of the group to which one belongs. Dobbelaere (1995), for instance, has noted that Belgian political history can partly be written in terms of the conflict between Catholics on the one hand and (radical) liberals and socialists on the other hand (cf. De Witte & Billiet, 1999). The core of both the liberal and the socialist party consisted of secular humanists who were anti-Catholic and later even anti-religious (Dobbelaere, 1995). Thus, a vote for the Christian democrat party might directly stem from one's sense of belonging to the group of Roman Catholics, rather than from the specificity of one's value system. In a similar vein, belonging to the group of Roman Catholics makes it very likely to hold political attitudes that emphasize tradition and conformity, not because these political attitudes are compatible with one's value system, but simply because these political attitudes are sociologically, so to speak, associated with the Roman Catholic Church in Flanders.

Hypotheses

The main aim of this article is to examine whether measures of religiosity, when values are controlled, provide additional predictive power concerning political attitudes. A second aim of this article is to identify the most important predictors of political attitudes in Flanders.

We expect the following relations between political attitudes and religiosity (see Table 1). We expect no relation between racism and church attendance (cf. Duriez & Hutsebaut, 2000). However, we expect racism to relate positively to both Orthodoxy and External Critique, because intolerance for ambiguity, which is characteristic of literal thinking (see Wulff, 1991, 1997), was reported to be related to a higher susceptibility to racism (Sidanius, 1985). Racism is expected to relate negatively to Relativism, because Relativism implies tolerance towards other opinions and cultures (Duriez & Hutsebaut, 2000) and with Second Naiveté, because in this outlook the commandment of brotherhood should be taken seriously. Billiet (1988) has noted that Flemish nationalism and Catholicism are strongly interwoven. Therefore, we expect nationalism to be positively related to both church attendance and Orthodoxy and Second Naiveté, and to be unrelated or negatively related to External Critique and Relativism. Since De Witte and Billiet (1999) have argued that the distinction between Catholics and non-Catholics can be grasped in terms of cultural conservatism and since Middendorp (1978) has shown that there is a positive relation between cultural conservatism and nationalism, we expect the same pattern of relations for cultural conservatism. Concerning economic conservatism, we expect no relation with church attendance, Orthodoxy and Second Naiveté. Although the Catholic Church sometimes criticizes the excesses of capitalism, it doesn't oppose its general principles. We also expect External Critique to be unrelated to economic conservatism, since we see no reason why this stance should be related to economic conservatism in any way. However, we expect Relativism to relate negatively to economic conservatism, since it is very likely that, when one is able to put into perspective one's own (un)belief, one is presumably also capable of putting typical western values, including capitalist values, into a more relativistic perspective.

Table 1   *Hypotheses regarding the relations between the religiosity measures and the political attitude measures and between the value orientations and the political attitude measures*

	Economic cons.	Cultural cons.	Nationalism	Racism
Church attendance	0	+	+	0
Orthodoxy	0	+	+	+
External Critique	0	0/-	0/-	+
Relativism	-	0/-	0/-	-
Second Naiveté	0	+	+	-
Power	+	+	+	+
Achievement	+	+	+	+
Hedonism	0	0	0	0
Stimulation	0	-	0	0
Self-Direction	0	-	0	0
Universalism	-	-	-	-
Benevolence	-	-	-	-
Tradition	0	+	+	+
Conformity	0	+	+	+
Security	0	+	+	+

We expect the following relations between value orientations and political attitudes (see Table 1). According to Barnea and Schwartz (1995), support for egalitarian political parties should be based on attributing importance to values that endorse concern for and promotion of the welfare of others (=self-transcendence values). Support for liberal parties should be based on attributing importance to values that endorse the attainment of wealth and influence and a superior status for oneself, and that legitimize the hierarchical relations (=self-enhancement values). We therefore expect economic conservatism to be positively related to Power and Achievement, to be unrelated to Hedonism, to be unrelated to Stimulation and Self-Direction, to be negatively related to Universalism and Benevolence, and to be unrelated to Tradition, Conformity and Security. According to Barnea and Schwartz (1995), support for authoritarian parties should be based on attributing importance to values that endorse protection of the social order and certainty (= conservation values and self-enhancement values). Support for libertarian parties should be based on attributing importance to opposite values (openness to change values and self-transcendence values). We therefore expect cultural conservatism to be positively related to Power and Achievement, to be unrelated to Hedonism, to be negatively related to Stimulation, Self-Direction, Universalism and Benevolence, and to be positively related to Tradition, Conformity and Security. Regarding racism, we hypothesize that the pure self-enhancement values (Power and Achievement) will be positively related to racism because they share an emphasis on promoting the (economic) interests of the self. This self-interest is best served by trying to get rid of the poor and needy who appeal to our support. Those who are perceived as poor and needy and not rightfully belonging here (non-Western immigrants in particular) are likely to be the first ones to attract negative responses. We hypothesize that the pure openness to change values (Stimulation and Self-Direction) will be unrelated to racism because, although the presence of minorities might contribute to the pursuit for novelty and the expression of autonomy, minorities might also be seen as dangerous and hence threatening to one's independence and one's pursuit for novelty. We expect the self-transcendence values (Universalism and Benevolence) to be negatively related to racism because they emphasize understanding, acceptance and showing concern for the welfare of other human beings (even though their way of life differs from one's own). Finally, we hypothesize conservation values (Tradition, Conformity and Security) to be positively related to racism because minorities are likely to confront members of the dominant group with challenges to the status quo and cultural arrangements. We thus expect racism to be positively related to Power and Achievement, to be either slightly positively or not at all related to Hedonism, to be unrelated to Stimulation and Self-Direction, to be negatively related to Universalism and Benevolence, and to be positively related to Tradition, Conformity and Security. Regarding nationalism, we expect the same pattern, since Maddens et al. (2000) noted that Flemish nationalism is imbedded in an ethnic discourse. However,

since part of the Flemish nationalist movement does advocate a multicultural society, we expect the relation to be substantially weaker.

Method

Sample

Participants were 389 first year psychology students from a Belgian university, ranging in age from 17 to 23 years with a mean age of 18. All participants had Belgian nationality and belonged to the Flemish-speaking part of the country; 79% were female. Concerning the frequency of church attendance 25% indicated to attend weekly or at least often (compared to about 10% in the general Flemish population according to the Belgian Office of Church Statistics), 43% indicated to attend at special occasions only, and 32% indicated to never attend. Participation was obligatory. Participants received course credit. Confidentiality and anonymity were guaranteed.

Measures

All participants completed the Dutch translation of Schwartz' value survey, which consists of 54 values, representing 10 value types. Each value was rated in terms of its importance as a guideline in one's life on a 9-point scale, ranging from "opposed to my principles" (-1) to "not important" (0) to "of supreme importance" (7). Estimates of internal consistency (Cronbach's alpha) were .72 for Power (Mean=1.69, SD=1.23), .75 for Achievement (Mean=3.77, SD=1.29), .76 for Hedonism (Mean=4.44, SD=1.15), .78 for Stimulation (Mean=3.42, SD=1.36), .54 for Self-Direction (Mean=5.04, SD=0.95), .79 for Universalism (Mean=4.51, SD=1.01), .70 for Benevolence (Mean=5.12, SD=0.75), .56 for Tradition (Mean= 2.29, SD=1.10), .70 for Conformity (Mean=3.88, SD=1.21), and .55 for Security (Mean=3.50, SD=1.19). As in Schwartz and Huismans (1995), the value scales were computed after correction for the mean score for each subject. More precisely, the scores were centered around the mean score of each subject across all 55 values. In this way, systematic response sets are controlled.[22]

Participants also completed a 28-item Post-Critical Belief scale (Desimpelaere et al., 1999) consisting of four subscales: Orthodoxy (7 items), External Critique (8 items), Relativism (6 items) and Second Naiveté (7 items). All items were scored on a 7-point Likert scale (1=completely opposed, 4=neutral, 7=completely in agreement). Estimates of internal consistency (Cronbach alpha's) were .61 for Orthodoxy (Mean = 2.06, SD = 0.78), .73 for External Critique (Mean = 3.50, SD = 0.97), .57 for Relativism (Mean = 5.47, SD = 0.69), and .84 for Second Naiveté (Mean = 3.68, SD = 1.32). Orthodoxy was nega-

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[22]   In order to augment the internal consistency of the value types, the values social recognition, influential, intelligent, creativity, curious, self-respect, wisdom, accepting my portion in life, self-discipline, family security, clean, reciprocation of favors, and healthy were not used in the computation of the indexes for the value types.

tively related to External Critique ($\underline{r}$=-.28, $\underline{p}$<.0001) and Relativism ($\underline{r}$=-.20, $\underline{p}$<.0001) and positively to Second Naiveté ($\underline{r}$=.38, $\underline{p}$<.0001). External Critique was unrelated to Relativism ($\underline{r}$=.02, n.s.) and negatively to Second Naiveté ($\underline{r}$=-.52, $\underline{p}$<.0001). Relativism and Second Naiveté were unrelated ($\underline{r}$=.10, n.s.). Frequency of church attendance was positively related to Orthodoxy ($\underline{r}$=.42, $\underline{p}$<.0001) and Second Naiveté ($\underline{r}$=.59, $\underline{p}$<.0001), unrelated to Relativism ($\underline{r}$=.02, n.s.) and negatively related to External Critique ($\underline{r}$=-.52, $\underline{p}$<.0001).

In order to measure the politically relevant dimensions in Flanders, four measures were used. All items were scored on a 5-point Likert scale (1=completely opposed, 3=neutral, 5=completely in agreement). Participants completed a 12-item economic conservatism scale and a 12-item cultural conservatism scale developed by De Witte (1990), as well as a 6-item Flemish nationalism scale and a 24-item racism scale (Duriez, 1998). The economic conservatism scale addresses issues such as the desirable impact of trade unions in companies, the desirable level of government interference in economics, and income differences. The cultural conservatism scale addresses issues like upbringing, work ethic, the position of women in society, abortion, euthanasia and premarital sex. The nationalism scale addresses issues like whether one is proud of one's national identity and whether one is in favor of the creation of a nation-state. The racism scale taps both subtle racism and blunt racism.[23] Estimates of internal consistency (Cronbach alpha's) were .78 for economic conservatism (Mean=2.51, SD=0.52), .71 for cultural conservatism (Mean=2.30, SD=0.50), .60 for nationalism (Mean=2.81, SD=0.68), and .92 for racism (Mean=2.11, SD=0.58). Economic conservatism was unrelated to cultural conservatism ($\underline{r}$=.03, n.s.) and positively to nationalism ($\underline{r}$=.17, $\underline{p}$<.001) and racism ($\underline{r}$=.19, $\underline{p}$<.0005). Cultural conservatism was positively related to nationalism ($\underline{r}$=.28, $\underline{p}$<.0001) and racism ($\underline{r}$=.39, $\underline{p}$<.0001). Nationalism and racism were positively related ($\underline{r}$=.34, $\underline{p}$<.0001).

Results

Initial correlation analysis

In order to get an overview of the relations between religiosity and value orientations on the one hand and political attitudes on the other hand, we computed Pearson correlations between the measures of religiosity, value orientations and political attitudes. Table 2 presents the relations between religiosity and the political attitudes in this study. Economic conservatism was, as expected, unrelated to frequen-

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[23]   Examples of items for economic conservatism, cultural conservatism, nationalism and racism are, respectively, "Differences between high and low incomes should remain the same", "Women should do the household and men should go out making money", "I am proud to be Flemish", and "We have to keep our race pure and fight mixture with other races". Note that it could be argued that the racism scale is not truly measuring racism. Billiet and De Witte (1991) have argued that scales like the one used here are comprised of two conceptually different components: Xenophobia and true racism. However, the scree test (Cattell, 1966) on the items belonging to this scale clearly pointed to one component only.

cy of church attendance, Orthodoxy and Second Naiveté and External Critique and negatively related to Relativism. Cultural conservatism was, as expected, positively related to frequency of church attendance, Orthodoxy and Second Naiveté, and unrelated to External Critique and Relativism. Nationalism was positively related to frequency of church attendance, and unrelated to Orthodoxy, External Critique, Relativism and Second Naiveté. The positive relation with frequency of church attendance was in line with our expectations. However, the relations with both Orthodoxy and Second Naiveté were not. Racism was, as expected, positively related to Orthodoxy and External Critique, unrelated to frequency of church attendance, and negatively related to Relativism. However, racism and Second Naiveté were unrelated (cf. Duriez, Fontaine & Hutsebaut, 2000; Duriez & Hutsebaut, 2000).[24]

Table 2   *Correlations between the religiosity measures and the political attitude measures and between the value orientations and the political attitude measures*

	Economic cons.		Cultural cons.		Nationalism		Racism	
Church attendance	.03		.21	****	.14	**	.02	
Orthodoxy	.04		.33	****	.08		.15	**
External Critique	-.12		-.08		.01		.13	*
Relativism	-.18	***	-.07		-.03		-.21	****
Second Naiveté	-.08		.23	****	.03		-.11	
Power	.32	****	.24	****	.18	***	.37	****
Achievement	.18	***	.27	****	.24	****	.39	****
Hedonism	.00		-.06		.04		.11	
Stimulation	.08		-.07		.16	**	.07	
Self-Direction	.01		-.24	****	-.01		-.04	
Universalism	-.24	****	-.33	****	-.26	****	-.54	****
Benevolence	-.19	****	-.22	****	-.17	***	-.24	****
Tradition	.05		.14	**	-.09		-.17	***
Conformity	.05		.34	****	.16	**	.28	****
Security	.08		.25	****	.14	**	21	****

* $p<.05$, ** $p<.01$, *** $p<.001$, **** $p<.0001$

Table 2 also presents the correlations between the value types and the political attitudes. As expected, economic conservatism correlated positively with Power and Achievement, and negatively with Universalism and Benevolence. Cultural conservatism correlated positively with Power, Achievement, Tradition, Conformity and Security, and negatively with Self-Direction, Universalism, and Benevolence. This was in line with our hypotheses, except for Stimulation. Nationalism correlated positively with Power, Achievement, Stimulation, Conformity and Security, and negatively with Universalism, Benevolence and

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[24]   It has often been argued that church attendance is curvilinearly related to both nationalism and racism (see Duriez & Hutsebaut, 2000). However, one-way ANOVA analyses (between-groups-design) yielded no evidence for this.

Tradition. This was in line with our expectations, except for Stimulation. Racism, finally, correlated positively with Power, Achievement, Conformity, and Security and negatively with Universalism, Benevolence, and Tradition. This was in line with our expectations, except that Tradition was negatively instead of positively related to racism.

Multiple regression analyses

To investigate whether religiosity measures had additional predictive power when controlling for values, we first compared the predictive power of the measures of religiosity and values in general. For this purpose, we separately inserted the religiosity scales and the values as a group in multiple regression analyses using the stepwise procedure (see Table 3). The procedure of Alf and Graf (1999) revealed that one can be 99% confident that the value orientations are better predictors of cultural conservatism ($.03 \leq R^2_{values} - R^2_{religion} \leq .29$), nationalism ($.01 \leq R^2_{values} - R^2_{religion} \leq .20$), and racism ($.22 \leq R^2_{values} - R^2_{religion} \leq .44$), but not of economic conservatism ($-.06 \leq R^2_{values} - R^2_{religion} \leq .17$). Next, we jointly inserted the religiosity scales as a group and the value types as a group in hierarchical multiple regression analyses. The predictive power increased significantly when the religiosity measures were added to the values ($F(5, 368)=6.36$, $p<.0001$ for economic conservatism, $F(5, 369=6.36$, $p<.0001$ for cultural conservatism, $F(5, 367)=3.02$, $p<.05$ for nationalism, and $F(5, 367)=3.35$, $p<.01$ for racism). Table 3 shows that the predictive power of the religiosity measures on the one hand and value types on the other hand was even nearly additive for economic conservatism and nationalism.

Table 3   Results of the multiple regression analyses with the political attitude measures as dependent variables and the religiosity measures and the value orientations as independent variables

	Economic cons. R^2		Cultural cons. R^2		Nationalism R^2		Racism R^2	
Religion	.07	****	.13	****	.03	*	.10	****
Values	.13	****	.29	****	.14	****	.36	****
Religion & Values	.20	****	.35	****	.17	****	.39	****

*$p<.05$, ** $p<.01$, *** $p<.001$, **** $p<.0001$

Second, multiple regression analyses, using the stepwise procedure, in which all religiosity measures and all value orientations were jointly inserted as independent variables, were performed to identify the most important predictors of the political attitude dimensions. Table 4 presents the significant predictors for each political attitude separately. Power was the most important predictor of economic conservatism, followed by External Critique, Second Naiveté and Relativism. Orthodoxy was the most important pre-

dictor of cultural conservatism, followed by Conformity, Universalism, Second Naiveté, Security, Achievement, Benevolence and Self-Direction. For nationalism, Achievement was the most important predictor, followed by Stimulation, frequency of church attendance, Conformity and Security. Universalism was by far the most important predictor of racism, followed by Conformity, Orthodoxy, Benevolence, Tradition, Achievement, and Security.

Table 4 *Reduced models for the prediction of the political attitude measures, the amount of variance these models explain and the standardized parameter estimates and t-values for each significant predictor*

Economic Conservatism	beta	t		R^2=.17
Power	.32	6.69	******	
External Critique	-.28	-5.08	******	
Second Naiveté	-.18	-3.39	****	
Relativism	-.10	-2.10	*	
Cultural Conservatism	**beta**	**t**		**R^2=.34**
Orthodoxy	.19	4.17	******	
Conformity	.19	4.15	******	
Universalism	-.16	-3.20	***	
Second Naiveté	.15	3.20	***	
Security	.13	2.99	***	
Achievement	.14	2.85	***	
Benevolence	-.13	-2.84	***	
Self-Direction	-.10	-2.11	*	
Nationalism	**beta**	**t**		**R^2=.15**
Achievement	.22	4.51	****	
Stimulation	.21	4.39	****	
Church Attendance	.16	3.35	***	
Conformity	.13	2.65	**	
Security	.11	2.34	*	
Racism	**beta**	**t**		**R^2=.37**
Universalism	-.38	-7.71	****	
Conformity	.14	3.20	**	
Orthodoxy	.13	3.08	**	
Benevolence	-.12	-2.69	**	
Tradition	-.11	-2.61	**	
Achievement	.11	2.19	*	
Security	.08	2.01	*	

* p<.05, ** p<.01, *** p<.001, **** p<.0001

Discussion

Results show that religiosity directly contributes to the prediction of political attitudes (although only to

some extent). Thus, our data seem to support the hypothesis that religiosity, even apart from the value system it promotes, continues to be important in predicting political attitudes in Flanders. However, this conclusion has to be met with caution. Our data do not allow us to decide on whether our findings are simply due to the fact that the Schwartz (1992) measure is missing out on some important, culturally specific, religious values, and/or whether religion is indeed associated with political attitudes in Flanders in a more direct way. In other words, the religiosity measures could contain some specific (religious) values which are important in the prediction of political attitudes, but which are not captured by the Schwartz. Thus, our findings could be due to the influence of religious values, which are not captured by Schwartz (1992). Further research into the content and structure of the value domain is needed to clarify this. Nevertheless, results point to the fact that in general value orientations are better predictors towards all political attitudes than religiosity measures (except for economic conservatism).

Each political attitude dimensions seems to be associated with a more or less unique combination of religious attitudes and values. Economic conservatism was unrelated to frequency of church attendance, Orthodoxy and Second Naiveté, and was negatively related to External Critique and Relativism. This was largely in line with our expectations, and suggests that, although the Roman Catholic Church condemns the large inequalities brought about by economic conservatism, rejection of this form of conservatism is mainly associated with the Exclusion of Transcendence. Cultural conservatism was, as expected, positively related to frequency of church attendance, Orthodoxy and Second Naiveté, and tended to be negatively related to both External Critique and Relativism. Apparently, the distinction between Catholics and non-Catholics can indeed, to a large extent, be grasped in terms of cultural vs. economic conservatism (De Witte & Billiet, 1999). Nationalism was, as expected, unrelated to External Critique and Relativism, and positively related to frequency of church attendance, but unrelated to Orthodoxy and Second Naiveté. One possible explanation for the finding that nationalism is related to frequency of church attendance, but not to Orthodoxy and Second Naiveté, is that although people holding nationalist convictions go to church, they cannot truly be regarded as believers.[25] Finally, racism was positively related to Orthodoxy and External Critique, unrelated to frequency of church attendance, and negatively related to Relativism and Second Naiveté. This supports the idea that racism is associated with closed-mindedness rather than with religiousness (Duriez & Hutsebaut, 2000). The relations between the value types and political attitudes also largely confirmed the hypotheses. Economic conservatism was positively related to self-enhancement (Power and Achievement) and negatively to self-transcendence (Uni-

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[25]   Support for this interpretation stems from the following analysis. On the basis of the question "Do you belief in the existence of God?", we divided our sample in three subsamples: disbelievers (those who do not believe in God), doubters (those who doubt the existence of God) and believers (those who believe in God). Church attendance and nationalism were positively related among disbelievers ($r = .18$, $p<.05$, $N = 191$), unrelated among doubters ($r = .02$, n.s., $N = 159$) and negatively among believers ($r = -.27$, n.s., $N = 33$). However, this last correlation did not reach significance, because of the small number of believers. Thus, church attendance and nationalism go hand in hand only among disbelievers.

versalism and Benevolence). Economic conservatism and self-enhancement go hand in hand, and apparently this self-enhancement is attained at the expense of others. Although economic and cultural conservatism were unrelated, they show a lot of similarity in terms of the associated value pattern. Cultural conservatism is also positively related to self-enhancement and negatively to self-transcendence. But, contrary to economic conservatism, cultural conservatism was, as expected, positively related to conservation values (Tradition, Conformity, Security) and negatively to Self-Direction. The main difference between economic conservatism and cultural conservatism seems to be that the latter is associated with the conservation of the own culture, while the former is not. Apparently, attaching importance to conservation and attaching importance to Self-Direction is incompatible. Another major difference is that cultural conservatism is related to Inclusion of Transcendence, whereas economic conservatism is not. Nationalism was positively related to both economic and cultural conservatism, and showed a lot of similarity to both forms of conservatism in terms of the associated value pattern. Nationalism was positively related to self-enhancement, Stimulation and partly to conservation (Conformity and Security only), and was negatively related to self-transcendence. It is noteworthy, however, that unlike both forms of conservatism, nationalism was positively related to Stimulation. This could suggest that a substantial amount of people perceive nationalist attitudes as of a rebellious nature. Moreover, the fact that nationalism is perceived as of a rebellious nature, could account for the fact that nationalism was unrelated, contrary to expectations, to Tradition. Racism, finally, showed a very similar value pattern as nationalism, despite the fact that racism and nationalism, as we mentioned before, showed a very different pattern of associations with the religiosity dimensions. Thus, in general, each political attitude is associated with a more or less unique combination of religious attitudes and values. Especially the value pattern associated with racism is, in several ways, unique. First, the greater strength of relations with the values suggests that racism is more value-related than nationalism or any other political attitude. In particular, racism is not only associated with a tendency to reject self-transcendence, but also with a tendency to reject Tradition. Furthermore, racism is related with self-enhancement (even more than economic conservatism), and with Conformity and Security (like cultural conservatism and nationalism).

Results also show that the relative importance of religious attitudes and values in predicting political attitudes varies in function of the various political attitudes. First, economic conservatism is primarily associated with Power. Moreover, all religious attitudes characterized by a reflection about the religious realm negatively predicted economic conservatism. Second, cultural conservatism is associated with a preparedness to conform to society and the religious framework society presents. Moreover, cultural conservatism is associated with a focus on Achievement and Security and/or on self-transcendence and Self-Direction. Third, nationalism is associated with Achievement and Stimulation, and also with a tendency to conform to society and the religious framework society presents, even without actually believ-

ing. Security is also important, but much less than is often supposed. Racism, finally, is associated with not being concerned about others, and with a preparedness to conform to society and, in an Orthodox way, to the religious framework society presents. Racism, in Flanders, is apparently not in line with attaching importance Tradition. Economical concerns (e.g., Power and Achievement) and security concerns are only slightly important. The fact that each political attitude is associated with a more or less unique value pattern casts doubt on the ideas of both Rokeach (1973, 1979), who singled out equality and freedom as the paramount political values, and Middendorp (1978), who singled out equality and freedom as the values underlying respectively economic conservatism and cultural conservatism. Results clearly point to a more complex picture. Moreover, whereas we cannot deny that Universalism (the value type to which equality belongs) appears to be important in predicting cultural conservatism and racism, it predicts neither economic conservatism nor nationalism. Self-Direction (the value type to which freedom belongs) turned out to be even less important (cf. Cochrane, 1979; Van Gyes & De Witte, 1999). Self-Direction was only a marginal predictor of cultural conservatism, and did not predict the other political attitudes.

Finally, several important limitations of this study need to be mentioned. First, participants in this study were university students ranging in age from 17 to 23 years. Thus, further research is needed to cross-validate these results in other populations, especially since it is possible that a solid and truly coherent value systems which lies at the basis of the formation of one's political attitudes only fully develops at a somewhat later age. Hence, in an older sample, religiosity might no longer provide additional predictive power towards political attitudes. However, on the other hand, it can also be argued that in an older population religiosity might have a more direct influence on political attitudes, because older people, at least in Flanders, grew up in a society that was a lot less secularized. Second, our study was limited to one specific cultural setting only, namely Flanders (Belgium). Future research will have to determine whether our findings can be generalized to other countries. Finally, results are correlational in nature, and thus, strictly speaking, no conclusions regarding causality can be drawn. However, from a theoretical point of view, it can be argued that, if one manages to alter certain value orientations, this will probably lead to a change in the associated political attitudes. One cannot deny that the current capitalist system, resulting from economic conservatism, produces large inequalities and/or certain needs, which, in a variety of ways, instigate massive migration. Nor can one deny that this massive migration is unavoidably turning societies into highly multicultural societies. Coping with these changes and the accompanying challenges, is therefore an important task for every society. Obviously, political attitudes such as racism, cultural conservatism, and nationalism are at least potentially problematic in this respect. Results suggest that raising the importance attached to Universalism could be an effective strategy to counter racism and cultural conservatism. When combined with attempts to degrade the importance attached to

Power, Achievement and Conformity, this strategy could even be more effective. In the long run, the educational system could play an important role in all this.

The Fence around the Meadow

PART 1

Religion and Psycho-Epistemology

Abstract

The purpose of the present study was to investigate the relationship between psycho-epistemological styles and three religious dimensions. The psycho-epistemological items which were used in our study are based on the three factors (naive realism, logical inquiry and skeptical subjectivism) which Wilkinson and Migotsky (1994) found in their attempt to develop a single comprehensive measuring device. The factor analysis with VARIMAX rotation on the 32 epistemological items did indeed reveal three significant factors, but those could better be interpreted as dualism, relativism and commitment (Perry, 1970). The religious dimensions were orthodoxy, historical relativism and external criticism (Hutsebaut, 1996, 1997a, 1997b). Results showed that dualism correlates with orthodoxy and external criticism, and that relativism and commitment correlate with historical relativism.

Introduction

People have always been interested in what knowledge is and how it can be acquired, and have always asked themselves questions such as: How can we be sure about what we think we know? Such questions have led to many trends in philosophy and more specifically these questions can be situated at the core of epistemology, which is the science of knowledge. Epistemology deals with the type of questions we presented above and tries to illuminate the philosophical assumptions that define the different epistemological stances, e.g.: realism, romanticism, constructionism, empiricism, rationalism, pragmatism and many more. Epistemology evaluates various knowledge beliefs and is usually applied in a narrow traditional manner. Some researchers (Erwin, 1981; Royce, 1967; Royce & Mos,1975), however, have tried to use this epistemological -isms as potentially useful sources of human variation. Wilkinson and Migotsky (1994) performed a factor analysis on some of these epistemological style inventories. In this context, an epistemological style is defined as the way in which an individual thinks about knowledge and its acquisition, and of course, there are various styles of this kind that can be identified. At this point epistemology is often referred to as psycho-epistemology, because it focuses on the individual differences rather than on the broad philosophical terms.

Review of past approaches

One of the first researchers who referred to psycho-epistemological styles was Royce (1964). He detected three epistemological dimensions, which he labeled rationalism, empiricism and metaphorism. Each of these styles has its own value system, affective system, cognitive processes and criteria concerning justified knowledge. Because people have different preferences along these dimensions, each individual has his own world-view. In further research, Royce and Mos (1975) constructed the Psycho-Epistemological Profile (P.E.P.). With this questionnaire, people could be situated on the three dimensions. However, despite the work of Royce, research with the PEP has never played a dominant role in psycho-epistemological research. A few exceptions are the studies conducted by Kearsley (1976), Lyddon (1989, 1991) and Hill and Stuckey (1993).

A second important approach is Perry's (1970). He studied the cognitive development and intellectual growth of college students, and found an evolution from dualism to relativism to commitment over nine phases. The three highest phases comprise commitment. People can stagnate in one of these nine phases or even regress to earlier ones. Although Perry spent many years researching his model, he didn't create a test to situate people on his scheme. Later on, however, Erwin (1981) developed his Scale of Intellectual Development (S.I.D.), which contains a few psycho-epistemological dimensions, including the concepts dualism and relativism from Perry (1970), and Ryan (1984a, 1984b) constructed a brief Adherence Scale, to measure the relative presence of dualism and relativism in the individual's

thinking. In contrast with the PEP, there has been a lot of research on the Perry scheme. Besides the investigations of Erwin and Ryan we can mention some other interesting studies, such as those conducted by Meyer (1977), Wilkinson and Schwartz (1987) and Bennet, Niggle and Stage (1990).

Another important scale, the Attitudes About Reality scale (AAR) which was constructed by Unger, Draper and Pendergrass (1986), tries to measure the implicit causal assumptions about the relationship between people and the social or physical context in which they live, and focuses on one particular dimension in epistemology: A continuum from a logical-positivist to a social-constructivist point of view. People on the former pole tend to view our understanding of reality as stable, irreversible and determined, whereas people on the latter pole tend to have a different approach: They tend to agree with views presenting our understanding of reality as changeable and depending on historical and cultural definitions. These personal epistemologies would be related to demographic markers such as religion and birth order as well as to variables such as age and socio-political identification. However, Jackson and Jeffers (1989) claim that the AAR measures a different continuum from what its authors suppose. They claim that it measures at least two dimensions, which they label social determinism and individual determinism. A possible third dimension, logical-positivism, would be irrelevant (as a construct).

Worth mentioning as well here is the Myers-Briggs Type Indicator (MBTI). Although it is used as a psychometric questionnaire for non-psychiatric personality types, it seems to us that it also corresponds with cognitive and psycho-epistemological styles. In the MBTI, each individual can be situated on four bipolar scales: Introversion / Extraversion, Sensation / Intuition, Thinking / Feeling, and Judgement / Perception. Bruhn, Bunce and Greaser (1978), Corman and Platt (1988) and Schmidt and McCutcheon (1988) suggest that cognitive and epistemological variables like flexibility, field-dependence / field-independence, rationalism / empirism and tolerance of ambiguity are all connected with certain types of the MBTI. Redford, McPherson, Frankiewicz and Gaa (1995) correlate the MBTI-types with the phases of moral development proposed by Kohlberg, of which Bokoros, Goldstein and Sweeney (1992) suggest that they are also cognitive styles. Finally, Wilkinson and Migotsky (1994) consider the Thinking / Feeling scale as a psycho-epistemology measure.

Another important inventory that was developed is the Scale of Adult Intellectual Development (SAID). This scale is based on the reflective-judgments model of Kitchener, King, Wood and Davison (1989). This model describes seven qualitatively different sets of epistemic presuppositions. These are sequentially and hierarchically ordered, each higher level demanding a more complex and more effective form of justification. It implies a connection with age since it is a developmental model in which no stages can be skipped. Epistemic-cognition is differentiated from cognition (e.g., memorizing, calculating) and meta-cognition (e.g., evaluating of an algorithm used to solve a problem). Kitchener et al. developed the reflective-judgments interview to evaluate the subjects and to situate them in one of the stages. Subjects

are presented with four relatively unstructured problems that represent two opposing points of view. More often, however, the SAID-65, a questionnaire based on the reflective-judgments model, is used to determine which stage is appropriate to a certain subject.

Because theories of psycho-epistemology have been developed in conjunction with cognitive and personality-theories as well, there are numerous theories, and we will have to limit ourselves here to those approaches that address differences in learning-styles. In contrast to Perry (1970), Schommer (1990, 1992, 1993; Schommer and Walker, 1995) argues that personal epistemology is not unidimensional and does not develop in a fixed progression of stages. She supposes that psycho-epistemologies are composed of several more or less independent dimensions: Structure, certainty, and source of knowledge as well as control and speed of knowledge acquisition. Gregorc (1984) makes a classification into four psycho-epistemic styles based upon the crossing of sequential or random processing with concrete or abstract data. Kolb (1984) presents four styles, which are defined by an intersection of his two dimensions: Apprehension vs. comprehension and extension vs. intention.

Table 1   *Psycho-epistemological dimensions and definitions*

Authors	Dimensions	Definitions
Royce	Rationalism	Knowledge is obtained through logical, conceptual, and analytical thinking.
	Empiricism	Knowledge is born of structured observations and data.
	Metaphorism	Knowledge is subjective & personal, involving integration & the use of symbols.
Perry	Dualism	Knowledge equals facts, these facts being stable and absolute.
	Relativism	Knowledge is context dependent, and there are no absolutes.
	Commitment	Knowledge is not absolute, but choices are made. Responsibility is important.
Unger et al.	Logical-Positivism	Knowledge is stable and irreversible and beyond our control.
	Social-Constructivism	Knowledge is dynamic and context dependent.
Gold et al.	Thinking	Knowledge is the result of logic and intellectual reasoning.
	Feeling	Knowledge is defined through feelings, emotion, and affect.
Martin et al.	Absolutism	Knowledge is reached through (1) the senses, (2) calculations, or (3) experts.
	Relativism	Knowledge is an arbitrary choice and context dependent.
	Evaluatism	Knowledge is not absolute. Responsibility and value-judgements are important.
Wilkinson et al.	Naive Realism	Knowledge consists of facts. There is one right answer to all questions.
	Logical Inquiry	Knowledge is based on logic, reasoning and (to a lesser extent) observations.
	Skeptical Subjectivism	Knowledge is the antithesis of Naive Realism (uncertain, reflective & complex).

Because of the proliferation of models of psycho-epistemological styles, it a comparison of theories is necessary to come to more general concepts and better insights. Martin et al. (1994) did such an investigation into the structure of epistemological styles. More concretely, they compared the SAID with other psycho-epistemic concepts. Factor analysis of the items of the SAID revealed three factors, interpreted

as representing three underlying and overlapping developmentally related epistemic strategies: absolutism, relativism and evaluatism. In relating these strategies with other concepts, they found significant correlations between the Absolutism scale of the SAID and the Dualism scale of the SID, and between the Relativism scale of the SAID and the Relativism scale of the SID.

Of particular interest to our study as well is the article of Wilkinson & Migotsky (1994), in which they perform a factor analysis on a few epistemological style inventories. Their goal was the development of a single, comprehensive measuring device. Seven epistemological-scales were involved in this study, taken from five epistemological inventories. The seven scales were relativism, dualism and rationalism (taken from the SID), empiricism and metaforism (taken from the PEP), social-constructivism / logical-positivism (taken from the AAR) and Gold and Reimer's Thinking-Feeling (T-F) (1974). Three factors were extracted, which were labeled naive realism, logical inquiry and skeptical subjectivism.

The present study

The purposes of the present study are twofold: (1) to find more general psycho-epistemological styles and (2) to correlate these dimensions with different religious beliefs. The psycho-epistemological dimensions we used in our research are based upon the factors of Wilkinson and Migotsky (1994), completed with items from other psycho-epistemological inventories. To relate these dimensions to religious beliefs, we used the three factors, which Hutsebaut (1996) found: Orthodoxy, External Critique and Historical Relativism. These dimensions were found in several studies after factor analysis of religious items, and can be situated on the dimensions Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolical (Wulff, 1991, 1997).

Orthodoxy means that there is a tendency to hold the opinion that on each religious question there is only one right answer, which is sustained by authority and which remains the same over time. Prototypical orthodox believers accept the answers from persons perceived as religious authorities. Moreover they are very certain about their beliefs and they report a positive relation to God, though this relation also includes elements of frustration, guilt and anxiety. In addition, they are literal religious thinkers and believers, although they tend to accept any religiously colored statement. This religious style is positively related to anxiety in the face of new questions, feelings of anomie and ethnocentricity (Hutsebaut, 1997b). Orthodoxy is thought to be a measure of what Wulff (1997) calls Literal Affirmation. External Critique means that there is a tendency towards non-belief or at least the meaning and possibility of religious belief is fundamentally questioned. Prototypical persons taking the external critique position want to be sure of their belief content (which they are not) and reject literal as well as symbolic thinking about religious statements. Moreover they feel rebellious toward God and want to be autonomous, relying on their own norms instead. This religious style is positively related to fear of uncertainty and feelings of

anomia (Hutsebaut, 1997b). External Critique is thought to be a measure of what Wulff (1997) calls Reductive Interpretation. Historical Relativism means that there is a tendency towards believing, but there is also a tendency to think and speak about belief in a historical way. Prototypical persons taking the historical relativism position think about religion in a symbolical way and are therefore aware of the fact that other religious meanings are also possible and that meaning can change over time. For them, speaking about the absolute is a searching process, a possibility beside other possibilities. This religious style is positively related to openness to complex questions and negatively related to anxiety in the face of new questions, feelings of anomie and ethnocentricity (Hutsebaut, 1997b). Historical Relativism is thought to be a measure of what Wulff (1997) calls Restorative Interpretation.

Hypotheses

We anticipate correlations between the psycho-epistemological dimensions and the religious ones. More concretely, it seems to us that Naive Realism can be expected to correlate with Orthodoxy, because of the importance of authority, the dualism, the literal thinking, and the inability to cope with doubts that are characteristic of both concepts. Historical relativism and External Critique could be connected with Skeptical Subjectivism because reflection and the acceptance of uncertainty characterize them both. Logical Inquiry could be related to External Critique as both emphasize rational thinking.

Method

Sample

The total number of questionnaires was 218. Ninety-nine subjects were male (45%) and 119 were female (55%). The mean age of the respondents was 40.23 (SD=12.29, min.= 18, max.= 75). Men and women differed little in mean age by gender (M=40.45, F= 40.05). In our analysis, we classified all subjects in four age groups: less then 25, 25 to 40, 40 to 55 and above 55. The subjects were sorted into four categories according to their educational level. The most highly educated group (68.8%, $\underline{N}$ = 150) consisted of subjects who obtained a university-degree or who were students at a university. The lowest level (1.4%, $\underline{N}$ = 3) consisted of people who completed elementary school only. The second group (20.6%, $\underline{N}$ = 45) was larger than the third (9.2%, $\underline{N}$ = 20). The subjects in our study were highly educated in comparison to the general population. Considering attendance at weekly church service: 45.2% ($\underline{N}$ = 98) of the subjects attend every week and only 12.9% ($\underline{N}$ = 28) never go, not even on special occasions. These percentages do not represent the average church attendance in Flanders, since only 17% of the people go to church regularly. Of all subjects, 98.2% ($\underline{N}$ = 213) described themselves as being raised catholic, whereas 82% ($\underline{N}$ = 172) still call themselves Catholics today.

Measures

The first thing subjects had to do was to choose one out of six belief-statements: (1) absolute believers (25.1%, $\underline{N}$ = 54), (2) believers with questions (43.7%; $\underline{N}$ = 94), (3) doubters (18.1%, $\underline{N}$ = 39), (4) rather non-believers (6.5%, $\underline{N}$ = 14), (5) non-believers (3.3%, $\underline{N}$ = 7) or (6) agnostics (3.3%, $\underline{N}$ = 7). The remainder of our investigation was based on a questionnaire containing items accompanied by seven point Likert scales (1=complete disagreement, 4=neutral, 7=complete agreement).

Because we wanted to get the broadest possible view of psycho-epistemology, we constructed our own questionnaire concerning psycho-epistemological styles. The use of this questionnaire can be seen as purely exploratory. Relying on the factors found in the study of Wilkinson and Migotsky (1994) we constructed a pool of 24 items: eight for each factor they represent. Ten of these items were selected from the highest-loading ones on these factors. We then added items representing dimensions that were found in studies using other inventories which could be supposed to load on the Wilkinson and Migotsky factors: three were taken from the AAR, five from the adherence-scale from Ryan (1984a,1984b), five from the PEP and one from the MBTI. In addition eight commitment-items, extracted from some interviews Perry mentioned in his publication (1970), completed this section of the questionnaire. Finally, the thirty-two items we acquired in this way were translated into Dutch.

Twenty-eight items were used to capture the religious dimensions, eight for orthodoxy and external critique and twelve for historical relativism. Twenty-four of these items had already been used in the earlier research (e.g., Hutsebaut, 1996, 1997a, 1997b) that resulted in the expected factors.

Results

A principal components analysis (using a VARIMAX rotation) on the 28 religiosity items resulted in the expected factors which accounted for 84% of the total variance. The eigenvalues of external criticism (≈factor1), orthodoxy (≈factor2) and historical relativism (≈factor3) were 5.34, 3.02 and 1.64. Estimates of internal consistency (Cronbach's alpha) were .72, .79 and .67 for orthodoxy, external critique and historical relativism respectively.

A principal components analysis (using a VARIMAX rotation) was conducted on the 32 psycho-epistemology items. This analysis revealed three factors. These factors had eigenvalues of 3.12, 1.06 and 1.95, explaining 69% of the total variance. However, these factors did not match those reported by Wilkinson and Migotsky (1994). Searching for another interpretation we concluded that these factors could be interpreted as Perry's dimensions dualism (≈factor1), relativism (≈factor2) and commitment (≈factor3). The first factor is characterized by items expressing a preference for unambiguity. There is only one right answer for all problems and doubts are annoying. Knowledge consists of absolutes and

can only be guaranteed by authority. The second factor is characterized by items referring to the opinion that knowledge is context dependent and that there are no absolutes. The third factor consists of items capturing more than simple relativism: Although there are no absolutes, choices are made and responsibility is important. Estimates of internal consistency (Cronbach's alpha) were .76, .65 and .65 for dualism, relativism and commitment respectively

Because we didn't find the factors we expected on psycho-epistemology, our initial hypotheses had to be reformulated. Taking into account the positions identified by Perry (1970) and the definitions of the religious dimensions, we anticipated the following patterns. Orthodoxy can be expected to correlate with dualism, and historical relativism can be expected to correlate with relativism and commitment. The connections between external critique and the psycho-epistemological dimensions were rather unclear. The results confirmed these hypotheses, although we have to admit that the correlations, though significant, are relatively small. In addition the results showed that external critique was connected with dualism (see Table 2).

Table 2   Correlations between the psycho-epistemological and the religious dimensions

	Orthodoxy	External Critique	Historical Relativism
Dualism	.32 ***	.29 ***	-.08
Relativism	.00	-.09	.38 ***
Commitment	-.07	-.07	.22 **

* p<.01, ** p<.001, *** p<.0001

Besides the correlations between the psycho-epistemological and the religious factors we also found a relation between these dimensions and some demographic variables. Regarding gender, the only significant difference was found between educational levels. The men in our sample were more highly educated than the women (3.69>3.47, p<.05). Age correlated positively with all psycho-epistemological and religious dimensions, except for external critique. However the highest correlations were found for dualism (r=.35, p<.0001) and orthodoxy (r=.32, p<.0001). For these two variables, there were significant differences between almost all age groups (α=.05, df=201 for dualism, α=.05, df=208 for orthodoxy). This finding, that as age went up, so did dualism as well as orthodoxy, was a bit surprising and will be addressed later (see Discussion).

The belief-statements proved to be correlated with the religious dimensions (rs = .36, p<.0001, -.59, p<.0001 and .30, p<.0001, for orthodoxy, external critique and historical relativism respectively) but not with the psycho-epistemological styles (rs = -.02, n.s., -.02, n.s. and .03, n.s., for dualism, relativism and

commitment respectively). This finding suggests the limitations of simple measures of religion. It should be clear that simply asking people whether they believe or not does not reveal how they think about their belief position. Nor does it provide information on why they do or do not believe. The correlations between the belief-statements and the religious dimensions were as could be expected: Positive for orthodoxy and historical relativism and negative for external critique. Further analysis showed that orthodox people were mainly 'absolute believers' (statement a) (α=.05, df=203) whereas historical relativists were to be found in the first three statements (a, b and c) (α=.05, df=196) with an emphasis on a belief with questions. The statements c,d e and f were significantly more chosen by people who were external critics (α=.05, df=195).

Discussion

In our exploratory search for common factors in psycho-epistemology we found the dimensions of Perry (1970) instead of the expected factors of Wilkinson and Migotsky (1994). This doesn't mean that the factors of Perry are *the* dimensions in psycho-epistemology. There is considerable overlap among many psycho-epistemological dimensions (cf. Table 1). In particular, we think of the dimensions Absolutism ($\approx$Dualism), Relativism ($\approx$Relativism) and Evaluatism ($\approx$Commitment) in the publication of Martin, Silva, Newman and Thayer (1994), and of the dimensions Logical Positivism ($\approx$Dualism) and Social Constructionism ($\approx$Relativism) in the publication of Unger, Draper and Pendergrass (1986). Wilkinson and Migotsky (1994) made a serious effort to capture the broad range of dimensions in psycho-epistemological research. However, the results of our investigation point to the concepts dualism, relativism and commitment instead. Nevertheless, we can not fully agree with the fact that the concepts of Perry (1970) are embedded in a developmental scheme. In our investigation, for example, older subjects were found to think more dualistically, which is opposed to Perry's ideas. These results could be explained if we consider relativism as a contemporary phenomenon, which is also suggested by Perry. Anyway, we did not find any indication in our results to support this developmental approach. We should, however, not forget that Perry's study was of college students only, so maybe if the correlation with age were limited to the university age sample, Perry's progression would show up.

The analysis on the religious items did result in the expected factors, which can be described as three religious-cognitive styles: Orthodoxy, external critique and historical relativism. Both orthodoxy and external critique turned out to correlate significantly with dualism only. It seems that both groups use a common dualism between church and bible on the one hand and (critical) society and scientific discoveries that call into question any form of belief on the other hand. Although orthodox subjects make a choice in favor of the church, whereas external critics accept the skepticism of society and science, the

underlying thought processes seem to be the same. Historical relativism turned out to correlate with relativism and commitment. This could be expected, since both dimensions are considered to be part of this religious-cognitive style: Historical relativists are supposed to be exhibit a certain religious commitment even though they are aware of the relative aspect in believing.

In conclusion, psycho-epistemological research appears to be able to contribute to the understanding of other concepts in psychological science because psycho-epistemological dimensions represent a personal world view, which has an enormous impact on all aspects of an individual's life. The significance of these dimensions was shown in our investigation. Nevertheless, the operationalization of the psycho-epistemological dimensions remains problematic. Especially for the commitment factor. It might currently be too ambitious to classify subjects in three or more groups, or to create an epistemological profile for each subject on the basis of only a couple of items. To clarify our view on the different dimensions found in previous research and to examine the significance of developmental elements in psycho-epistemology, we feel it necessary to start with extensive interviews (which should not be limited to university students only) which could become the basis for a more reliable questionnaire.

PART 2

Religion and Morality

Abstract

The present research investigates the relation between the religiosity dimensions which Wulff (1991, 1997) described (Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic) and both moral attitudes and moral competence. The Post-Critical Belief scale (Duriez, Fontaine & Hutsebaut, 2000) was used as a measure of Wulff's religiosity dimensions, and the Moral Judgment Test (Lind, 1998) was used to measure both moral attitudes and moral competence. Results from an adolescent sample (N = 138), a student sample (N = 372) and a sample of adults affiliated to the Roman Catholic Church (N = 294) suggest that whereas the Literal vs. Symbolic dimension shows substantial relations with moral attitudes and moral competence, the Exclusion vs. Inclusion of Transcendence dimension is unrelated to both of them. This suggests that there is no intrinsic relationship between religiosity and morality. However, results also suggest that religiously affiliated persons, in general, exhibit low moral competence. The content of the moral dilemmas that were presented cannot account for this.

Introduction

Recently, Fontaine et al. (in press) have shown that the religiosity dimensions which Wulff (1991, 1997) described (Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic) can adequately be captured via the Post-Critical Belief scale (Duriez, Fontaine & Hutsebaut, 2000; Fontaine et al., in press). This allows for a nuanced study of the religiosity-morality issue, in which the effect of being religious as such is separated from the effect of the way in which one is dealing with the religious realm. This is the aim of the present study. First, the theory of Wulff will be summarized, followed by a brief presentation of the Post-Critical Belief scale. Second, the difference between moral attitudes and moral competence will be highlighted, followed by a brief presentation of the Moral Judgment Test. Third, hypotheses regarding the relation between the religiosity dimensions and moral attitudes and moral competence will be formulated. Finally, results of the present study will be presented and discussed.

The theory of Wulff

According to Wulff (1991, 1997), all possible approaches to religion can be summarized along two bipolar dimensions. The Exclusion vs. Inclusion of Transcendence dimension specifies whether the objects of religious interest are granted participation in a transcendent reality. The Literal vs. Symbolic dimension indicates whether religious expressions are interpreted literally or symbolically. These dimensions define four basic attitudes toward religion. Literal Affirmation represents a position in which the literal existence of religious objects is affirmed. Literal Disaffirmation represents a position in which one neither beliefs in the literal meaning of religious words nor in the possibility that these words can have a symbolic meaning. Reductive Interpretation represents a position in which one denies reality to the transcendent referent of religious language and claims a privileged perspective on the true meaning of religion's myths and rituals. Restorative Interpretation represents a position in which one posits the transcendent realm as real, but in which one searches for the symbolical meaning instead.

Building further on this, Duriez, Fontaine & Hutsebaut. (2000) constructed the Post-Critical Belief scale in order to capture four approaches to Roman Catholic religion that map onto Wulff's scheme: Orthodoxy, External Critique, Relativism and Second Naiveté. These approaches provide measures of Literal Affirmation, Literal Disaffirmation, Reductive Interpretation and Restorative Interpretation respectively. Recently, however, Fontaine et al. (in press) have argued that the Post-Critical Belief scale also provides direct measures of Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic. An individual's position in Wulff's scheme can then be identified on the basis of these measures. In this way, the effects of being religious or not (Exclusion vs. Inclusion of Transcendence) can be disentangled from the way in which religion and religious contents are approached (either in a literal or in a symbolical way).

Moral Attitudes vs. Moral Competence

Within the Kohlbergian research tradition (i.e., Colby et al., 1983, 1987a, 1987b; Kohlberg, 1969, 1976, 1981, 1984; Rest, 1974, 1979, 1997), the concept of moral reasoning is defined as the individual's socio-moral perspective: The characteristic point of view from which the individual formulates moral judgments. In this line of research, participants are usually offered moral dilemmas. What is characteristic of this kind of dilemmas is that there is no easy way out. There is a conflict between different moral principles, and each possible solution is doomed to conflict with some of these moral principles. Participants are asked to argue, either freely (as is the case in Kohlberg's Moral Judgment Interview) or via forced choice (as is the case in Rest's Defining Issues Test) why it would be justified to chose a certain outcome. On the basis of this kind of research, and drawing on Piagetian assumptions concerning stagewise cognitive development, Kohlberg (1984) proposed a six stage model to describe moral development. These six stages are divided, two by two, in three distinctive levels. The preconventional level has been described as a self-perspective. Social norms are either not comprehended or ignored, and hence fail to enter into the process of moral reasoning. The guiding moral principle is to avoid punishment (stage 1) and to satisfy one's needs (stage 2). In the conventional level, social norms as such guide the process of moral reasoning. Of central importance are being a nice person (stage 3) and conforming and obeying to as well as trying to maintain the social order (stage 4). Finally, in the post-conventional level, one no longer relies upon the social norms, but rather on the moral principles upon which these norms are based. There is a focus on the legal viewpoint, including the possibility to change the law when at odds with rational considerations of social utility (stage 5) and on abstract ethical principles, such as equality and respect for the dignity of human beings, which appeal to logical comprehensiveness and universality (stage 6). When there is a conflict between conventions and moral principles, a conventional reasoner is expected to judge by convention rather than by moral principle, whereas a post-conventional reasoner is expected to judge by moral principle rather than by convention. However, this does not imply that individuals at the post-conventional level are also more moral. As Wagner (1990) has noted, a higher level of moral development is not defined by the "correctness" of one's moral conclusions, but by the concepts and reasons employed in arriving at these conclusions. Individuals who have reached higher moral development levels have a repertoire of concepts and justifications which allows them to comprehend the moral reasoning of persons at lower levels. Conversely, persons at lower moral development levels are unable to fully understand and appreciate the justifications used by those who have reached higher moral development levels. The Kohlbergian tradition thus presupposes an affective-cognitive parallelism in moral development (e.g., Kohlberg, 1969, p. 349). A preference for higher stages (the affective component) is supposed to develop simultaneously with the ability to use the underlying perspective in a consistent and differentiated manner (the cognitive component).

But as Lind (1985) has noted, although this affective-cognitive parallelism is one of the core assumptions of Kohlberg's theory, this hypothesis had not been dealt with adequately in the design of research methods, and hence, was never empirically assessed. To render it possible to empirically test this hypothesis, a new research design was needed. For this purpose, Lind (e.g., 1978, 1995, 1998; Lind & Wakenhut, 1985) constructed the Moral Judgment Test (MJT) which allows empirical investigation of this supposed affective-cognitive parallelism. According to Lind (1995), it is insufficient and even theoretically invalid to focus exclusively on the moral principles someone pursues (= the affective aspect). One should also look at how competently or how consistently a person applies these principles in the decision making process (= the cognitive aspect). A child may hold high moral principles, such as justice and keeping one's promises, but will lack the competence to apply these principles in a consistent but differentiated manner to everyday decision-making. Thus, according to Lind (1995), a consistent moral judgment can only be expected in highly morally developed subjects. But this consistency must be defined with respect to a well-reasoned criterion. The criterion Lind puts forward is that people should appreciate a moral principle independently of whether the resulting arguments are in line with the personal opinion on a particular issue.

The MJT confronts people with two moral dilemmas: The workers dilemma and the mercy-killing dilemma. For each dilemma, a person has to indicate to which degree he or she agrees or disagrees with the solution chosen by the main character. Next, this person is confronted with six arguments pro and six arguments contra his or her own opinion on how to solve the dilemma. Each of these arguments represents one of Kohlberg's (1958, 1984) stages of moral reasoning. One should then indicate, on a nine point scale ranging from -4 to +4, to which degree these arguments are (un)acceptable. Since each of the stages is represented by four arguments (one pro and one contra argument for each dilemma), the sum of the scores a person obtains for each cluster of arguments indicates the degree to which this person reasons according to the underlying socio-moral perspectives. The C-index, the MJT's main score, measures the degree to which a person's judgments about these pro and contra arguments are consistent. A highly morally consistent or competent person will appreciate all arguments referring to a certain socio-moral perspective, irrespective of whether this argument is a pro or contra argument, and will obtain a C-score close to 100. A person with low moral competence will appreciate the pro arguments referring to a certain socio-moral perspective only, and will obtain a C-score close to 0. A detailed description of how to compute this index can be found in Lind (1998). And although the C-index is logically independent of the moral principles someone pursues, it has been reported that there exists a strongly positive relationship between the C-index and a preference for the highest stages of Kohlberg's model (Lind, 1985). Thus, in general, people obtaining the highest moral competence levels are also the ones preferring the most advanced socio-moral perspectives. These results support Kohlberg's presupposed affective-cognitive parallelism.

Hypotheses

Kohlberg (1981) argued that religiosity and moral reasoning are inherently unrelated because they constitute two distinct areas of human concern. Moral decision making, on the one hand, is grounded in rational arguments of justice and is influenced by level of cognitive development (e.g., education) and exposure to socio-moral experiences (e.g., role taking opportunities, Kohlberg, 1976). Religious reasoning, on the other hand, is based on revelations by religious authorities. Thus, whereas the function of morality is to resolve competing claims among individuals, the primary function of religion is to affirm morality (Kohlberg, 1981, p. 321). In other words, whereas moral reasoning provides moral prescriptions, religious reasoning affirms moral judgment as meaningful (Fernhout & Boyd, 1985).

In spite of Kohlberg's arguments, researchers have attempted to associate both concepts, and have come to the conclusion that religiosity and morality are not unrelated at all. Research has reported that religiously affiliated persons exhibit increased preference for Kohlberg's conventional level (stages 3 and 4) (Siegmund, 1979; Wakenhut, 1981) and decreased preference for principled reasoning (stages 5 and 6) (Deka & Broota, 1988). Moral reasoning was also reported to be negatively related to both Allport and Ross's (1967) intrinsic and extrinsic religiosity (Sapp & Gladding, 1989), and positively to Batson's (1976) quest dimension (Glover, 1997; Sapp & Gladding, 1989). Following Kohlberg's presupposition of affective-cognitive parallelism, these findings suggest that religious persons exhibit limited moral development because they lack the cognitive capacity for principled moral reasoning. However, Ernsberger and Manaster (1981) and Glover (1997) have argued that the moral reasoning of religious persons depends on the seriousness of their religious commitment and on the moral stage which is normative for their religious community. In a religious community whose teachings include principled reasoning, highly religious individuals are likely to show increased preference for this kind of reasoning. In contrast, in a religious community whose teachings do not include principled reasoning, highly religious individuals are likely to exhibit decreased preference for this kind of reasoning. The theological superiority of the conventional moral arguments would then overrule the logical superiority of post-conventional moral arguments. According to Ernsberger and Manaster (1981), the same may apply to non-religious belief systems and ideologies. In a similar vein, Wahrman (1981) argued that the apparent religiosity-morality relation can probably be explained by dogmatism.

In this study, the Post-Critical Belief (PCBS) scale and the Moral Judgment Test (MJT) will be used. The PCBS allows one to disentangle being religious or not (exclusion vs. inclusion of transcendence) from the way in which one approaches religion and religious contents (either in a literal or in a symbolic way). The MJT yields measures of both moral attitudes and moral competence. Therefore, the use of these scales allows for an elaborated study of the religiosity-morality relation that might make a significant

contribution to our understanding of this relation. The literal vs. symbolic dimension is expected to relate negatively to preference for lower moral stages and positively to preference for higher moral stages and moral competence. Fontaine et al. (in press) have argued that this dimension relates to role-taking (see also Duriez, 2002b), which was shown to be associated with moral development (e.g., Ernsberger & Manaster, 1981; Kohlberg, 1976). Moreover, this dimension was shown to relate to intolerance of ambiguity and closed-mindedness (Duriez, 2002c) and dualism (Desimpelaere et al., 1999), which are similar to dogmatism. The exclusion vs. inclusion of transcendence dimension is expected to be unrelated to both moral attitudes and moral competence.

Method

Samples

In total, three different samples were assembled ($\underline{N}$ = 822) in Flanders (Belgium). Sample 1 consisted of adolescents ($\underline{N}$ = 145, 37% male) ranging in age from 14 to 18, with a mean of 16. Questionnaires were distributed in two randomly selected schools. Of the participants in this sample, 10% attended Roman Catholic Church services regularly, while 95% was baptized by the Roman Catholic Church. Sample 2 consisted of first year university students who followed an introductory course in psychology ($\underline{N}$ = 376, 25% male). Participation was obligatory and they received full course credit. Of the participants in this sample, 25% of the participants in this sample attended Roman Catholic Church services regularly, while 92% was baptized by the Roman Catholic Church. Sample 3 was gathered among highly religious subjects, affiliated to the Roman Catholic Church ($\underline{N}$ = 301, 35% male). All participants in this sample attended Roman Catholic services regularly. The mean age in this sample was 45 years (SD=12). Of these participants, 21% attended university, 40% obtained a higher education diploma, 31% obtained a secondary education diploma, and 2% obtained a primary school diploma only (6% failed to give an answer to this question). In all samples, subjects having over three missing values on the Post-Critical Belief scale were excluded from the analyses. In total, only 11 subjects needed to be removed across the samples. For subjects which were not removed, missing values were replaced by the sample-specific mean of the item. In total, 87 missing values (= 0.3% of the scores included in this study) were replaced.

Measures

Participants completed the Moral Judgment Test (see above for a more detailed description). The Dutch version of this test was recently validated by Duriez and De Marez (2000), according to the prescriptions of Lind (1998), and can be regarded as a fully fledged translation of the original test. Participants also completed the 33 item Post-Critical Belief scale. All items were scored on a 7-point Likert scale

(1=completely opposed, 4=neutral, 7=completely in agreement). As in Fontaine et al. (in press), a level of acquiescence estimation was subtracted from the raw scores. For each sample, a Principal Component Analysis (PCA) was then carried out on these corrected scores. A scree test pointed to a two-componential solution for all three samples. However, since PCA allows freedom of rotation, the componential structures of the different samples cannot be compared straightforwardly. Therefore, these structures were subjected to orthogonal Procrustes rotations towards the average structure reported in Fontaine et al. (in press). In all samples, for both components, Tucker's Phi indices were above the rule-of-thumb recommendation (of .90) provided in the literature (Bentler & Bonett, 1980; Van de Vijver & Leung, 1997). Hence, in all samples, the first component could be interpreted as Exclusion vs. Inclusion of Transcendence and the second as Literal vs. Symbolic.

Results

The relation between the religiosity dimensions on the one hand and moral attitudes and moral competence on the other hand was investigated for each of the samples separately by means of bivariate correlations (see Table 1). In all samples, results show that the Exclusion vs. Inclusion of Transcendence dimension is unrelated to moral attitudes. The Literal vs. Symbolic dimension, however, is not. In all samples, this dimension is significantly negatively related to preference for stage 1, 2 and 3, unrelated to preference for stage 4, and weakly positively related to preference for stage 5 and 6. Results also show that, whereas the Exclusion vs. Inclusion of Transcendence dimension is unrelated to moral competence (the C-index), the Literal vs. Symbolic dimension is strongly positively related to this. This suggests that being religious as such is unrelated to morality. However, Table 2 reveals that the adult participants in sample 3, in general, obtained the lowest scores on almost all of the stages identified by Kohlberg. Moreover, the adults in sample 3 generally obtained significantly lower moral competence scores than the adolescents in sample 1, which, in turn, obtained significantly lower moral competence scores than the students in sample 2.

Lind (2000c) argued that it should be taken into account that the mercy-killing dilemma is likely to evoke religious reasoning among Roman Catholics, whereas the workers dilemma is not, because the Roman Catholic Church takes a clear stance on mercy-killing, but not on the workers dilemma. If the lowered moral competence scores can be accounted for by the responses to the mercy-killing dilemma, this would suggest that religious persons are capable to exhibit coherent moral reasoning, but that they don't when their religion makes certain arguments illegitimate. In contrast, if a lower moral competence score is also observed with respect to the workers dilemma, this would suggest that religious persons, in general, lack the capacity to exhibit coherent moral reasoning. To find out whether these low moral compe-

tence scores were due to the content of the mercy-killing dilemma, moral competence scores were computed for each dilemma separately. The moral competence score regarding the workers dilemma is indicated as C-index A and the moral competence score regarding the mercy-killing dilemma is indicated as C-index B (see Table 2). Results show that the adult participants in sample 3 obtained significantly lower moral competence scores with respect to the workers dilemma than both the adolescents in sample 1 and the students in sample 2. With respect to the mercy-killing dilemma, the adult participants in sample 3 obtained moral competence scores which are highly similar to the moral competence scores obtained by the adolescent in sample 1, and significantly lower than the moral competence scores of the students in sample 2. Table 1 presents the correlations between the moral competence scores and the religiosity dimensions. The moral competence scores were (negatively) related to Exclusion vs. Inclusion of Transcendence in sample 3 only, and only with respect to the workers dilemma. The moral competence scores were positively related to Literal vs. Symbolic, except for sample 3. In this sample the moral competence score with respect to the workers dilemma was unrelated to Literal vs. Symbolic.

Table 1   _Correlations between the religiosity dimensions and moral attitudes and moral competence_

	Inclusion vs. Exclusion of Transcendence		
Morality	Sample 1	Sample 2	Sample 3
Stage 1	.05	-.03	.01
Stage 2	.13	.02	-.04
Stage 3	.15	.10	.00
Stage 4	.08	-.01	-.06
Stage 5	.03	-.05	-.07
Stage 6	.02	-.02	-.04
C-Index	-.03	.06	-.11
C-Index A	-.10	.00	-.17 *
C-Index B	.01	.09	-.07
	Literal vs. Symbolic		
Morality	Sample 1	Sample 2	Sample 3
Stage 1	-.30 *	-.22 **	-.26 **
Stage 2	-.34 **	-.23 **	-.28 **
Stage 3	-.29 *	-.15 *	-.27 **
Stage 4	-.03	-.05	-.10
Stage 5	.10	.13	.15 *
Stage 6	.16	.10	.19 *
C-Index	.31 *	.21 **	.28 **
C-Index A	.26 *	.15 *	.03
C-Index B	.26 *	.15 *	.27 **

*_p_<.01, **_p_<.0001

Table 2   *Mean scores and standard deviations on the measures of moral attitudes and moral competence*

Morality	Sample 1	Sample 2	Sample 3
Stage 1	-3.29 (SD=5.48) [c]	-4.49 (SD=4.65) [b]	-5.24 (SD=5.55) [a]
Stage 2	-1.24 (SD=5.51) [c]	-2.96 (SD=4.84) [b]	-3.45 (SD=5.64) [a]
Stage 3	-1.84 (SD=5.48) [b]	-3.04 (SD=4.94) [a]	-2.79 (SD=5.59) [ab]
Stage 4	2.91 (SD=4.33) [b]	2.47 (SD=4.27) [b]	-0.47 (SD=4.55) [a]
Stage 5	3.86 (SD=4.28) [b]	5.01 (SD=3.92) [c]	2.74 (SD=4.71) [a]
Stage 6	3.22 (SD=4.33) [b]	3.95 (SD=3.65) [bc]	2.49 (SD=4.62) [ab]
C-Index	24.83 (SD=18.45) [b]	31.44 (SD=16.71) [c]	20.84 (SD=16.13) [a]
C-Index A	41.66 (SD=23.44) [b]	46.60 (SD=20.77) [c]	35.11 (SD=22.34) [a]
C-Index B	36.98 (SD=24.23) [a]	47.05 (SD=23.41) [b]	35.61 (SD=25.79) [a]

Note: *Mean levels with different superscript are significantly different at the .05 level.*

Discussion

At first sight, the present results show that, when disentangling the effects of being religious or not (exclusion vs. inclusion of transcendence) from the way in which one approaches religion and religious contents (either in a literal or in a symbolic way), the religiosity-morality relation can be explained by the way in which people approach religion and religious content. In all samples, being religious as such was unrelated to both moral attitudes and moral competence. The results seem to support the ideas of Wahrman (1981) who argued that the apparent religiosity-morality relation can probably be explained by dogmatism, and support the ideas of Kohlberg (1981) who argued that religiosity and morality are inherently unrelated because they are two distinct areas of human concern.

However, when taking a closer look at the present results, the religiously affiliated adults in sample 3 exhibit dramatically low moral competence scores. On average, the moral competence level of these religiously affiliated adults did not even reach the moral competence level of 16-year olds. To examine this in more detail, moral competence scores were computed for each of the two dilemma's separately. In this way, the hypothesis was tested that these low moral competence scores would be the result of religious people, for theological reasons, exhibiting low moral competence with respect to the mercy-killing dilemma, on which the Roman Catholic Church takes a strong stance. However, results show that the content of the mercy-killing dilemma cannot account for the low overall moral competence levels exhibited by the religiously affiliated adults. Whereas these adults did exhibit low moral competence scores with respect to the mercy-killing dilemma, on average, these moral competence scores were not significantly lower than the moral competence scores obtained by the adolescent participants in sample 1. With respect to the worker's dilemma, however, the religiously affiliated adults did obtain moral competence scores which were significantly lower than the adolescent participants in study 1. Since the Roman Catholic Church does not take an explicit stance on this dilemma and, hence, is not rendering certain moral argumentations illegitimate to its members, theological grounds cannot account for this observation. Noteworthy, however, is that the moral competence scores obtained by the religiously affiliated adults are comparably low with respect to both dilemma's. This suggests that it is especially those

people with low moral competence levels that tend to respond favorable to the Roman Catholic Church. In other words, it seems that the Roman Catholic Church not only attracts persons that are highly religious (scoring high on the Exclusion vs. Inclusion of Transcendence dimension) but <u>especially</u> persons that are highly religious <u>in a literal way</u> (scoring high on the Exclusion vs. Inclusion of Transcendence dimension <u>and</u> low on the Literal vs. Symbolic dimension). Of course, further research is needed to examine this in more detail. Especially research which compares the moral competence of adults affiliated to the Roman Catholic Church with the moral competence of adults of comparable age and education who are not religiously affiliated is needed. Research focussing on other denominational groups is also needed in order to answer the question whether the present findings are restricted to Roman Catholics or whether they can be generalized to religiously affiliated persons in general.

PART 3
Religion and Need for Closure

Abstract

The relation between motivated social cognition and the religiosity dimensions which Wulff (1991, 1997) described (Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic) was investigated in a Flemish student sample (N= 330). The Need for Closure scale (NFC, Webster & Kruglanski, 1994) was used to measure motivated social cognition and the Post-Critical Belief scale (Duriez, Fontaine & Hutsebaut, 2000) was used to measure Wulff's religiosity dimensions. Although NFC was expected to relate to the Literal vs. Symbolic dimension only, results also revealed a relation between NFC and the Exclusion vs. Inclusion of Transcendence dimension. However, whereas the former relation is due to the NFC facets Discomfort with Ambiguity and Closed-Mindedness, the latter relation can be attributed to the facets Order and Structure and Predictability. The Decisiveness facet appears unrelated to both religiosity dimensions. Results obtained in a second sample (N= 392) confirm these findings.

Introduction

Kruglanski (1989) argued that knowledge, beliefs and attitudes are arrived at through the process of a motivated search for information. A central construct in this theory is the need for nonspecific cognitive closure, which refers to the desire for any firm belief on a given topic, as opposed to further ambiguity. Though need for closure may vary as a function of the situation (e.g., Kruglanski & Webster, 1991; Kruglanski, Webster & Klem, 1993), it also represents a dimension of stable individual differences (Webster & Kruglanski, 1994). According to Kruglanski (1989), the need for closure might spring from various sources. In particular, five facets are assumed to represent the universe of the construct (Webster & Kruglanski, 1994). Persons with a high need for closure would (1) desire order and structure in their lives, (2) prefer predictable situations, (3) experience a desire to reach closure which is reflected in the decisiveness of judgments and choices, (4) experience ambiguous situations devoid of closure as aversive, and (5) be unwilling to have one's knowledge and beliefs confronted and hence rendered insecure by inconsistent evidence or alternative opinions. Thus, some people may desire closure because they value ordered environments, whereas others may seek closure out of a concern for predictability, decisiveness, ambiguity avoidance, or sticking to their own knowledge, belief or opinion. Of course, closure may be desired for more than one reason. Hence, the different facets are considered additive in their impact on the total need for closure (Kruglanski et al., 1997). Note that although Kruglanski and his colleagues treat intolerance for ambiguity and closed-mindedness (respectively the fourth and the fifth facet of the need for closure) as motivational constructs, psychological theorizing traditionally framed these concepts in terms of cognitive styles (e.g., Sorrentino & Short, 1986; Rokeach, 1960). The position of Kruglanski and his colleagues is in line with the theory of the authoritarian personality (Adorno et al., 1950), which depicts rigidity as motivated by psychodynamic defenses (Kruglanski & Webster, 1996).

Previous research suggest that at least some of the need for closure facets, and related constructs, are positively related to religiosity. In this respect, no matter how it was measured, religiosity was shown to relate to intolerance of ambiguity (Budner, 1962; Feather, 1964; Hassan & Khalique, 1981; Lansky & Pihl, 1976; Sinha & Hassan, 1975), dogmatism (Di Giuseppe, 1971; Hoge & Carroll, 1973; Kilpatrick et al., 1970; Paloutzian et al., 1978; Parker, 1991; Raschke, 1973; Swindell & L'Abate, 1970; Thompson, 1974; Wahrman, 1981; Wilson, 1985) and rigidity (Ahmad, 1973; Hassan & Khalique, 1981). However, as Matlby (1998) noted, these relations might not be very pronounced. Some studies even suggest that religiosity is independent of intolerance of ambiguity, dogmatism and rigidity (Eckhardt & Newcombe, 1969; Francis, 1997). Some studies also seem to suggest that the way in which religion is perceived and treated might be more important than religiosity as such. Kahoe (1974) found that dogmatism was related to extrinsic but not to intrinsic religiosity (Allport & Ross, 1967). Feather (1967) did find a relation

between religious affiliation and intolerance of ambiguity and dogmatism, but this relation was obscured by the kind of religious affiliation, with members of fundamentalist groups obtaining higher intolerance of ambiguity and dogmatism scores than members of liberal religious groups (cf. Glass, 1971). In a similar vain, Stanley (1963) argued that it is fundamentalism that represents the religious manifestation of the closed mind, and Pargament et al. (1985) argued that churches may selectively attract and keep members with and / or shape members towards varying levels of tolerance of ambiguity.

The present study aims to clarify whether and how need for closure relates to religiosity. In this respect, Wulff (1991, 1997) recently provided an interesting perspective on religiosity. According to Wulff (1991, 1997), all possible attitudes to religion can be summarized along two dimensions. The Exclusion vs. Inclusion of Transcendence dimension specifies whether the objects of religious interest are granted participation in a transcendent reality. The Literal vs. Symbolic dimension indicates whether religious expressions are interpreted literally or symbolically. In this way, a distinction can be made between the effects of being religious or not (Exclusion vs. Inclusion of Transcendence) and the effects of the way in which religion and religious contents are approached (either in a literal or in a symbolical way). Hence, according to Wulff, one can dogmatically adhere to both atheism and religion. Both can be examples of a rigidity which precludes reality and logic by insisting that one correct idea or belief must prevail. Thus, rather than religion per se, dealing with religious contents in a fundamentalist, dogmatic, literal way would constitute the real threat to reason. Hence, need for closure is expected to relate to the Literal vs. Symbolic dimension, rather than to the Exclusion vs. Inclusion of Transcendence dimension.

Method

Samples

In order to be able to check the stability of these relationships, two samples were gathered, respectively in 2001 and 2002. Participants in the first sample were 330 first year psychology students, ranging in age from 17 to 23 with a mean of 18 (75% were female). Participants in the second sample were 392 first year psychology students, ranging in age from 17 to 31 with a mean of 18 (80% were female). All participants had Belgian nationality and belonged to the Flemish-speaking part of the country. Participation was obligatory and participants received course credit. Confidentiality and anonymity were guaranteed. All subjects having over two missing values on one of the scales included were excluded from further analyses. In total, 5 participants were removed in the first sample and 3 participants were removed in the second sample. For subjects which were not removed, missing values were replaced by the mean of the item. In total, only 19 missing values were replaced in the first sample and only 4 missing values were replaced in the second sample.

Measures

As a measure of motivated social cognition, participants completed the Dutch version of the Need for Closure scale (Cratylus, 1996; 42 items). The items of this scales were scored on a 5-point Likert scale. The Need for Closure scale (NFC, Webster & Kruglanski, 1994) consists of five subscales, each of which assesses a specific facet of need for closure. The Order and Structure (OS) subscale measures the desire for order and structure in life. The Predictability (PR) subscale measures the degree to which predictable situations are preferred. The Decisiveness (DE) subscale measures the speed at which decisions are made and the degree to which one doubts this was the right decision. The Discomfort with Ambiguity (DA) subscale measures the discomfort produced by ambiguity. The Closed-Mindedness (CM) subscale measures the degree to which one is prepared to have one's knowledge confronted by alternative opinions or inconsistent evidence. However, Cratylus (1996) has argued that the Dutch version of the DA subscale is rather unreliable, and that it should be considered to extend this scale with other items. For this purpose, Kirton's (1981) Intolerance of Ambiguity scale was chosen (7 items). Each respondent's aggregate Need for Closure score as well as a score for the subscales were calculated by summing up all relevant items (after reverse scoring the appropriate items) (cf. Webster & Kruglanski, 1994). In both samples, the internal consistency of the DA subscale was improved by substituting four original DA items by Kirton's (1981) items. Estimates of internal consistency (Cronbach Alpha's) were .81 and .80 for OS, .83 and .79 for PR, .71 and .80 for DE, .60 and .58 for DA, .60 and .55 for CM, and .85 and .84 for NFC in the first and second sample respectively.

As a measure of Wulff's (1991, 1997) religiosity dimensions, participants completed the Post-Critical Belief scale (Duriez, Fontaine & Hutsebaut, 2000; 33 items), which allows one to disentangle the effects of being religious or not (Exclusion vs. Inclusion of Transcendence) from the way in which religious contents are dealt with (either in a literal or in a symbolical way) (see Fontaine et al., in press). The items were scored on a 7-point Likert scale. As in Fontaine et al. (in press), a level of acquiescence estimation was subtracted from the raw scores. A Principal Component Analysis (PCA) was then carried out on these corrected scores. A scree test pointed to a two-componential solution. However, since PCA allows freedom of rotation, the componential structures of different samples cannot be compared straightforwardly. Therefore, this structure was subjected to an orthogonal Procrustes rotation towards the average structure reported by Fontaine et al. (in press). In both samples, Tucker's Phi indices were above the rule-of-thumb recommendation of .90 provided in the literature (Bentler & Bonett, 1980; Van de Vijver & Leung, 1997) for both components. Hence, these components could be interpreted as Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic respectively.

Results

The relation between the religiosity dimensions and Need for Closure (NFC) and its subscales was investigated by means of bivariate correlations (see Table 1). Results from the first sample suggest that, although both religiosity dimensions relate to NFC, the positive relation between Exclusion vs. Inclusion of Transcendence and NFC stems from the positive relation with Order and Structure and Predictability, whereas the negative relation between Literal vs. Symbolic and NFC is due to the negative relation with both Discomfort with Ambiguity and Closed-Mindedness. Decisiveness was unrelated to both religiosity dimensions. Results from the second sample confirm these results.

Table 1   _Correlations between the religiosity dimensions and need for closure and its subscales_

	Exclusion vs. Inclusion		Literal vs. Symbolic	
	Study 1	Study 2	Study 1	Study 2
Need for Closure	.19 **	.17 **	-.19 **	-.17 **
Order and Structure	.18 **	.17 **	-.03	-.05
Predictability	.17 **	.17 **	-.10	-.10
Decisiveness	.00	-.04	-.10	.03
Discomfort with Ambiguity	.12	.10	-.20 ***	-.18 **
Closed-Mindedness	.10	.08	-.24 ***	-.29 ***

_* p<.01, ** p<.001, *** p<.0001_

Discussion

According to Neuberg, Judice and West (1997), the decisiveness facet measures the seizing process, whereas the other Need for Closure facets measure the freezing process. In line with this reasoning, seizing turns out irrelevant when it comes to religious beliefs. In contrast, freezing seems important. Both religiosity dimensions relate to freezing processes, but they differ in the exact processes they relate to. Apparently, people who are more religious, as evinced by higher scores on Exclusion vs. Inclusion of Transcendence, have a higher need for closure than people who are less religious _because_ they desire an ordered and predictable environment. This suggests some instrumentality of religion, which is in line with the point of view that religion, by offering a global worldview and a moral program, reduces the complexity of life and creates a psychologically safe environment (Schwartz & Huismans, 1995). In contrast, people who deal with religious contents in a literal way have a higher need for closure than people who deal with religious content in a symbolical way _because_ they need to avoid ambiguity or are unwilling to have their beliefs confronted by alternative opinions. Thus, apparently, whereas religious be-

lief as such seem to be associated with a preference for order and structure as well as predictability, it is those who deal with religious content in a literal way who are incapable of dealing with alternative opinions.

PART 4

Religion and Personality

Abstract

The relationship between the two main dimensions of the religiosity domain (Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic) and the Five Factor Model of personality was investigated in a Flemish sample of late adolescents ($\underline{N}$=335). Exclusion vs. Inclusion of Transcendence was expected to relate to Agreeableness and Conscientiousness and Literal vs. Symbolic was expected to relate to Openness to Experience. Results show that, whereas the relations between Exclusion vs. Inclusion of Transcendence and Agreeableness and Conscientiousness failed to reach significance, Literal vs. Symbolic was strongly related to Openness to Experience and moderately to Agreeableness. As expected, the relation between Openness to Experience and Literal vs. Symbolic was mediated by Berzonsky's (1990) identity styles, and the normative identity style had an additional effect on Exclusion vs. Inclusion of Transcendence. Once Openness to Experience was taken into account, Agreeableness was no longer an important determinant of Literal vs. Symbolic.

Introduction

In the past, quite a lot of studies have been conducted in order to shed a light on the personality-religiosity relation (for a recent overview, see Saroglou, 2002). Most of these studies were exploratory in nature and the picture emerging has been rather fragmented. Apart from this, a limited number of studies have been conducted in order to shed light on the relationship between identity development and religiosity during adolescence (Markstrom-Adams, 1999; Markstrom-Adams, Hofstra, & Dougher, 1994; Tzuriel, 1984; Verhoeven & Hutsebaut, 1995). The picture emerging from these studies has also been rather fragmented. Therefore, in this article, we will try to elaborate both research traditions by introducing a multidimensional approach to religiosity (Fontaine et al., in press) into the research tradition on religiosity and personality, and by introducing both this multidimensional approach to religiosity and a process oriented perspective on identity development (Berzonsky, 1990) into the research tradition on religiosity and identity development. This will allow us to derive theoretical predictions regarding both the relation between religiosity and personality and between religiosity and identity development, which will lead to an integrated model in which the relationship between personality and religiosity during late adolescence is mediated by the social-cognitive processes involved in identity development. This model will then be tested in a group of late adolescents ($\underline{N}$=335) gathered in Flanders (Belgium).

Religiosity and Personality

Early research into the relation between religiosity and personality using Eysenck's three dimensional model of personality (PEN; Psychoticism, Extraversion and Neuroticism) (Eysenck & Eysenck, 1968; 1985) confirmed the hypothesis that religiosity corresponds, at least to some extent, to individual differences in personality. Although some authors failed to find a link between religious attitudes and personality (e.g., Chau, et al., 1990; D'Onofrio et al, 1995; Heaven, 1990; Robinson, 1990), a series of studies in a variety of cultures and denominations converged on the conclusion that religious people in general tend to be somewhat lower in Psychoticism (Francis,1992a, 1992b, 1993; Francis & Katz, 1992; Francis & Pearson, 1993; Francis & Wilcox, 1994; Lewis & Joseph, 1994; Lewis & Maltby, 1995, 1996; Maltby, 1999a, 1999b). Regarding the other dimensions (Extraversion and Neuroticism), no such convergence was reached: Different studies yielded inconsistent results, leading researchers to conclude that these factors are unrelated to religiosity (e.g., Eysenck, 1998; Francis, 1992b). However, more recently, Costa and McCrae (1978, 1992) have presented the Five Factor Model of personality (FFM; Extraversion, Agreeableness, Conscientiousness, Neuroticism, Openness to Experience), which can be regarded as an extension of Eysenck's model, with Agreeableness and Conscientiousness providing a two-dimensional view of low Psychoticism (Digman, 1997; McCrae, 1996) and Openness to Experience constituting a new element (Costa & McCrae, 1995). However, although some of the studies using the

Five Factor Model resulted in positive relations between religiosity and both Agreeableness and Conscientiousness (Kosek, 1999, 2000; Taylor & McDonald, 1999), these relations are typically low (Saroglou, 2002), and sometimes even absent (Streyfeller & McNally, 1998; Saucier, 2000; Saucier & Goldberg, 1998). Regarding the other factors, no clear relationship with religiosity emerged (Saroglou, 2002). Nevertheless, McCrae (1999) has urged greater attention to Openness to Experience in order to come to a better understanding of religious phenomena.

One way to characterize Openness to Experience is in terms of the structure of consciousness, with individuals high in Openness to Experience being able to simultaneously access more thoughts, feelings and impulses in awareness (McCrae & Costa, 1997). However, this structural account is insufficient (McCrae & Costa, 1997). Individuals high in Openness to Experience may be characterized by a particularly permeable structure of consciousness but also by an active motivation to seek out the unfamiliar, and it seems plausible that the consciousness structure results from this motivational characteristic rather than vice versa. This need for experience, which goes hand in hand with tolerance of ambiguity and open-mindedness, leads those high in Openness to Experience to endorse liberal political and social values because questioning conventional values is a natural extension of their curiosity (McCrae, 1996). The willingness to question conventional values also leads to higher moral development (Lonky, Kaus & Roodin, 1984), and hence, Openness to Experience is considered highly relevant towards social attitudes and ideologies in general (McCrae, 1993-1994, 1994, 1996; McCrae & Costa, 1997; Trapnell, 1994; Riemann, Grubich, Hempel, Mergl, & Richter, 1993; Saucier, 2000; Van Hiel, Kossowska, & Mervielde, 1996, 2000). The importance of Openness to Experience towards religiosity is supported by Streyffeler and McNally (1998), who found liberal and fundamentalist Protestants to differ with respect to this factor but not with respect to any of the other factors of the Five Factor Model, and Saucier (2000), who found Openness to Experience to relate negatively to alphaism (a broad dimension of social attitudes which is comprised of, among other things, conventional religion).

How to measure Religiosity ?

Wulff (1991, 1997) has recently constructed a comprehensive framework to identify various possible approaches to religion. According to Wulff, all possible approaches to religion can be summarized along two bipolar dimensions. The Exclusion vs. Inclusion of Transcendence dimension specifies whether the objects of religious interest are granted participation in a transcendent reality. The Literal vs. Symbolic dimension indicates whether religious expressions are interpreted literally or symbolically. These dimensions define four basic attitudes toward religion. Literal Affirmation represents a position in which the literal existence of religious objects is affirmed. This position is most clearly embodied by religious fundamentalism. Literal Disaffirmation represents a position in which one neither beliefs in the literal meaning

of religious words nor in the possibility that these words can have a symbolic meaning. Reductive Interpretation represents a position in which one denies reality to the transcendent referent of religious language and claims a privileged perspective on the true meaning of religion's myths and rituals. Restorative Interpretation represents a position in which one posits the transcendent realm as real, but in which one tries to encompass and go beyond reductive interpretations in order to find religion's symbolic message. Building on Wulff's theory, Hutsebaut and his colleagues (Duriez, Fontaine & Hutsebaut, 2000; Hutsebaut, 1996) constructed the Post-Critical Belief scale which captures four approaches to Christian religion that map onto Wulff's scheme: Orthodoxy, External Critique, Relativism and Second Naiveté. These approaches equal Literal Affirmation, Literal Disaffirmation, Reductive Interpretation and Restorative Interpretation respectively (Duriez, Fontaine & Hutsebaut, 2000). Recently, the Post-Critical Belief scale was shown to also reliably capture the dimensions Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic (Fontaine et al., in press).

Fontaine et al. (in press) have argued that most religiosity measures confuse the two main dimensions of the religiosity domain which Wulff (1991, 1997) identified (Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic) leading to an inaccurate picture of religiosity and its correlates. Therefore, in this article the Post-Critical Belief scale, a religiosity measure designed to disentangle these religiosity dimensions, will be used to shed new light on the religiosity-personality relation. In this way, the effects of being religious or not (Exclusion vs. Inclusion of Transcendence) can clearly be disentangled from the way in which religious contents are dealt with (either in a literal or in a symbolical way). In line with McCrae (1999), we expect Openness to Experience to be of crucial importance to understand religious phenomena. More specifically, although this dimension can be expected to be unrelated to being religious or not (as most of the previous research has shown), and hence to be unrelated to Inclusion vs. Exclusion of Transcendence, it can nevertheless be expected to be important to understand religious phenomena because it can be expected to be crucial in understanding the way in which religious contents are dealt with. Like those high on Openness to Experience (Costa & McCrae, 1997), those high on the Literal vs. Symbolic dimension are not only able to grasp new ideas and new interpretations of religious contents, but also appear to enjoy this. Moreover, previous research has shown that the Literal vs. Symbolic dimension relates positively to cognitive variables such as moral competence (Duriez, in press A) and cognitive-motivational variables such as tolerance of ambiguity and open-mindedness (Duriez, 2002c) and negatively to correlates such as racism (Duriez, 2002a; Duriez & Hutsebaut, 2000; Duriez, et al., 2002), social dominance and authoritarianism (Duriez & Van Hiel, 2002; Duriez, Van Hiel & Kossowska, 2002) and cultural conservatism (Duriez, in press B; Duriez, et al., 2002).

Identity Development

According to Erikson (1968), the primary developmental task of adolescence is the formation of an integrated sense of personal identity. The outcome of this process has been conceptualized by Marcia (1966, 1967, 1980, 1982) along the two orthogonal dimensions of exploration and commitment. Exploration refers to both the degree of self-examination about one's values, beliefs and goals and the degree of exploration of various social roles, whereas commitment refers to the possession of a stable set of convictions, values and goals. The two dimensions of Marcia's model define four identity statuses: Achievement, Moratorium, Foreclosure and Diffusion. Individuals with an Achievement status have experienced a period of exploration and have subsequently made determined and firm commitments. Individuals with a Moratorium status are currently in the process of exploration and lack these stable commitments. Individuals with a Foreclosure status, although never having experienced a period of exploration, hold firm commitments, which are most likely adopted from either significant others (e.g., parents) or a prevailing tradition. Finally, individuals with a Diffusion status are neither inclined to engage in a process of exploration nor have they made determined choices about their identity. But although Marcia's paradigm has proven both its utility and its validity in empirical research on identity (Berzonsky & Adams, 1999; Marcia, 1980; Waterman, 1982), it has recently been severely criticized. Some authors have pointed out that the paradigm lacks construct validity and that the model does not represent the theory of Erikson in a conceptually sufficient manner (Coté & Levine, 1987, 1988; van Hoof, 1999). More specifically, it has been argued that Marcia's model treats identity statuses as dispositional, static outcome variables, whereas Erikson has regarded identity in the context of lifelong development in continuous interaction with changing social demands and environments.

In an attempt to conceptualize individual differences in identity development in a more process-oriented way, Berzonsky (1990) proposed three identity styles. Berzonsky (1990) points out that these identity styles are ways of processing information and of coping with problems which typically arise in identity crises. As such, they should be considered as social cognitions or as cognitive self-theories through which the adolescent perceives and processes reality. Information oriented individuals deal with identity issues and personal decisions by actively seeking out, processing and utilizing relevant information in the context of identity development. When confronted with information that is dissonant with their self-conceptions, information oriented individuals will be prepared to revise and accommodate their self-perceptions. Normative oriented individuals focus on the normative expectations and prescriptions held up by significant others (e.g., parents or authority figures) and reference groups (e.g., a certain religious tradition). Futhermore, they adhere rigidly to their existing identity structures, in which they inflexibly assimilate all identity-relevant information. Finally, diffuse / avoidant oriented individuals can be character-

ized by procrastination of decisions about personal problems and one's identity. According to Berzonsky (1990), this identity style results in a fragmented and loosely integrated identity structure. Research has shown that both individuals with an Achievement status and individuals with a Moratorium status use a predominantly information oriented identity style, that individuals with a Foreclosure status tend to apply the normative identity style, and that individuals with a Diffusion status adopt a diffuse / avoidant oriented identity style (Berman et al., 2001; Berzonsky, 1992a; Berzonsky & Kuk, 2000; Berzonsky & Niemeyer, 1994; Streitmatter, 1993; Schwartz et al., 2000).

Identity Development and Personality

Berzonsky (1990; Berzonsky & Adams, 1999) has argued that information oriented individuals should be characterized by high levels of Openness to Experience, whereas people endorsing a normative orientation should be closed to information that may threaten aspects of their self-image and value system. It has indeed been shown that the information orientation relates positively to Openness to Experience (Dollinger, 1995) as well as to introspectiveness, need for cognition, and openness to ideas, feelings and fantasies (Berzonsky & Sullivan, 1992). In contrast, the normative orientation relates negatively to Openness to Experience and openness to values, actions and fantasies (Berzonsky & Sullivan, 1992; Dollinger, 1995), and positively to need for structure and cognitive closure (Berzonsky & Adams, 1999). Finally, the diffuse / avoidant orientation, which was repeatedly found to relate negatively to the information orientation (Berman et al., 2001; Berzonsky, 1992a, 1992b; Berzonsky & Niemeyer, 1994; Berzonsky & Sullivan, 1992; Dollinger, 1995), tends to relate negatively to several indices of Openness to Experience (Berzonsky & Sullivan, 1992).

Identity Development and Religiosity

In the process of searching and exploring one's identity, the adolescent is thought to develop a personal view on issues of political, occupational, philosophical, and religious nature (Erikson, 1958, 1964, 1965). Therefore, an important question is whether identity development relates to the acquisition of religious beliefs and whether personal crises experienced in the process of identity formation go hand in hand with an increased openness toward the divine and, consequently, with religious involvement. According to Parker (1985), the experience of conflict in the search for a personal identity (= identity exploration) is a major determinant in developing religious beliefs. According to Parker (1985), anecdotal evidence supports the notion that high religious involvement arises after experiencing profound identity crises. Both the Old and the New Testament are replete with examples showing that religious conversions and transformations often occur within the context of a broader personal crisis. For example, initially being a prosecutor of the Christian movement, Paul was converted to Christianity in a period of his life during which he experienced severe inner conflicts. However, in spite of all this, there has been a lack of em-

pirical research addressing the relation between religiosity and identity development. Moreover, the few studies that did examine this relation lead to inconclusive results. Whereas some studies reported higher religiosity among individuals in the identity statuses characterized by commitment (achievement and foreclosure) (Markstrom-Adams, Hofstra & Dougher, 1994; Tzuriel, 1984; Verhoeven & Hutsebaut, 1995), Markstrom-Adams (1999) found no relation between dimensions of ideological identity (i.e., identity with respect to religion, politics, occupation and philosophical life-styles) and indices of religious involvement. Thus, although Parker (1985) expected a positive relation between the exploration dimension of identity and the degree of religious involvement, empirical studies could not confirm this. Rather, a positive relation between the commitment dimension and the degree of religious involvement was found, although not all studies confirm this relationship (Markstrom-Adams, 1999). Nevertheless, Paloutzian, Richardson and Rambo (1999) have argued that religiosity and identity go hand in hand. More specifically, religious conversion would exert a clear effect on identity.

The fact that the results of the limited research on the identity-religiosity relation are difficult to interpret could be attributed to the lack of a common theoretical framework on how adolescents process both identity-relevant information and religious phenomena. By bringing together Berzonsky's (1990) theory of process-oriented identity styles and Wulff's (1991, 1997) multidimensional model of religiosity (in which one dimension refers to the processing of religious information), clear hypotheses about this relation can be formulated. First, information oriented individuals actively seek out, elaborate and evaluate information in order to make a personal integration of identity elements (Berzonsky, 1990). Therefore, it can be expected that this identity style will relate positively to a personal and symbolic interpretation of religious phenomena, and hence to be positively related to the Literal vs. Symbolic dimension. However, since a personal integration of religious elements into one's identity may or may not include a reference to transcendence, no relation with the Exclusion vs. Inclusion of Transcendence dimension is expected. Second, normative oriented individuals are expected to rely on and conform to the prescriptions and standards of both significant others and referent groups (Berzonsky, 1990). Given the fact that the Flemish-Belgian society is characterized by a strong Roman Catholic tradition (Billiet & Dobbelaere, 1976; Dobbelaere, 1995), we can expect normative oriented individuals to be sensitive to this pro-religious climate, and therefore to show higher scores on the Exclusion vs. Inclusion of Transcendence dimension. Moreover, we can expect the normative oriented identity style to relate negatively to the Literal vs. Symbolic dimension. Individuals with this identity style can be expected to literally accept the prescriptions and dogmas of the Roman Catholic Church since they would be closed to information that is discrepant with the prevailing (religious) tradition (Berzonsky, 1990). Finally, we can expect a negative association between the diffuse / avoidant identity style and the Literal vs. Symbolic dimension but for different reasons. Instead of conforming to existing traditions and prescriptions of authority figures, people

with a diffuse identity style are likely to avoid questioning difficult and personal issues such as religion. However, no relation is expected with the Exclusion vs. Inclusion of Transcendence dimension since an avoidance to question religious issues may go hand in hand with either an unquestioned rejection or an unquestioned acceptance of transcendence.

Hypotheses

On the one hand, based on previous research concerning the relationship between personality and religiosity, a positive relationship can be expected between Agreeableness and Conscientiousness on the one hand and the Exclusion vs. Inclusion dimension on the other hand. On the other hand, based on the theorizing of Wulff (1991, 1997) and McCrae (1999), a positive relationship between Openness to Experience and the Literal vs. Symbolic dimension of the religiosity domain can be expected. However, in order to gain more insight in the nature of this hypothesized relationship between Openness to Experience and the Literal vs. Symbolic dimension, we will examine whether this relationship can be explained by the way late adolescents process both identity-relevant information and information of a religious nature. In contemporary personality and developmental research, it is assumed that personality traits such as the ones presented in the Five Factor Model of personality (Costa & McCrae, 1978, 1992) are not merely descriptions of static and enduring interindividual differences. Rather they should be considered dynamic, organizational constructs, influencing how people organize their behavior, process information and adapt to the social environment (Buss, 1989; Caspi, 1998; McCrae & Costa, 1997; Roberts, Caspi & Moffitt, 2001). Given the assumption that issues of identity development and ways of processing these issues are of major importance during adolescence, it can be hypothesized that the relations between personality traits and outcome variables (such as dimensions of religiosity) are mediated by the identity styles late adolescents use. Hence, during adolescence, we expect the relation between Openness to Experience and the Literal vs. Symbolic dimension to be mediated by Berzonsky's (1990) identity styles. Moreover, we expect the normative oriented identity style to directly predict some of the variance in the Exclusion vs. Inclusion of Transcendence dimension (see above). Furthermore, based on previous findings, we can also expect the information oriented identity style and the diffuse / avoidant identity style to be negatively related (Berman et al., 2001; Berzonsky, 1992a, 1992b; Berzonsky & Niemeyer, 1994; Berzonsky & Sullivan, 1992; Dollinger, 1995). The proposed integrated model of relations between Openness to Experience, the identity styles and the religiosity dimensions which assumes that the identity styles will fully mediate the relationship between Openness to Experience and the Literal vs. Symbolic dimension, with the normative oriented identity style directly influencing the Exclusion vs. Inclusion of Transcendence dimension, is summarized in Figure 1.

Figure 1   *Integrated hypothetical model of the relations between Openness to Experience, the identity styles and the religiosity dimensions*
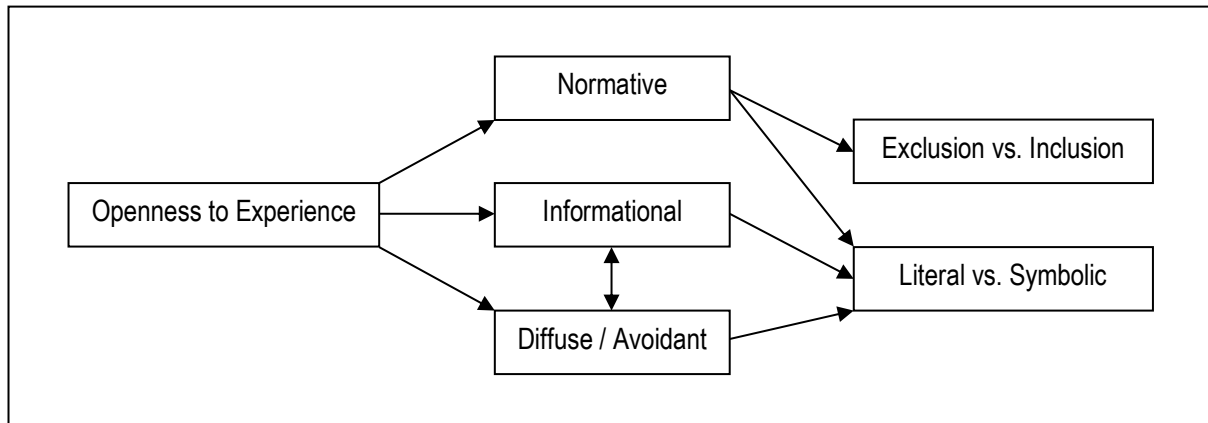
Method

Sample

Participants were 335 first year psychology students from a Belgian university, ranging in age from 17 to 25 with a mean of 18 (80% female). All participants were Flemish-speaking and of Belgian nationality. Participation was obligatory and participants received course credit. Anonymity was guaranteed. Of the participants in this sample, 90% was baptized by the Roman Catholic Church, which services are attended regularly (at least once a month) by 8% of the participants, from time to time (less than once a month) by 14% of the participants, on special occasions only by 55% of the participants, and never by 23% of the participants. All subjects having over two missing values on either the NEO-FFI, the Post-Critical Belief scale or the Identity Style Inventory were excluded from further analyses. In total, only one of the subjects needed to be removed. For the subjects with less than three missing values, these missing values were replaced by the sample-specific mean of the item. In total only 25 missing values were replaced (less than 0.001% of the individual scores included in this research).

Measures

As a measure of Costa & McCrae's (1978, 1992) Five Factor Model of personality, participants completed the authorized Dutch / Flemish version of the NEO-FFI (60 items; Hoekstra, Ormel & De Fruyt, 1996), which has been validated on several Dutch and Flemish samples. The Dutch / Flemish translation covers the US item pool as much as possible, and the structure of the Dutch / Flemish edition and the descriptive meaning of the different factors closely resemble the original US version. Estimates of internal consistency (Cronbach alpha's) were .81, .70, .79, .85 and .71 for Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness to Experience respectively (12 items each). Extraver-

sion related positively to Agreeableness (r=.27, p<.0001), Conscientiousness (r=.24, p<.0001) and Openness to Experience (r=.18, p<.001) and negatively to Neuroticism (r=-.33, p<.0001). Agreeableness was positively related to Conscientiousness (r=.20, p<.001), unrelated to Openness to Experience (r=.12, n.s.) and negatively related to Neuroticism (r=-.15, p<.01). Conscientiousness was unrelated to Openness to Experience (r=.03, n.s.) and negatively related to Neuroticism (r=-.16, p<.01). Finally, Conscientiousness and Openness to Experience were unrelated (r=.01, n.s.).

As a religiosity measure, participants completed the Post-Critical Belief scale (PCBS, Duriez, Fontaine & Hutsebaut, 2000; 33 items). The PCBS provides measures of Orthodoxy (e.g., "Only a priest can give an answer to important religious questions"), External Critique (e.g., "In the end, faith is nothing more than a safety net for human fears"), Relativism (e.g., "Secular and religious conceptions of the world give valuable answers to important questions about life") and Second Naiveté (e.g., "The Bible holds a deeper truth which can only be revealed by personal reflection"). However, Fontaine et al. (in press) have shown that this scale also provides measures of the two basic religiosity dimensions which Wulff (1991, 1997) identified, namely Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic. In this way, the effects of being religious or not (Exclusion vs. Inclusion of Transcendence) can be disentangled from the way in which religious contents are dealt with (either in a literal or in a symbolical way). The items were scored on a 7-point Likert scale. As in Fontaine et al. (in press), a level of acquiescence estimation was subtracted from the raw scores. A Principal Component Analysis (PCA) was then carried out on these corrected scores. A scree test (Cattell, 1966) pointed to a two-componential solution. However, since PCA allows freedom of rotation, the componential structures obtained in different samples cannot be compared straightforwardly. Therefore, this structure was subjected to an orthogonal Procrustes rotation (McCrae et al., 1996; Schonemann, 1966) towards the average structure reported by Fontaine et al. (in press). Tucker's Phi indices were above the rule-of-thumb recommendation (of .90) provided in the literature for both components, suggesting good congruence (Bentler & Bonett, 1980; Van de Vijver & Leung, 1997). Hence, these components could be interpreted as Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic respectively.

As a measure of Berzonsky's (1990) identity styles, participants completed a Flemish version of the revised Identity Style Inventory (ISI; Berzonsky, 1992b). The ISI contains the informational identity style scale (10 items, e.g., "I've spent a great deal of time thinking seriously about what I should do with my life"), the normative identity style scale (10 items, e.g., "I prefer to deal with situations where I can rely on social norms and standards"), and the diffuse / avoidant identity style scale (10 items, e.g., "I'm not really thinking about my future now; it's still a long way off"). The translation of this scale into Flemish was done according to the guidelines of the International Test Commission (Hambleton, 1994), using the translation back-translation procedure (Brislin, 1980). Differences between the back-translated and

the original version were minimal. A committee of bilingual research assistants decided on the final Flemish version (cf. Van de Vijver & Leung, 1997). The items were scored on a 5-point Likert scale. Estimates of internal consistency (Cronbach alpha's) were .68, .62, and .74 for the information style scale, the normative style scale and the diffuse / avoidant style scale respectively. The information style scale was unrelated to the normative style scale (r=.01, n.s.) and negatively related to the diffuse / avoidant style scale (r=-.44, p<.0001). The normative style scale and to the diffuse / avoidant style scale were unrelated (r=-.07, n.s.). Reliability and validity data are provided in Berzonsky (1992b).

Results

To test our hypotheses we first of all carried out some correlational analyses. Due to the large sample size, our analyses attained high power. To preclude that small effects were flagged as significant, an alpha-level of .01 was used in our analyses. Results of these analyses show that the personality factors are unrelated to the Exclusion vs. Inclusion of Transcendence dimension (see Table 1). Concerning Extraversion, Neuroticism and Openness to Experience, these findings are in line with previous research. However, based on previous research, a positive correlation was expected between both Agreeableness and Conscientiousness and Exclusion vs. Inclusion of Transcendence. Although the correlations point in the right direction, this is clearly not the case in our sample. It should be noted, however, that previous research has pointed out that these relations are typically low, so the fact that we don't find them should come as no surprise. Concerning the relations between the personality factors and the Literal vs. Symbolic dimension, the importance of Openness to Experience is confirmed (see Table 1). As expected, Extraversion, Conscientiousness and Neuroticism were unrelated to this dimension. Agreeableness was also expected to be unrelated to the Literal vs. Symbolic dimension, but in spite of this, a weak but positive relation was observed. This should come as no surprise either, since McCrae (1999) has noted that, just like Openness to Experience, although to a lesser extent, Agreeableness is also relevant to social attitudes and ideologies in general. Moreover, the Literal vs. Symbolic dimension was found to relate to empathy and perspective taking (Duriez, 2002b; Fontaine et al., 2002). Again, the fact that we could not confirm the expected relation with the Inclusion vs. Exclusion of Transcendence dimension, but came across a relation with the Literal vs. Symbolic dimension instead, seems to support the claim that most religiosity measures confuse these two dimensions of the religiosity domain (Fontaine et al., in press).

Table 1   Correlations between the five personality factors and the religiosity dimensions (E = Extraversion, A = Agreeableness, C = Conscientiousness, N = Neuroticism, O = Openness to Experience)

	E	A	C	N	O
Exclusion vs. Inclusion	.00	.05	.10	.00	-.04
Literal vs. Symbolic	-.05	.15 *	-.07	.02	.30 ***

* p<.01, ** p<.001, *** p<.0001

The correlational analyses also showed that there exist clear relations between the identity styles and some of the personality factors (see Table 2). As expected, Openness to Experience was positively related to the informational identity style, and negatively to both the normative identity style and the diffuse / avoidant identity style. Apart from this, a positive relation between Conscientiousness and the normative identity style, and negative relations between both Agreeableness and Conscientiousness and the diffuse / avoidant identity style were also observed.

Table 2   Correlations between the identity styles and the five personality factors (E = Extraversion, A = Agreeableness, C = Conscientiousness, N = Neuroticism, O = Openness to Experience)

	E	A	C	N	O
Informational	.01	.09	.08	.00	.45 ***
Normative	.06	.04	.31 ***	-.05	-.15 *
Diffusion / Avoidance	-.10	-.23 ***	-.31 ***	.08	-.20 **

* p<.01, ** p<.001, *** p<.0001

Finally, the correlational analyses showed that there exist clear relations between the identity styles and the two dimensions of the religiosity domain. More specifically, as expected, the Exclusion vs. Inclusion of Transcendence dimension related positively to the normative identity style and the Literal vs. Symbolic dimension related positively to the informational identity style and negatively to both the normative identity style and the diffuse / avoidant identity style.

Table 3   Correlations between the identity styles and the religiosity dimensions

|	Informational	Normative	Diffuse / Avoidant
Exclusion vs. Inclusion	.02	.21 ***	-.02
Literal vs. Symbolic	.36 ***	-.15 *	-.23 ***

* p<.01, ** p<.001, *** p<.0001.

To test the proposed model which integrates Openness to Experience, the identity styles and the religiosity dimensions (see Figure 1), structural equation modeling with manifest variables was used. For this purpose, we relied on the PROC CALIS procedure from the SAS system (Hatcher, 1994). Again, to preclude that the high power attained due to the sample size would lead to small effects being flagged as significant, an alpha-level of .01 was used in our analyses. Our model proposes that the Openness to Experience dimension is directly predictive for the way identity-relevant information is processed, which, in turn contributes to the way religious phenomena are interpreted (literal vs. symbolic). In addition, it was expected that the normative identity style would positively predict the Exclusion vs. Inclusion of Transcendence dimension and that the informational and the diffuse / avoidant identity style would be negatively related. In other words, the hypothesized model is a full mediation model in which it is expected that the direct path from Openness to Experience (the exogenous or independent variable) to the Literal vs. Symbolic dimension will turn out to be non-significant (Baron & Kenny, 1986) when the identity styles are taken into account. To evaluate the goodness of fit of this model, seven fit indices were examined. The Goodness-of-Fit Index (GFI), which compares the hypothesized model with no model at all and which should be close to 1.00, suggested a good model fit (GFI=.99). The Adjusted Goodness-of-Fit Index (AGFI), which takes the degrees of freedom into account, also suggested a good fit (AGFI=.97). The chi-square statistic also pointed out that our model fits the data well ($\chi^2(7)$)=10.62, p>.05). This chi-square statistic tests the departure of the specified model's estimated covariance matrix from the actual covariance matrix. A non-significant chi square indicates that the estimated and obtained covariance matrices are similar and that the proposed model provides a good fit to the data. The Normed Fit Index, the Non-Normed Fit Index (NFI and NNFI, Bentler & Bonnett, 1980) and the Comparative Fit Index (CFI, Bentler, 1990), which are less sensitive to variations in sample size and compare the model with the independence model, and which should exceed .90 (Bentler, 1990), suggested that our model fits the data well (NFI=.96, NNFI=.97, CFI=.98). Finally, the Root Mean Square Error of Approximation (RMSEA), which takes into account the error of approximation in the population and should be less than .05 to indicate a good model fit, also suggested that our model fits the data well (RMSEA=.04) (for an overview of these statistics, see Byrne, 1998).

An inspection of Figure 2 indicates that, even although we found a significant negative correlation between the diffuse / avoidant identity style and the Literal vs. Symbolic dimension (see Table 3), the path coefficient leading from the diffuse / avoidant identity style to the Literal vs. Symbolic dimension is non-significant. This means that this identity style does not explain a significant amount of variance in the scores on the Literal vs. Symbolic dimension in addition to the other two identity styles. In line with this reasoning, the Wald test (Hatcher, 1994) indicated that this path could be deleted without significant loss in model fit. Furthermore, the Lagrange Multiplier Test (LMT; Hatcher, 1994) was used to determine

if the addition of one or more paths would significantly increment the fit of the model. The LMT revealed that no path contributed significantly ($p<.01$) to the model fit in addition to the hypothesized paths. Since the association between Openness to Experience and the Literal vs. Symbolic dimension of religiosity was non-significant when Berzonsky's identity styles were included as mediation variables, it can be concluded that these identity styles fully mediate the relationship between Openness to Experience and the Literal vs. Symbolic dimension of the religiosity domain (see Baron & Kenny, 1986).

Figure 2   *Integrated model of the relations between Openness to Experience, the identity styles and the religiosity dimensions, including the standardized path coefficients*
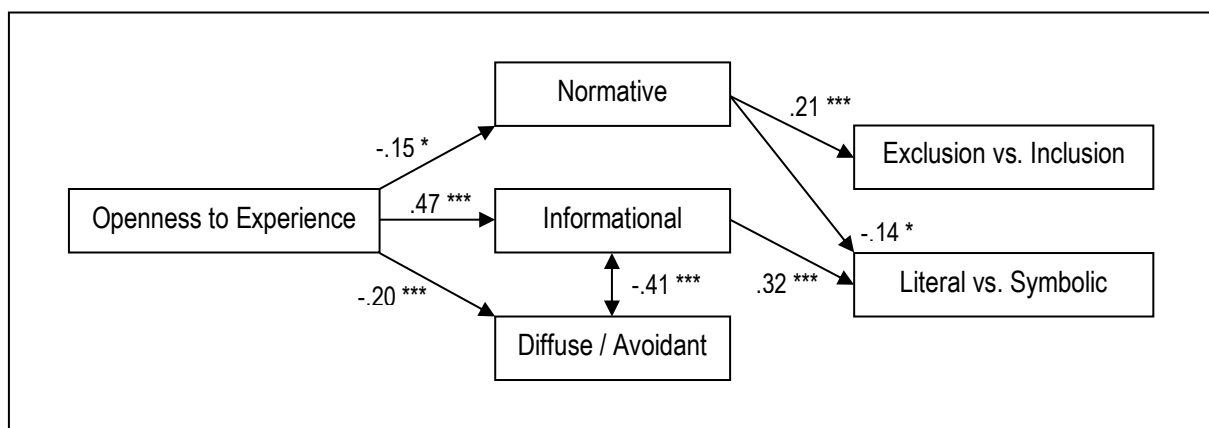
*$p<.01$, ** $p<.001$, *** $p<.0001$

Finally, because the correlational analyses have depicted that there is a significantly positive relation between Agreeableness and the Literal vs. Symbolic dimension (see Table 1), we tried to incorporate this relationship into our model in order to check whether it would also be mediated by the identity styles. Since Agreeableness was related to the diffuse / avoidant identity style only (in a negative way) (see Table 2), and since this diffuse / avoidant identity style also happened to be negatively related to the Literal vs. Symbolic dimension (see Table 3), we inserted Agreeableness into our model and added pathways from Agreeableness to the diffuse / avoidant identity style and from the diffuse / avoidant identity style to the Literal vs. Symbolic dimension. Results show that, when doing so, the standardized path coefficient on the pathway from Openness to Experience to the diffuse / avoidant identity style drops off slightly (from -.20, $p<.0001$ to -.17, $p<.001$) in favor of the pathway from Agreeableness to the diffuse / avoidant identity style, which obtained a path coefficient of -.20 ($p<.0001$). However, the pathway from the diffuse / avoidant identity style to the Literal vs. Symbolic dimensions remained non-significant ($p>.01$). The fit indices indicated that this elaborated model also fits the data well (GFI=.99, AGFI=.97, $\chi^2(11)=15.93$, $p>.05$, NFI=.94, NNFI=.96, CFI=.98, RMSEA=.04). This suggests that, once Openness to

Experience is taken into account, Agreeableness is no longer an important determinant of the Literal vs. Symbolic dimension. Adding this personality factor to our model did not significantly increase the variance explained in the Literal vs. Symbolic dimension (p>.01).

Discussion

The aim of the present study was to elaborate on previous empirical findings on the relation between personality and religiosity and on the relation between identity development and religiosity. For this purpose, we introduced a multidimensional approach to religiosity which disentangles the two main dimensions of the religiosity domain which Wulff (1991, 1997) identified (Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic). Finally, we presented an integrated theory-driven model of the relations between personality, identity development and religiosity (see Figure 1).

Personality and Religiosity

On the one hand, based on previous research, a positive relation was expected between the personality factors of Agreeableness and Conscientiousness and the religiosity dimension Exclusion vs. Inclusion of Transcendence which indicates the degree to which one is religious or not. On the other hand, based on the theories of Wulff (1991, 1997) and McCrae (1999), a positive relation was expected between the personality factor Openness to Experience and the religiosity dimension Literal vs. Symbolic which indicates whether religious contents are interpreted literally or symbolically. However, although the relation between Openness to Experience and the Literal vs. Symbolic dimension was confirmed, results failed to confirm the relation between Agreeableness and Conscientiousness and the Exclusion vs. Inclusion of Transcendence dimension. This should come as no surprise, since previous research has pointed out that these relations are typically low (Saroglou, 2002). Moreover, Fontaine et al. (in press) have argued that most religiosity measures confuse the Exclusion vs. Inclusion of Transcendence dimension and the Literal vs. Symbolic dimension, leading to an inaccurate picture of religiosity and its correlates. This last interpretations receives further support from looking at the correlation between Agreeableness and the Literal vs. Symbolic dimension. Unexpectedly, a significantly positive relation occurred. However, this should come as no surprise either, since previous research has shown that the Literal vs. Symbolic dimension relates to empathy and perspective taking (Duriez, 2002b; Fontaine et al., 2002). Moreover, McCrae (1999) has argued that, just like Openness to Experience, although to a lesser extent, Agreeableness is also relevant to social attitudes and ideologies in general. Hence, a similar pattern of correlations with social attitudes and ideologies might be expected. Nevertheless, results showed that, once Openness to Experience is taken into account, Agreeableness is no longer a determinant of the Literal vs. Symbolic dimension. In line with Saucier and Goldberg (1998), Piedmont (1999) and Paunonen and

Jackson (2000) who have argued that religiousness and spirituality are beyond the factors that are represented in the Five Factor Model of personality, we can conclude that there is no relation whatsoever between any of the five personality factors and whether or not people believe in a transcendent reality or a personal God. In spite of this, Openness to Experience is important in order to interpret religious phenomena because it is related to dealing with religious contents in an open, symbolical way.

Identity and Religiosity

Disentangling whether or not people believe (Exclusion vs. Inclusion of Transcendence) from the way in which religious contents are interpreted (Literal vs. Symbolic) not only sheds a new light on the relation between personality and religiosity, but also on the relation between identity and religiosity. Whereas previous research concerning the relation between Marcia's (1966, 1967, 1980, 1982) identity statuses and measures of religiosity yielded inconclusive results that are difficult to interpret, the present study makes is clear that theoretically predictable relations do occur when a more process oriented approach to identity development is combined with a religiosity measure which disentangles the Exclusion vs. Inclusion of Transcendence dimension from the Literal vs. Symbolic dimension. More specifically, we found that late adolescents who use an information oriented identity style tend to interpret religious contents in a personal and symbolic way (as is expressed by the correlation with the Literal vs. Symbolic dimension). In contrast, late adolescents who use a normative oriented or a diffuse / avoidant identity style tend to interpret religious contents in a literal way. On the one hand, based on the theory of Berzonsky (1990), adolescents using a diffuse / avoidant identity style are thought to interpret these religious contents in a literal way because they are likely to avoid questioning difficult and personal issues such as religion. On the other hand, also based on the theory of Berzonsky (1990), adolescents using a normative oriented identity style are thought to interpret these religious contents in a literal way because they are likely to rely on and conform to the prescriptions and standards of both significant others, referent groups, authority and tradition. In line with this, results also suggest that late adolescents who use a normative oriented identity style tend to be more religious (as is expressed by the correlation with the Exclusion vs. Inclusion of Transcendence dimension), at least in a context that is characterized by a strong religious tradition.

An integrated model

Contemporary personality and developmental research assumes that personality traits such as the ones presented in the Five Factor Model are not merely descriptions of static, enduring individual differences. Rather they should be considered dynamic, organizational constructs that influence how people organize their behavior, process information and adapt to the social environment (Buss, 1989; Caspi, 1998; McCrae & Costa, 1997; Roberts, Caspi & Moffitt, 2001). Hence, given the assumption that issues of

identity development and ways of processing these issues are of major importance during adolescence, it was hypothesized that the relation between Openness to Experience and the religiosity dimensions would be mediated by the identity styles late adolescents use. This theory-driven model was found to fit the data well. The association between Openness to Experience and the Literal vs. Symbolic dimension turned out to be non-significant when identity styles were included as mediation variables. Hence, it can be concluded that identity styles fully mediate the relation between Openness to Experience and the Literal vs. Symbolic dimension of the religiosity domain. Moreover, an elaboration of our model also suggested that, once Openness to Experience is taken into account, Agreeableness is no longer a significant predictor of the Literal vs. Symbolic dimension.

Limitations and Suggestions

We should be careful, however, when drawing conclusions from our path analyses. We are well aware of the fact that, although there are clear theoretical predictions underlying our model, the more detailed construction of our model might have been partly data-driven. Hence, it might have been obtained to some extent by 'capitalizing on chance' (Jöreskog, 1993). Moreover, the output of our structural equation modeling analyses indicated a Critical $\underline{N}$ goodness of fit statistic of 442, suggesting our sample ($\underline{N}$= 334) was not sufficiently large to allow for a totally adequate testing of the model. Therefore, before basing strong claims on the analyses reported in our paper, the model we proposed should be tested again (strictly confirmatory) using data from a new and larger sample of late adolescents. Furthermore, testing this model in groups of middle adolescents would allow to test whether the theory underlying the proposed model encompasses the whole of adolescence. Moreover, Erikson (1968) has stressed that identity development is a life-long process that extends well beyond adolescence into adulthood. Recently, Whitbourne, Sneed and Skultety (2002) have proposed three ways of adapting one's self-concepts and identity in the context of changing social environments during adulthood and old age: Identity balance, identity accommodation and identity assimilation. These identity styles of adulthood are conceptually similar to, respectively, the information oriented identity style, the diffuse / avoidant identity style and the normative oriented identity style of late adolescence. Hence, future research might also try to test this model in groups of adults. In this way, the theory underlying the proposed model might be expanded to encompass later stages in life. Furthermore, future research might try and test this model in cultures in which either other religious denominations prevail, in order to check whether our model also applies in cultural settings that are not characterized by a strong Roman Catholic tradition, as well as in a context where no religious denomination at all is dominant, in order to check whether our model also applies in cultural settings that are not characterized by a strong religious tradition at all.

Appendix

PART 1

Cognition, Authoritarianism and Ideology

Abstract

The present studies explore the differential relationships between right-wing authoritarianism (RWA) and social dominance orientation (SDO) on the one hand, and the motivated cognition measures need for closure, need for cognition and dogmatism on the other hand. Moreover, it was investigated whether RWA and SDO mediates the effects of motivated cognition on conservative beliefs and racism. These research questions were investigated on student samples in Study 1 (N = 399) and Study 2 (N = 390) and on an adult sample in Study 3 (N = 381). Results reveal significant correlations between RWA and both need for closure and need for cognition, and between SDO and both need for closure and dogmatism. However, the effects of need for closure on conservative beliefs and racism are mediated by RWA, whereas the effects of dogmatism on the target variables are largely mediated by SDO. The cognitive roots of RWA and SDO based conservatism and racism are discussed.

Introduction

The Authoritarian Personality (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950) can be considered as one of the cornerstones of political psychology and has been cited in more than 2,000 publications (Meloen, 1993). The authoritarianism concept has been widely used to explain pro-fascist attitudes, politico-economic conservatism, prejudice, stereotyping, discrimination and intergroup conflict. In line with this research tradition, the present study is concerned with the interplay of authoritarianism and motivated cognition in the genesis of conservative beliefs and racism.

<u>Authoritarianism, motivated cognition and political ideology</u>

Classic research on authoritarianism has been concerned with two main themes: its relation to conservative beliefs and prejudice (e.g., Adorno et al., 1950; Altemeyer, 1998) and its relation to cognitive functioning. The former line of research has found that authoritarianism is a powerful predictor of conservative beliefs and prejudice whereas the latter reported that authoritarianism is accompanied by cognitive rigidity (e.g., Rokeach, 1948) and intolerance for ambiguity (e.g., Frenkel-Brunswik, 1949). People high on authoritarianism were also found to differ from people low on authoritarianism with respect to, for example, integrative complexity (e.g., Harvey, 1963), field dependence (e.g., Rudin & Stagner, 1958) and the use of conceptual categories (e.g., White, Alter, & Rardin, 1965). Studies relating authoritarianism to cognitive functioning led to the conclusion that, above all, authoritarianism is a mode of perceiving the world. An authoritarian vision of reality would apply to persons for whom the reality in which they live is hardly understandable and over which they have no cognitive control, and who consequently have a need to simplify this reality in order to get a grip on it.

The link between cognitive functioning and conservative beliefs and prejudice has recently been studied by what can be referred to as the motivated cognition approach to political psychology (e.g., Greenberg, Simon, Pyszczynski, Solomon, & Chatel, 1992; Jost, Glaser, & Kruglanski, in press; Kemmelmeier, 1997; Kossowska & Van Hiel, in press; Shah, Kruglanski, & Thompson, 1998; Tetlock, 1983, 1993). According to this line of research, both directional and non-directional psychological motives are be involved in belief formation and maintenance. Directional motives reflect the desire to reach a specific conclusion, such as that the self is valuable (e.g., Dunning, 1999; Kunda, 1990). Non-directional motives reflect the desire for any firm belief on a given topic. Jost et al. (in press) mention the need for closure (Kruglanski & Webster, 1996), the need for cognition (after inversion) (Cacioppo & Petty, 1982), and regulatory focus (Higgins, 1998), but measures such as dogmatism (Rokeach, 1960) and intolerance of ambiguity (Budner, 1962; Frenkel-Brunswik, 1949) have also been considered cognitive-motivational by both its instigators and its commentators (e.g., Davies, 1998; Durrheim, 1997; Jost et al., in press). Persons having low levels of motivation to process information would be more likely to support conservative

ideologies since these rely on tradition, are aimed at (societal) stability, and imply the avoidance of ambiguity caused by change.

In sum, the classic research on authoritarianism focused on the relation between authoritarianism and both cognitive functioning (i.e., motivated cognition avant la lettre) and conservative beliefs and prejudice, whereas the recent motivated cognition approach highlights the relationship between motivated cognition and conservative beliefs and prejudice. However, with the exception of Chirumbolo (2002), an integrated approach in which authoritarianism, motivated cognition, and conservative beliefs and prejudice are studied simultaneously has not been advanced yet. This is the aim of the present study.

Chirumbolo (2002) found that both authoritarianism and motivated cognition relate positively to right-wing political ideology, and that authoritarianism mediates the influence of motivated cognition on political orientation. However, in this study, only one measure of motivated cognition (the need for closure scale) was used. Moreover, an authoritarianism measure based on the F scale (Adorno et al., 1950) was used, neglecting the fact that the F scale has attracted a lot of criticism during the years (see Altemeyer, 1998). In addition, this study was restricted to the prediction of political party preferences. Finally, and arguably the most important omission, Chirumbolo did not take into account the growing literature on the differentiation of authoritarianism in authoritarian submission and authoritarian dominance (Altemeyer, 1998; Duckitt, 2001; Duckitt, Wagner, du Plessis, & Birum, 2002; Duriez & Van Hiel, 2002; Duriez, Van Hiel, & Kossowska, in press; Lippa & Arad, 1999; McFarland, 1998, 1999; McFarland & Adelson, 1996, Van Hiel & Mervielde, 2002b).

<div align="center">Authoritarianism submission and dominance</div>

Although both the F-scale scale (Adorno et al., 1950) and the more recent Right-Wing Authoritarianism (RWA) scale (Altemeyer, 1981) were constructed to capture the psychology of the submissive crowd, the motive for domineering others was initially also considered an integral part of the same monolithic authoritarianism concept (Adorno et al. 1950). However, researchers only recently developed an interest in the study of "authoritarian dominance" and the Social Dominance Orientation (SDO) scale (Pratto, Sidanius, Stallworth, & Malle, et al., 1994) was constructed to measure this concept. Research reported substantial correlations between SDO and variables like racism, militarism, punitiveness and conservatism, which have also been reported to show solid relations with RWA. Hence, subsequent research set out to compare the predictive validity of RWA and SDO (Altemeyer, 1998; Duckitt, 2001; Van Hiel & Mervielde, 2002b) and found these to independently predict conservative beliefs and prejudice and to relate differentially to other relevant variables such as cultural and economic conservatism, value orientations, religiosity and moral competence (Altemeyer, 1998; Duriez & Van Hiel, 2002; Duriez, Van Hiel, & Kossowska, 2002; Lippa & Arad, 1999; McFarland, 1998, 1999; McFarland & Adelson, 1996). These

findings led to the conclusion that RWA (or authoritarian submission) and SDO (or authoritarian dominance) constitute different prejudice dispositions. According to Duckitt (2001; Duckitt et al., 2002), RWA is driven by feelings of fear and being threatened. These feelings generate self-protective, defensive motivational needs for social control and security. Out-groups are disliked because they are seen as threatening and dangerous to social and group cohesion, values, security, order and stability. This generates a categorization of the social world into good, decent people (us) and bad, disruptive and deviant people (them). In contrast, SDO is driven by a view of the world as a competitive jungle characterized by a ruthless, amoral struggle for power and resources in which the fit succeed and the unfit fail. This generates self-enhancement motives for status, power, superiority and dominance. Out-groups are disliked because they are seen as inferior and weak. This generates a categorization of the social world into superior, strong, competent and dominant people (us) and inferior, weak, incompetent and worthless people (them). Still, although RWA and SDO would result from different motivational and cognitive processes, both RWA and SDO are associated with the political right, and, as a consequence, RWA and SDO might influence each other as a result of political socialization and political involvement, especially in countries in which the political system is strongly ideologized along a broad left-right dimension (Duckitt, 2001; Duckitt et al., 2002; Duriez, Van Hiel, & Kossowska, 2002).

Given the differential relationships of RWA and SDO with a host of variables and given their supposedly different psychological background and genesis, an important issue that has to be raised is whether RWA and SDO also relate differentially to individual differences in motivated cognition. Based on both the theorizing on this topic and the results of the research that has been conducted from this point of view (for an overview, see Durrheim, 1997), one should expect a positive relationship between RWA and motivated cognition. With respect to the relationship between SDO and motivated cognition, however, the situation is less clear. Social Dominance Theory (e.g., Pratto et al., 1994; Sidanius & Pratto, 1999) has not made any statement about the relationship between SDO and motivated cognition, and moreover, no direct empirical evidence is available with respect to this issue.

<u>The present study</u>

The present study aims to replicate and extend the findings of Chirumbolo (2002). More specifically, the present study aims to investigate whether motivated cognition relates to conservative beliefs and racism, whether motivated cognition relates (differentially) to RWA and SDO and, if so, whether the effects of motivated cognition on conservative beliefs and racism are mediated by RWA and SDO. Moreover, in order to enhance the generalizability of our findings, a variety of indicators of motivated cognition (i.e., need for closure, need for cognition and dogmatism), conservative beliefs (i.e., cultural conservatism, economic conservatism and general conservatism) and racism (i.e., general racism, classic racism and

symbolic racism) were used. Finally, the stability of some of these relationships was checked in different samples (i.e., two student samples and one adult sample gathered in Flanders, Belgium).

STUDY 1

Method

Sample

Participants were 399 first year psychology students from a large Belgian university, ranging in age from 17 to 31 years with a mean age of 19. All participants had Belgian nationality and belonged to the Flemish-speaking part of the country; 82% were female. They participated in partial fulfillment of a research experience requirement for introductory psychology courses.

Measures

Five-point scale items anchored by Certainly disagree and Certainly agree were used for all measures. A 14 item SDO scale (Pratto et al., 1994, translated by Van Hiel & Duriez, 2002, Cronbach alpha = .87) and an 11 item RWA scale (Altemeyer, 1981, translated by Meloen, 1991, Cronbach alpha = .71) were administered, as well as a 42 item Need for Closure Scale (NFCS, Webster & Kruglanski, 1994, translated by Cratylus, 1995). According to Webster and Kruglansi (1994), the Need for Closure scale comprises five domains which are additive in their impact on the total need for closure: (1) preference for order and structure in the environment, (2) predictability of future contexts, (3) decisiveness of judgments and choices, (4) affective discomfort occasioned by ambiguity, and (5) closed-mindedness. Cronbach alpha's for preference for order, preference for predictability, decisiveness, discomfort with ambiguity and closed-mindedness were .80, .79, .80, .53 and .51 respectively. Principal component analysis with OBLIMIN rotation of the Need for Closure items revealed the quasi-orthogonal (r = .03, p > .59) two-component structure previously obtained in several studies (e.g., Neuberg, Judice, & West, 1997; Neuberg, Judice, Thompson, & West, 1997; see also Kruglanski, DeGrada, Mannetti, Atash, & Webster, 1997). In line with Neuberg and colleagues the first component was identified as Need for Simple Structure. High loading items on this component primarily belonged to the preference for order and preference for predictability facets (correlations with the abovementioned Need for Closure facets were .95, .90, -.11, .39 and .60 respectively). Also in line with Neuberg and colleagues the second component was identified as Decisiveness. Items from the decisiveness facet constituted this component (correlations with the abovementioned Need for Closure facets were .34, .01, .93, .12 and -.12 respectively).

Furthermore, cultural conservatism and racism were administered as dependent variables. Cultural conservatism relates to the endorsement of traditional values and norms as opposed to the freedom to arrange life according to one's own insights. Cultural conservative ideology thus favors issues such as an authoritarian parent-child relationship, traditional work ethic and conventional female roles (Middendorp, 1978). Cronbach's alpha for the 12 item cultural conservatism scale (De Witte, 1990; Duriez, Luyten, Snauwaert, & Hutsebaut, 2002) was .75. The racism scale that was admistered was originally constructed to measure two conceptually different components: xenophobia and racism (Billiet & De Witte, 1991). An example of a xenophobia item is "In general, immigrants are not to be trusted". An example of a racism item is "We have to keep our race pure and fight mixture with other races". However, contrary to the presumed two-factorial structure, both the scree test and the eigenvalue-greater-than-one criterion clearly pointed to one component only (cf. Duriez, 2002; Duriez, Fontaine, & Hutsebaut, 2000; Duriez & Hutsebaut, 2000; Duriez et al., 2002). Cronbach's alpha for this 9 item racism scale was .88.

Results and Discussion

Correlations between the variables in this study can be found in Table 1. Note that, for all analyses reported in this article, we adhered to the rather conservative significance level of 1%. Given the large sample sizes, the analyses attained such high power that we could trade somewhat in for a decreased probability of a Type I error. Moreover, the traditional significance level of 5% implies the possibility we would have to report trivial effects, explaining less than 1% of the variance in the dependent variables. Results of these analyses reveal that RWA is strongly related to Need for Simple Structure but only weakly to Decisiveness and that SDO is only weakly related to Need for Simple Structure and not al all to Decisiveness. These results also reveal that Need for Simple Structure relates to both cultural conservatism and general racism, whereas Decisiveness is unrelated to these variables.

*Table 1*   *Correlations between the variables included in Study 1*

	Dec	NFSS	RWA	SDO	CC
NFSS	.03				
RWA	.19 *	.45 *			
SDO	.09	.21 *	.44 *		
CC	.11	.38 *	.62 *	.35 *	
Racism	.12	.30 *	.51 *	.56 *	.50 *

Note: *Dec = Decisiveness, NFSS = Need for Simple Structure, CC = Cultural Conservatism.*

* p < .01.

Next, mediation analyses were conducted to examine whether or not the effects of the motivated cognition measures (Decisiveness and Need for Simple Structure) on the dependent variables were mediated by authoritarianism. Each analysis consisted of checking four necessary conditions for strict mediation (cf. Baron & Kenny, 1986): (1) motivated cognition affects the dependent variables, (2) motivated cognition affects authoritarianism, (3) authoritarianism affects the dependent variables, and (4) the effect of motivated cognition on the dependent variables vanishes after statistical control for authoritarianism. For consistency purposes, the analyses were restricted to complete cases only. As a result, four observations were discarded from the mediation analyses. Results revealed that the first three conditions were satisfied. Motivated cognition was related to both cultural conservatism (R^2 = .155, F(2,392) = 36.03, p < .001) and racism (R^2 = .10, F(2,392) = 22.74, p < .001), and to both RWA (R^2 = .232, F(2,392) = 59.20, p < .001) and SDO (R^2 = .052, F(2,392) = 10.63, p < .001). Moreover, both RWA and SDO were related to cultural conservatism (R^2 = .386, F(1,393) = 247.06, p < .001 and R^2 = .127, F(1,393)= 57.06, p < .001 respectively) and racism (R^2 = .254, F(1,393)= 133.85, p < .001 and R^2 = .308, F(1,393)= 174.58, p < .001 respectively). Analyses pertaining to the fourth condition revealed that motivated cognition no longer affected either cultural conservatism (F(2,391) = 4.41, p = .013) or racism (F(2,391) = 2.20, p > .11) once RWA was controlled for. Thus, in line with Chirumbolo (2002), the effects of Need for Closure on cultural conservatism and racism were fully mediated by RWA. In contrast, the effects of Need for Closure on cultural conservatism and racism were not fully mediated by SDO. Motivated cognition still affected both cultural conservatism (F(2,391) = 26.39, p < .001) and racism (F(2,391) = 12.23, p < .001) once SDO was controlled for. Interestingly, the effects of motivated cognition on SDO, cultural conservatism and racism were restricted to the Need for Closure dimension Need for Simple Structure. The Decisiveness dimension had a significant effect on RWA only.

In order to summarize the conclusions derived from these analyses, we fitted a path-analytic model with motivated cognition directly affecting both RWA and SDO, motivated cognition indirectly affecting both cultural conservatism and racism, and RWA and SDO directly affecting both cultural conservatism and racism. To allow for the fact that RWA and SDO may be related beyond the relationship due to their joint dependence on motivated cognition (see above), we allowed the errors of RWA and SDO to correlate (r = .39). In a similar vein, because cultural conservatism and racism may both be influenced by other variables than RWA, SDO and motivated cognition, we also let the errors associated with these two variables correlate (r = .25). The resulting model (see Figure 1) fitted the data adequately. The Goodness of Fit Index (GFI = .99), the Adjusted Goodness of Fit Index (AGFI = .95), the Non-Normed Fit Index (NNI = .96) and the Normed Fit Index (NFI = .98) all indicated a good model fit. In addition, the Root Mean Square Error of Approximation was very low (RMSEA = .067), indicating a close fit (p = .21), and even the very powerful Chi-Square test indicated an acceptable fit (χ^2 (df = 5) = 13.96, p = .02).
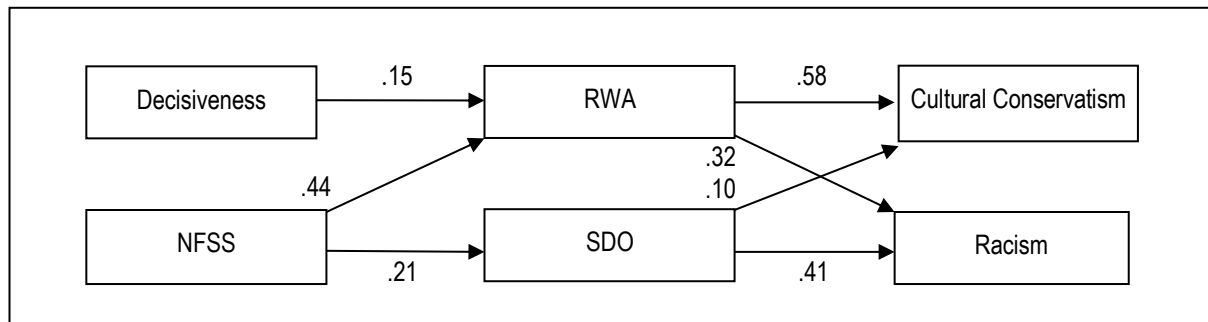
STUDY 2

In Study 2, besides the cultural conservatism scale, an economic conservatism scale was also assessed in order to achieve a more complete representation of conservative ideology. The distinction between economic and cultural conservatism became apparent in the work of prominent scholars (e.g. Eysenck, 1954; Lipset, 1981; Middendorp, 1978; Wilson, 1973). From an economic perspective, progressive ideology emphasizes equality and rejects inequality of the distribution of power, income, and opportunities. Economic progressive ideology therefore favors issues such as worker participation, state economic intervention and trades unionism. Economic conservatism favors adherence to capitalist ideology, private initiative and unrestricted competition among individuals. Thus, the finding in Study 1 that the relationship between motivated cognition and cultural conservative beliefs was not fully mediated by SDO does not preclude the possibility that SDO might mediate the relationship between motivated cognition and economic conservative beliefs. Another reason for the lack of a mediation effect of SDO in Study 1 might be the use of just one particular measure of motivated cognition (i.e., the need for closure scale). That is, it is possible that SDO mediates the relationship between other measures of motivated cognition and conservative beliefs and prejudice. Hence, the need for cognition scale (Cacioppo & Petty, 1982) was used as an extra indicator of motivated cognition in Study 2.

Method

Sample

A total of 330 first-year psychology students of a large Belgian university participated in partial fulfillment of a research experience requirement for introductory psychology courses. Their mean age was 18 (ranging from 17 to 23 years) and 75% of them were female. All participants had Belgian nationality and belonged to the Flemish-speaking part of the country.

Measures

Five-point scale items anchored by Certainly disagree and Certainly agree were used for all measures. A 14 item SDO scale (Van Hiel & Duriez, 2002, Cronbach alpha = .85) and an 11 item RWA scale (Meloen, 1991, Cronbach alpha = .72) were administered, as well as a 42 item Need for Closure Scale (NFCS, Cratylus, 1995). Cronbach alpha's for preference for order, preference for predictability, decisiveness, discomfort with ambiguity and closed-mindedness were .82, .72, .72, .41 and .58 respectively. Principal component analysis with OBLIMIN rotation revealed the quasi-orthogonal (r = -.02, p > 69) two-component structure suggested by Neuberg et al. (see above). In line with Neuberg et al., the first component was identified as Need for Simple Structure. This component is primarily constituted by items from the preference for order and preference for predictability facets (correlations with the abovementioned Need for Closure facets were .89, .82, -.07, .44 and .34 respectively). Also in line with Neuberg et al., the second component was identified as Decisiveness. Items from the decisiveness facet load on this component (correlations with the abovementioned Need for Closure facets were .12, -.08, .95, .06 and -.16 respectively). To obtain an additional measure of motivated cognition, we also administered a 15 item Need for Cognition scale (Pieters, Verplanken, & Modde, 1987), which proved sufficiently internally consistent (Cronbach alpha = .86).

In line with Study 1, conservatism and racism measures were assessed as dependent variables. However, in addition to this, the present study also pays attention to the differentiation between cultural and economic conservatism. In the present study, the cultural conservatism scale and the economic conservatism scale (De Witte, 1990; Duriez et al., 2002) were extended from 12 items to 18 items in order to obtain a balanced scale, containing 9 pro- and 9 con-trait items (Cronbach's alpha = .67 and .76 respectively). The racism scale used in Study 1 was also administered. Again, a scree test clearly pointed to one component only (see above). Cronbach's alpha was .88.

Results and Discussion

Correlations between the variables in this study can be found in Table 2. In line with Study 1, RWA was strongly related to Need for Simple Structure and SDO was unrelated to Decisiveness. In contrast with Study 1, RWA was unrelated to Decisiveness and SDO was unrelated to the Need for Simple Structure. However, these divergences do not need to be exaggerated because the relationships between RWA and Decisiveness and between SDO and Need for Simple Structure in Study 1 were both rather weak. Moreover, in line with Study 1, Need for Simple Structure related strongly to both conservative beliefs and racism, whereas Decisiveness was unrelated to these variables. Need for Cognition was related to RWA and racism only.

Table 2   *Correlations between the variables included in Study 2*

	Dec	NFSS	NFC	RWA	SDO	CC	EC
NFSS	-.02						
NFC	.08	-.41 *					
RWA	.03	.43 *	-.26 *				
SDO	.09	.13	-.11	.30 *			
CC	.02	.33 *	-.09	.56 *	.23 *		
EC	-.10	.15 *	-.05	.24 *	.42 *	.18 *	
Racism	.03	.29 *	-.29 *	.45 *	.43 *	.39 *	.28 *

Note: *Dec = Decisiveness, NFSS = Need for Simple Structure, NFC = Need for Cognition, CC = Cultural Conservatism, EC = Economic Conservatism.*

* p < .01.

Next, mediation analyses were conducted to examine whether the effects of the motivated cognition measures (Decisiveness, Need for Simple Structure and Need for Cognition) on the dependent variables were mediated by authoritarianism. Again, each analysis consisted of checking four conditions for strict mediation (cf. Baron & Kenny, 1986): (1) whether motivated cognition affects the dependent variables, (2) whether motivated cognition affects authoritarianism, (3) whether authoritarianism affects the dependent variables, and (4) whether the effects of motivated cognition on the dependent variables vanish if one controls for authoritarianism. Analogous to Study 1, all analyses were performed on complete cases only, thereby discarding five cases. Results revealed that the first two conditions were not satisfied entirely. Motivated cognition was significantly related to cultural conservatism (R^2 = .112, F(3,321) = 13.49, p < .001) and racism (R^2 = .121, F(3,321) = 14.66, p < .001) but the relationships between motivated cognition and economic conservatism (R^2 = .031, F(3,321) = 3.47, p = .017) failed to reach the .01 level. Motivated cognition was related to RWA (R^2 = .197, F(3,321) = 26.24, p < .001), but the relationship between motivated cognition and SDO again failed to reach the .01 criterion (R^2 = .029, F(3,321) = 3.20, p > .02). The third condition was completely satisfied. Both RWA and SDO were related to cultural conservatism (R^2 = .318, F(1,323) = 150.73, p < .001 and R^2 = .052, F(1,323) = 17.61, p < .001 respectively), economic conservatism (R^2 = .055, F(1,323) = 18.97, p < .001 and R^2 = .177, F(1,323) = 69.44, p < .001 respectively) and racism (R^2 = .206, F(1,323) = 83.66, p < .001 and R^2 = .285, F(1,323)= 128.56, p < .001 respectively). Analyses pertaining to the fourth condition revealed that the relationship between motivated cognition and cultural conservatism dissipated (F(3,320) = 2.83, p = .038) once RWA was controlled for, but continued to affect racism (F(3,320) = 5.06, p < .01). Also, motivated cognition did not affect economic conservatism (F(3,320) = 1.57, p > .19) after control for RWA. Apparently, whereas the effect of motivated cognition on cultural conservatism and its insignificant effect on economic conserva-

tism were fully mediated by RWA, the effect of motivated cognition on racism was not fully mediated by RWA. Inspection of the regression coefficients revealed that only Need for Cognition had a significant effect on racism once RWA was controlled for ($t(320) = 3.26$, $p < .001$). So, again, in line with Chirumbolo (2002), the effects of Need for Closure on cultural conservatism and racism were mediated by RWA. In contrast, the effects of Need for Closure on cultural conservatism and racism were not mediated by SDO. Since motivated cognition was not related to SDO, this latter variable could not act as a mediator. Hence, motivated cognition still affected both cultural conservatism ($F(3,320) = 12.12$, $p < .001$) and racism ($F(3,320) = 12.17$, $p < .001$) once SDO was controlled for. Moreover, the non-significant effect of motivated cognition on economic conservatism became significant after controlling for SDO ($F(3,320) = 3.94$, $p < .01$). Every time motivated cognition affected RWA, cultural conservatism or racism, the effect was due to the Need for Closure dimension Need for Simple Structure, and, in the case of racism, also to Need for Cognition. Consistent with Study 1, the effect of Decisiveness always failed to reach significance at the 1% level (as was already evident from looking at Table 2).

In order to summarize the conclusions derived from these analyses, we fitted a path-analytic model with motivated cognition directly affecting both RWA and SDO, motivated cognition indirectly affecting cultural conservatism, economic conservatism and racism, and RWA and SDO directly affecting cultural conservatism, economic conservatism and racism. Need for Simple Structure was the only motivated cognition variables that was related to RWA and none of the motivated cognition variables related to SDO. SDO predicted racism and economic conservatism but not cultural conservatism, even though the regression analyses described above seemed to suggest that SDO would have a significant effect on cultural conservatism. This effect proved to be non-significant, indicating that SDO was only spuriously related to cultural conservatism due to its correlation with RWA. Finally, Need for Cognition had a direct impact on racism. To allow for the fact that RWA and SDO may be related beyond the relationship due to their joint dependence on motivated cognition (see above), we allowed the errors of RWA and SDO to correlate with each other ($r = .28$). In similar vein, because cultural conservatism and racism may both be influenced by other variables besides authoritarianism and motivated cognition, we also let the errors associated with these two variables correlate with each other ($r = .19$). Initially, we also let the error associated with economic conservatism correlate with both the errors of cultural conservatism and racism. However, neither of these two correlations was significant (both $rs < .03$), so, we omitted them and re-estimated the model. Although the resulting model (see Figure 2) was rejected by the Chi-Square test (χ^2 (df = 16) = 32.50, $p = .009$), other indices suggested an adequate fit. The Goodness of Fit Index (GFI = .98), the Adjusted Goodness of Fit Index (AGFI = .95), the Non-Normed Fit Index (NNI = .95) and the Normed Fit Index (NFI = .94) all indicated a good model fit. In addition, the Root Mean Square Error of Approximation was very low (RMSEA = .056), indicating a close fit ($p = .32$).

Figure 2   *Integrated model of the variables included in Study 2*
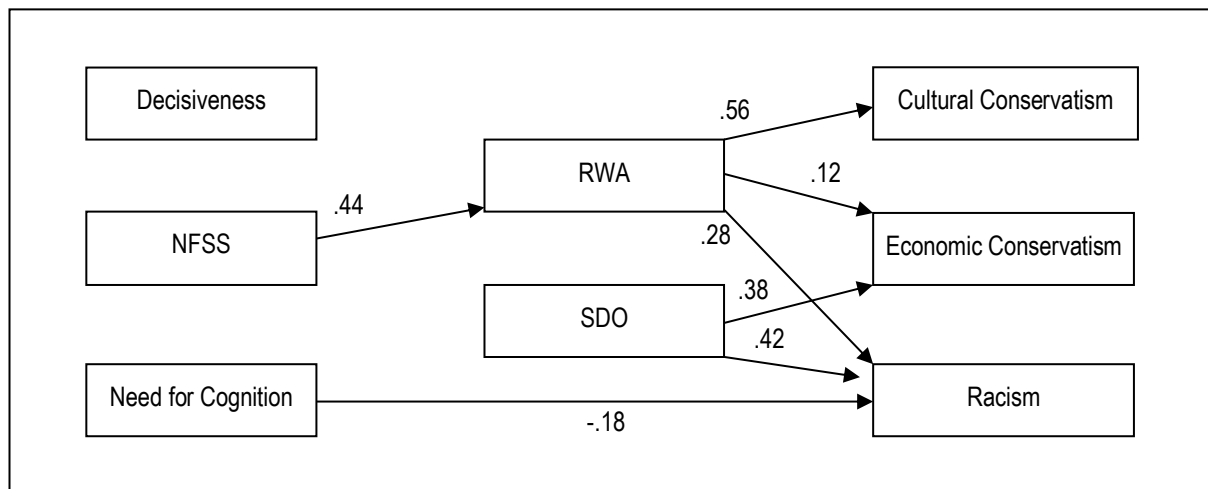
STUDY 3

Study 1 and 2 revealed that RWA mediated the relationships between motivated cognition and conservative beliefs and racism, at least when need for closure acted as the motivated cognition measure. This result was obtained for the cultural and economic conservative beliefs, as well as for racism. However, Study 2 also revealed that the need for cognition had a small but direct impact on racism. The most important reason for this disappointing result corroborates Jost et al.'s (in press) idea that although the need for cognition might well contribute to the cognitive complexity of an individual's reasoning, it does not provide a theoretical link to conservative ideological contents. Hence, we chose to administer the Dogmatism scale in Study 3, because Dogmatism is a motivational-cognitive variable that has been repeatedly shown to bear a significant relationship with conservative beliefs and racism.

In Study 1 and 2, a racism scale that consists of items referring to xenophobia and blatant racism was used. Such instances of racist convictions can also be categorized as "traditional racism" as opposed to "symbolic racism" (see, Kinder & Sears, 1981; Sniderman & Tetlock, 1986). Symbolic racism refers to a more subtle and less direct form of racism. This subtle form of racism is thought to surface whenever it is safe, socially acceptable, or easy to rationalize. Therefore, in Study 3 items based on Kinders and Sears (1981) that refer to the traditional-symbolic distinction were administered.

Finally, the fact that the samples used in Study 1 and 2 consisted of first year psychology students – an ideologically rather homogeneous group – constitutes a limitation for the generalizability of the results. That is, about 70% of the first year psychology students have a preference for the political program of parties that represent the left wing side of the political spectrum in Flanders (i.e., the Green Party and the Social Democrats; for a short description of these parties as well as their numerical support, see Van Hiel & Mervielde, 2002a). Therefore, in study 3, the questionnaires were administered to an adult sample.

Method

Sample

An adult sample (N=381) was gathered in Flanders (Belgium) by undergraduate students asking their neighbors to participate in order to obtain a heterogeneous sample. The mean age was 44 years (SD=13); the sample consisted of 207 males, 140 females, and 34 persons who did not specify their gender. Of these participants, 182 attended higher education, 140 completed secondary education, 14 left school at age 14, and 45 did not specify their educational level.

Measures

Five-point scale items anchored by Certainly disagree and Certainly agree were used for all measures. A 14 item SDO scale (Van Hiel & Duriez, 2002, Cronbach alpha = .83) and a 30 item RWA scale (Meloen, 1991, Cronbach alpha = .94) were administered, as well as an abridged Need for Closure Scale. In order to reduce the extent of the questionnaire, we decided to drop the affective discomfort occasioned by ambiguity and closed-mindedness subscales because poor reliability was obtained for these scales, both in our two previous studies as well as in the study of Cratylus (1995). Moreover, for each of the remaining scales, we administered the seven best items only. Cronbach alpha's for preference for order, preference for predictability and decisiveness, were .84, .78 and .72 respectively. Principal component analysis with OBLIMIN rotation revealed the quasi-orthogonal (r = -.07, p > .18) two-component structure suggested by Neuberg and colleagues (see above). In line with Neuberg et al., the first component was identified as Need for Simple Structure. This component is constituted by items from the preference for order and preference for predictability facets (correlations with the abovementioned Need for Closure facets were .91, .89 and .02 respectively). Also in line with Neuberg and colleagues the second component was identified as Decisiveness. This component is primarily constituted by items from the decisiveness facet (correlations with the abovementioned Need for Closure facets were .10, -.08 and .97 respectively). To obtain an additional measure of motivated cognition, we also administered the Dogmatism scale (D, Rokeach, 1960, translated by Meloen, 1991). According to Rokeach (1954), dogmatism refers to a higher-order and more complexly organized form of resistance to change. In particular, dogmatism operates in the synthesizing phases of thinking, and, hence, is important to the integration of new beliefs into belief systems. The 21 items Dogmatism scales proved to be reliable (Cronbach alpha = .80).

As dependent variables, general conservatism and classical and symbolical racism were assessed. A 10 item general conservatism scale (Van Hiel & Mervielde, 1996), which was designed to cover a wide range of political statements that can be used to discriminate between people adhering left wing political beliefs and people adhering (conservative) right-wing political beliefs and encompasses items referring to attitudes as diverse as attitudes towards immigration, softdrugs, aid for third world countries and the

independence of Flanders, proved to be reliable (Cronbach alpha = .71). Finally, a 4 item classical racism scale and a 4 item symbolical racism scale (derived from Kinder & Sears, 1981), which refer to two racism dimensions that are particularly salient in theories on ethnic prejudice (e.g., Kinder, 1981; Sniderman & Tetlock, 1986), also proved to be reliable (Cronbach's alpha = .72 and .70 respectively).

Results and Discussion

Correlations between the variables in this study can be found in Table 3. Results of these analyses reveal that, in line with Study 1 and 2, RWA is strongly related to Need for Simple Structure but, in contrast to Study 1, unrelated to Decisiveness. Results also reveal that, in line with Study 1, SDO is weakly related to Need for Simple Structure only, and not al all to Decisiveness. Furthermore, in line with Study 1, these results reveal that Need for Simple Structure relates to both conservative beliefs and racism, whereas Decisiveness is unrelated to these variables. Dogmatism was related to both RWA and SDO as well as to both conservative beliefs and racism.

Table 3   *Correlations between the variables included in Study 3*

	Dec	NFSS	D	RWA	SDO	GC	CR
NFSS	-.07						
D	-.22 *	.38 *					
RWA	.03	.57 *	.42 *				
SDO	-.01	.20 *	.43 *	.49 *			
GC	.06	.44 *	.32 *	.70 *	.56 *		
CR	.02	.30 *	.44 *	.58 *	.65 *	.65 *	
SR	-.03	.28 *	.36 *	.50 *	.60 *	.56 *	.60 *

Note: *Dec = Decisiveness, NFSS = Need for Simple Structure, D = Dogmatism, GC = General Conservatism, CR = Classical Racism, SR = Symbolic Racism.*

* p < .01.

As in the previous studies, mediation analyses were conducted to examine whether the effects of the motivated cognition measures (Decisiveness, Need for Simple Structure and Dogmatism) on the dependent variables were mediated by authoritarianism. Again, each analysis consisted of checking four conditions for strict mediation (cf. Baron & Kenny, 1986): (1) whether motivated cognition affects the dependent variables, (2) whether motivated cognition affects authoritarianism, (3) whether authoritarianism affects the dependent variables, and (4) whether the effects of motivated cognition on the dependent variables vanish if one controls for authoritarianism. As in Studies 1 and 2, all analyses were performed

on complete cases only. Therefore, 12 cases were discarded. Results revealed that the first three conditions were satisfied. Motivated cognition was related to symbolic racism (R^2 = .227, $F(3,365)$ = 35.65, p < .001), classical racism (R^2 = .153, $F(3,365)$ = 21.89, p < .001) and conservatism (R^2 = .237, $F(3,365)$ = 37.82, p < .001), as well as to both RWA (R^2 = .395, $F(3,365)$ = 79.39, p < .001) and SDO (R^2 = .191, $F(3,365)$ = 28.72, p < .001). Moreover, both RWA and SDO were related to symbolic racism (R^2 = .338, $F(1,367)$ = 187.22, p < .001 and R^2 = .426, $F(1,367)$ = 272.37, p < .001 respectively), classical racism (R^2 = .250, $F(1,367)$ = 122.24, p < .001 and R^2 = .355, $F(1,367)$ = 202.07, p < .001 respectively) and conservatism (R^2 = .491, $F(1,367)$ = 353.92, p < .001 and R^2 = .313, $F(1,367)$ = 167.44, p < .001 respectively). Analyses pertaining to the fourth condition revealed that motivated cognition no longer affected conservatism ($F(3,364)$= 1.10, p > .34) but continued to affect both symbolical racism ($F(3,364)$= 10.56, p < .001) and classical racism ($F(3,364)$ = 4.24, p < .01) once RWA was controlled for. Apparently, whereas the effect of motivated cognition on conservatism was fully mediated by RWA, the effect of motivated cognition on classical and symbolic racism was not fully mediated by RWA. Inspection of the regression coefficients learned that only Dogmatism had a significant effect on both classical racism ($t(364)$ = 3.36, p < .001) and symbolic racism ($t(364)$ = 5.55, p < .001) once RWA was controlled for. So, again, in line with Chirumbolo (2002), the effects of Need for Closure on conservatism and racism were mediated by RWA. In contrast, the effects of motivated cognition on cultural conservatism and racism were not mediated by SDO. Motivated cognition still affected conservatism ($F(3,364)$ = 26.47, p < .001), symbolic racism ($F(3,364)$ = 12.03, p < .001) and classical racism ($F(3,364)$ = 6.51, p < .001) once SDO was controlled for. Inspection of the regression coefficients learned that, controlling for SDO, Need for Simple Structure had a significant effect on all three dependent variables (all ts > 3.38, all ps < .001). In addition, Dogmatism had an effect on symbolic racism ($t(364)$ = 3.53, p < .001). In sum, it appears that the effects of Need for Simple Structure were mediated by RWA, whereas the effects of Dogmatism on conservatism and classical racism were largely mediated by SDO. This is in line with previous research suggesting a different genesis for RWA and SDO. As in Study 1 and 2, the role of Decisiveness was rather limited. Decisiveness only had an effect on RWA ($t(365)$ = 3.10, p < .01) and conservatism ($t(365)$ = 2.84, p < .01). The latter disappeared after controlling for RWA ($t(364)$ = 1.27, p > .21).

In order to summarize the conclusions derived from these analyses, we fitted a path-analytic model with motivated cognition directly affecting both RWA and SDO, motivated cognition indirectly affecting cultural conservatism, economic conservatism and racism, and RWA and SDO directly affecting cultural conservatism, economic conservatism and racism. RWA was primarily affected by the motivated cognition measures Need for Simple Structure and to a lesser extent Dogmatism, whereas SDO was affected by Dogmatism only. Both SDO and RWA directly affected conservatism, classical racism and symbolic racism. In addition, Dogmatism was directly related to symbolic racism. As in the previous studies, we al-

lowed the errors of RWA and SDO to correlate with each other ($\underline{r}$ = .40). Also, we let the errors associated with conservatism, classical racism and symbolic racism correlate with each other ($\underline{r}$ = .21 for conservatism and classical racism, $\underline{r}$ = .32 for conservatism and symbolic racism, and $\underline{r}$ = .26 for classical racism and symbolic racism). Although the resulting model (see Figure 3) was rejected by the Chi-Square test (χ^2 (df = 11) = 26.36, $\underline{p}$ = .006), other indices indicated an adequate fit. The Goodness of Fit Index (GFI = .98), the Adjusted Goodness of Fit Index (AGFI = .94), the Non-Normed Fit Index (NNI = .97) and the Normed Fit Index (NFI = .98) all indicated a good model fit. In addition, the Root Mean Square Error of Approximation was very low (RMSEA = .062), indicating a close fit ($\underline{p}$ = .23).

Figure 3 *Integrated model of the variables included in Study 3*
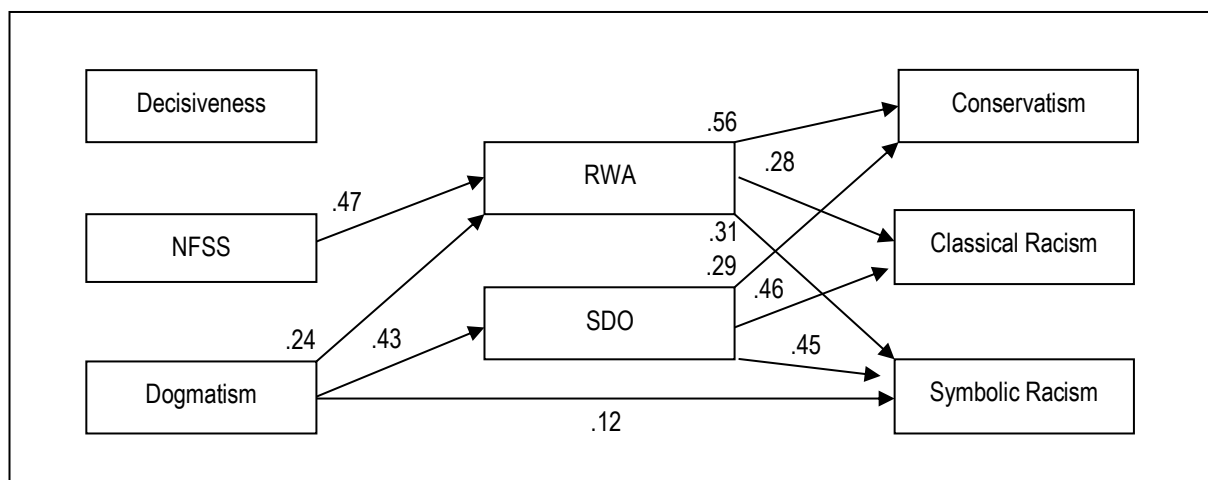
General Discussion

Authoritarianism largely mediates the effects of motivated cognition on conservative beliefs and racism. However, this crude statement obviously needs to be qualified. Some motivated cognition effects are mediated by some forms of authoritarianism and other motivated cognition effects are mediated by other forms of authoritarianism. The present results largely replicated the results of Chirumbolo (2002) by showing that RWA mediates the effects of need for closure on conservative beliefs and racism. However, the present result also made clear that the mediating role of authoritarianism is not only limited to need for closure and authoritarian submission (or RWA), but extends to other motivated cognition measures and authoritarian dominance (or SDO). In particular, the third study revealed that the effects of dogmatism - another indicator of motivated cognition - on conservative beliefs and racism were largely mediated by SDO. Hence, the finding that the effects of motivated cognition on conservative beliefs and racism are mediated by RWA and SDO show that, in order to have a complete picture of the effects of motivated cognition on these target variables,

dispositional measures such as RWA and SDO should also be included. Moreover, the present results are the first to show that RWA and SDO based conservatism and racism each have another cognitive basis. The question what sorts of motivated cognition variables might serve as a basis for these well-known dispositional variables is at least as interesting as the study of the direct relationships between motivated cognition and conservative beliefs and racism. In the remainder, we will discuss (1) the differential cognitive bases for RWA and SDO based conservatism and prejudice, (2) the result that two quasi-orthogonal dimensions underlie the need for closure scale and that only the need for simple structure dimension bears significant correlations with the ideological variables, and (3) some perspectives on future research.

Cognitive bases for RWA and SDO

The present results suggest that the cognitive basis for RWA based conservatism and racism is primarily constituted by need for closure. This is not very surprising. Both RWA and Need for Closure have been shown to relate to cognitive simplification. Individuals high on RWA have been shown to exert little effort in information processing, leading to overly simplified judgments (see above), and Need for Closure has been associated with, for example, low levels of cognitive complexity (e.g., Van Hiel & Mervielde, 2002c; Webster & Kruglanski, 1994), a greater proneness to use cognitive heuristics (Kruglanski & Freund, 1983), and a less extensive search for information (e.g., Klein & Webster, 2000; Van Hiel & Mervielde, 2002d). However, in contrast to RWA, the present results suggest that the cognitive basis for SDO based conservatism and racism is primarily constituted by dogmatism. This finding indicates that individuals high on SDO are apt to make the world fit their own schemes, and to discount negative evidence. The most important characteristic of the dogmatic mind is its inability to objectively evaluate the contents and quality of new information and to integrate this information into old belief structures. Thus, once a belief is present, individuals high in dogmatism persist in their beliefs, even in the presence of discrediting information (Davies, 1993; 1998). Moreover, individuals high in dogmatism are more likely to produce a set of attitude consistent beliefs when given the opportunity for thought, and, consequently, to manifest thought induced attitude polarization (Leone, 1989). In sum, unlike RWA based cognition, variations in dogmatism do not lead to *quantitative* differences in information processing, but instead, to *qualitative* differences. That is, individuals high in dogmatism do not think less, but seem to focus heavily on proattitudinal information and to ignore, discredit or re-interpret counterattitudinal information.

Ideology and freezing and seizing processes

On the basis of their psychometric analyses, Neuberg, Judice, and West (1997) advanced the hypothesis that the two primary orthogonal factors of the Need for Closure scale might map the seizing and freezing processes underlying the need for closure. The seizing process, characterized by an urgent desire to gain a

quick non-specific solution, manifests itself as a preference for decisiveness. The freezing process, in turn, characterized by a desire to maintain with some degree of permanence the specific solution seized upon, has a dispositional analogue in a preference for simple structure. It is striking that the results indicate that the scales that, according to Neuberg et al., load on the need for (simple) structure dimension, bear significant relationships with conservatism and prejudice, whereas the decisiveness scale which loads on another factor, does not show such a relationship. This result corroborates previous research in Polish and Flemish samples in which Kossowska and Van Hiel (in press) obtained a relationship between all but one NFCS subscale (i.e., Desiciveness) and general conservatism as well as economic and cultural conservatism. Hence, according to Neuberg et al., the present results can be accounted for by freezing processes. One could argue indeed that the conservatism questionnaires capture participants' "frozen" ideologies and beliefs, which they long ago seized upon. High need for (simple) structure individuals would adhere to the specific political views they were already holding. In the present context, it is noteworthy that the need for (simple) structure and dogmatism show a substantial correlation (r = .38), probably because both scales measure to some extent the desire to hold on to previously held convictions. However, the results of the path analyses that were presented suggest that these scales have important divergences too. In particular, the present results suggest cognitive closure seems to be a "cognitive miser" option which leads to less information processing, regardless of the fact whether the new information confirms the existing structures or not. This interpretation is also consistent with Neuberg and colleagues who refer to a need for <u>simple</u> structure, instead of a need for structure.

The lack of a significant relationship between decisiveness and conservative beliefs and prejudice may be due to the fact that this scale refers to the desire to seize. Since the rapidly seized information and the judgment formed on its basis are not instantly included in crystallized cognitive structures, the individual is still ready to make changes and to engage in cognitive re-evaluation. Thus, because the seizing process does not account for the fact that information becomes a part of the knowledge system, it seems that the seizing process itself is not a basis for political beliefs.

Perspectives on future research

Of course, the present research has been limited to just a few instances of motivated cognition. Subsequent research should pay attention to other motivated cognition measures as well. For example, Duckitt's (2001; Duckitt et al. 2002) hypothesis that RWA is driven by feelings of fear and threat closely maps onto Jost et al.'s (in press) assertion that motives associated with fear and aggression may be important in predicting conservative beliefs. Moreover, the selection of motivated cognition variables as potential differential bases for RWA and SDO would be better informed if a consensual framework for motivated cognition variables would exist. Stable, replicable motivated cognition dimensions could be established through the use of fac-

tor-analysis (for an example in the context of cognitive styles, see Van Hiel & Mervielde, 2002d; Wardell & Royce, 1978; Wolitzky & Wachtel, 1973). Regrettably, because of the current lack of such a framework, research should select a broad collection of motivated cognition variables that might relate differentially to RWA and SDO. Finally, the present research has been limited to the relation between motivated cognition and "crystallized" measures of conservatism which are under conscious control. The present research thus does not preclude the occurrence of stronger motivated cognition effects on more automatic, unconscious measures of conservatism and racism. Moreover, the use of obtrusive measures of conservatism and racism might also cause other motivations, such as the motivation to control prejudiced reactions (Dunton & Fazio, 1997), to come into play. These motivations might suppress potential motivated cognition effects. Future research should therefore adopt a more fine-grained perspective in which the automatic component of conservative and racist beliefs and the more controlled component can be distinguished (see, Dunton & Fazio, 1997; Fazio & Hilden, 2001; McConnell & Leibold, 2001).

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