CHAPTER 4

Presenting a Positive Alternative to Strivings for Material Success and the Thin Ideal: Understanding the Effects of Extrinsic Relative to Intrinsic Goal Pursuits

Maarten Vansteenkiste, Bart Soenens, and Bart Duriez

Contemporary consumer culture offers a seemingly promising pathway to developing a satisfying and happy life. In numerous advertisements, we are told that the pursuit of a good life can be equated with a "goods life" (Kasser, 2002) or with the attainment of a "perfect body" (Dittmar, 2007). The mass media suggests that if we manage to garner the possessions that are presented to us on TV and in glossy magazines and if we are able to reach the idealized body images that role models exemplify, we are more likely to be satisfied with ourselves and with our lives in general. In bringing this message, the mass media creates a dream world in which wealth and the attainment of good looks are glorified as indicators of happiness and success (Kasser, Cohn, Kanner, & Ryan, 2007).

In line with the exponential growth of consumer culture over the past decades, psychologists have become increasingly interested in examining whether the promise of the "American Dream" (Kasser & Ryan, 1993) holds some truth or whether it represents a myth in which people might even get entrapped (Dittmar, 2007). The purpose of this chapter is to frame this discussion about consumerism and the good life within a well-grounded motivational theory, that is, Self-Determination Theory (SDT; Deci & Ryan, 2000; Ryan & Deci, 2000) and the qualitative distinction this theory makes between intrinsic goals (e.g., self-development, community contribution) and extrinsic goals (e.g., financial success, status). In doing so, we will not only focus on the implications of pursuing extrinsic goals, but, following the positive psychology perspective (Seligman & Csikszentmihalyi, 2000), we also consider a positive alternative, that is, the pursuit of intrinsic goals. Furthermore, we move beyond the personal and social well-being correlates of people's goal pursuits (see Kasser, 2002, for

Page Number: 58

an overview) by also focusing on the consequences of extrinsic versus intrinsic goals in the domains of ethical, ecological, and inter-group attitudes and performance and persistence.

This chapter consists of four different parts. In the first two parts, we discuss the implications of the personal pursuit of extrinsic relative to intrinsic goals and the exposure to the contextual promotion of extrinsic relative to intrinsic goals. After this, we review a number of theories that have challenged the distinction between extrinsic and intrinsic goals. Finally, we argue that the lack of satisfaction of the basic psychological needs for autonomy, competence, and relatedness (Ryan, 1995) that follows from endorsing or being exposed to the promotion of extrinsic goals at the expense of intrinsic goals might account for the differential effects of these goals on people's functioning (Kasser, 2002).

In addition to discussing the mechanism of basic need satisfaction, we also "zoom in" on the micro-mediational mechanisms that might play an intervening role between goal pursuits and basic need satisfaction. In doing so, we review research from the body image literature, from consumer psychology and from social psychology.

INTRINSIC- VERSUS EXTRINSIC-GOAL PURSUITS

Within SDT, it is argued that some goals are more likely to contribute to people's personal and social well-being than others (Ryan, Sheldon, Kasser, & Deci, 1996). Specifically, SDT-researchers (Kasser & Ryan, 1996; Vansteenkiste, Lens, & Deci, 2006) have distinguished two different types or contents of goals, that is, (a) extrinsic goals such as garnering social popularity or fame, being financially successful, attaining power and influence over others, and having a physical appealing image, and (b) intrinsic goals such as building meaningful relationships, developing one's talents, achieving a sense of physical fitness and good health, and meaningfully contributing to the community.

Extrinsic goals exemplify salient aspects of a consumer culture, in which fame, money, and good looks are portrayed as signs of success (Kasser, Cohn et al., 2007). The appeal of these goals lies in the anticipated power, admiration, and sense of worth that might result from realizing them (Kasser, Ryan, Couchman, & Sheldon, 2004). They are considered extrinsic because they would promote an "outward orientation" (Williams, Cox, Hedberg, & Deci, 2000) or a "having orientation" (Fromm, 1976), as they focus people on making a good impression on others. However, the pursuit of these goals is likely to be "exogenous" to basic need satisfaction, as their pursuit is unlikely to satisfy and might even thwart the need for autonomy, competence, and relatedness (Deci & Ryan, 2000).

In contrast, intrinsic goals are typically valued because their pursuit is inherently satisfying and health promoting. They reflect an inward oriented frame or a "being orientation" focused on the actualization of one's interests, values, and potential (Fromm, 1976; Van Boven & Gilovich, 2003). In agreement with humanist thinking, intrinsic goals are thought to reflect

people's tendency to obtain meaning, to grow as a person, and to connect with others (Sheldon & Kasser, 2001). Thus, intrinsic goals can be considered manifestations of the organismic growth tendencies common to human beings; under sufficiently supportive circumstances, people would have the natural inclination to increasingly move away from extrinsic goals, toward intrinsic goals (Sheldon, Arndt, & Houser-Marko, 2003). The pursuit of intrinsic goals is more likely to lead the person to have experiences that can satisfy inherent psychological needs for autonomy, competence, and relatedness, so that intrinsic goal pursuit is said to be more "endogenous" or more inherently related to basic need satisfaction.

In contrast to researchers who aimed to chart the structure of all possible human values (e.g., Schwartz, 1992), the differentiation between intrinsic and extrinsic goals is not meant to be exhaustive: Not all possible goals can be classified as either intrinsic or extrinsic in nature, and goals that are neither means to impress others nor inherently growth-promoting (e.g., hedonism) might fit neither category. It should also be noted that the study of extrinsic goals is by no means unique to SDT. Although labeled differently, the concept of extrinsic goals has also received considerable attention in fields such as consumer psychology (e.g., Belk, 1985; Richins & Dawson, 1992), political sociology (e.g., Inglehart, 1990), and organizational psychology (e.g., Elizur, 1984), which have all primarily focused on the pursuit of one particular extrinsic goal, that is the pursuit of wealth. In the literature on body image and eating disorders (e.g., Stice & Shaw, 1994), researchers have focused on another single extrinsic goal, that is, the thin ideal. Although pursuing material success and physical appeal might be important for understanding different phenomena (e.g., ethical functioning versus the etiology of eating disorders), from a SDT perspective, they can both be studied under the extrinsic-goal concept, as they share an outward character.

Furthermore, rather than studying extrinsic goals in "isolation" from other goals, SDT argues that the pursuit of extrinsic goals needs to be contrasted with a positive alternative, that is, the pursuit of intrinsic goals. Accordingly, empirical studies in the SDT tradition often use a composite score reflecting the relative importance individuals attach to intrinsic compared to extrinsic goals. Thus, a higher score reflects a tendency to value more strongly intrinsic than extrinsic goals.

In the first studies on intrinsic and extrinsic goals, Kasser and Ryan (1993, 1996) developed the Aspiration Index, assessing the importance that individuals attribute to the pursuit of intrinsic and extrinsic aspirations. Initial factor-analytical work in U.S. samples indicated that these two types of goals fall apart in an intrinsic and extrinsic factor. More recently, using more sophisticated analytical techniques (i.e., multidimensional scaling), Grouzet, Kasser, et al. (2006) demonstrated the generalizability of the intrinsic-extrinsic goal distinction by showing that it holds up in 15 different nations varying in cultural foci and Bruto National Product, providing further evidence for the generalizability of the intrinsic-extrinsic dimension. Because intrinsic and extrinsic goals are said to result in qualitatively different modi of functioning, the critical issue at hand concerns whether living

Page Number: 60

a life that is organized more strongly around the pursuit of intrinsic than extrinsic goals yields implications for individuals' adjustment. Note that it is not so much the absolute importance attributed to extrinsic goals that might be problematic rather than the relative weight these goals occupy in the person's total value-structure.

Personal Well-being and Health

A few dozen studies, conducted in countries as diverse as South-Korea, Russia, Belgium, Germany, and the UK, have now convincingly shown that the pursuit of extrinsic relative to intrinsic goals is associated with lower psychological well-being (e.g., self-actualization, vitality), lower subjective well-being (e.g., happiness, life satisfaction), and stronger signs of ill-being (e.g., depression, negative affect, proportion of time spent being unhappy, and anxiety; see Kasser, 2002, for an overview). Various studies in the consumer literature have confirmed these results by showing that the pursuit of materialism is negatively associated with self-esteem (e.g., Richins & Dawson, 1992) and quality of life (e.g., Roberts & Clement, 2007), while being positively associated with social anxiety, narcissism, and conduct disorders (Cohen & Cohen, 1996).

In a similar vein, Van Boven and Gilovich (2003) found that people who believe that money spent on experiential purchases (i.e., the "consumption" of a series of events, such as traveling) when compared to material purchases (i.e., the buying of a tangible object; e.g., jewelry) is "better spent" and that experiential relative to material purchases provoke more positive feelings. These findings were further corroborated by Kasser and Sheldon (2002), who reported that a happy and satisfying Christmas is positively associated with more frequent engagement in religious and family experiences and is negatively associated with engagement in materialist experiences (e.g., spending money). Furthermore, Kasser (2005) found materialist children of 10 to -11 years old to be more prone to depression and reduced well-being. In a related study, Dohnt and Tiggeman (2006a) showed that by 6 years old a large number of girls desired a thinner ideal figure; girls who looked at women's magazines were more likely to be dissatisfied with their appearance concurrently, whereas girls who watched more appearancerelated television programs were more at risk for developing low appearance satisfaction prospectively (Dohnt & Tiggeman, 2006b). The finding that young children are already vulnerable for the adverse effects of extrinsic relative to intrinsic goal pursuits is alarming in light of the advertising industry's increasing attempts to seduce children to buy the message that achieving an ideal body and material goods guarantees happiness.

Finally, research in different domains, including exercise (Sebire, Standage, & Vansteenkiste, 2007), sports (Vansteenkiste, 2007) and work (Vansteenkiste, Neyrinck, et al., 2007) starts to show that the valuation of intrinsic over extrinsic goals is associated with better domain-specific adjustment. In addition to studying adjustment and well-being, other studies have linked people's goals to self-reported (un)healthy behaviors. For

Positive Alternative to Strivings for Material Success and Thin Ideal 61

instance, extrinsically oriented individuals were found to watch more TV and to smoke, drink, and use drugs more often (e.g., Williams, Cox, Hedberg, & Deci, 2000). Moreover, materialist individuals were more likely to be "shopaholics" (Dittmar, 2005). These behaviors can be considered self-medicating, because they may help extrinsically oriented individuals to compensate for their lack of daily need satisfaction. Such an interpretation of the findings suggests that extrinsic goal pursuits might not only result in poorer well-being but might also be undertaken to overcome and compensate for distress (Kasser, 2002).

Social and Ethical Functioning

The pursuit of extrinsic goals does not only yield personal well-being and health costs but also has a number of social implications, at both interpersonal and intergroup levels. For instance, extrinsically oriented individuals are more likely to engage in conflicting and less trustful love relationships (Kasser & Ryan, 2001), and materialists are found to be less satisfied with their family and friends (e.g., Richins & Dawson, 1992). In addition to affecting the quality of intimate and family relationships, the pursuit of intrinsic relative to extrinsic goals also seems to affect the interaction with opponents during sports games. For instance, on the ball field, extrinsic relative to intrinsic goal oriented soccer players have been found to be more likely to engage in aggressive behaviors, such as tackling (Vansteenkiste, 2007). Although such unfair behavior might be perceived by soccer players as necessary and instrumental for achieving their extrinsic goals (i.e., winning the game and making more money), they are unlikely to foster respectful relationships with one's opponents.

A similar lack of ethical functioning was observed in the organizational domain by Tang and Chiu (2003) who found materialist white collar employees to be more likely to overcharge customers, use their expense account inappropriately, and steal merchandise. The current findings thus suggest that the pursuit of extrinsic goals is associated with poorer ethical functioning (Kasser, Vansteenkiste, & Deckop, 2006).

Adopting an extrinsic relative to intrinsic goal orientation was not only found to be problematic for the quality of one's social relationships (i.e., the interpersonal level) but also for individuals' attitudes toward social groups (i.e., the intergroup level). For instance, Duriez, Vansteenkiste, Soenens, and De Witte (2007) found that an extrinsic-relative to intrinsic-goal orientation was associated with a less prejudiced attitude toward ethnic minorities (see also Roets, Van Hiel, & Cornelis, 2006).

This effect could be accounted for by the stronger social dominance orientation that is associated with an extrinsic relative to an intrinsic goal orientation. Specifically, extrinsic goal oriented individuals are more likely to adopt a social dominance orientation, that is, they want their group to maintain a superior position relative to other social groups (Pratto, Sidanius, Stallworth, & Malle, 1994). A social dominance orientation is likely to take root in extrinsically oriented individuals' belief that they live in a

Page Number: 62

dog-eat-dog world that requires them to compete with others for scarce material goods. Hence, the adoption of a socially dominant attitude fits with these individuals' worldview and would be instrumental in achieving their extrinsic ambitions.

Conversely, the pursuit of material goods might also represent an instrument allowing socially dominant individuals to confirm their superior position in society. In line with this reasoning, Duriez, Vansteenkiste, et al. (2007) found that a social dominance attitude and an extrinsic relative to intrinsic goal orientation reciprocally predicted one another over time, suggesting that they form a mutually reinforcing constellation that is likely to contribute to the stability and even rise in prejudice over time.

Finally, the pursuit of intrinsic relative to extrinsic goals not only yields effects on the way one treats other people but also on the way one deals with our planet and the environment at large. For instance, Brown and Kasser (2005) demonstrated that an extrinsic- relative to intrinsic-goal orientation negatively predicted engagement in proecological behaviors and was associated with an enlarged ecological footprint. Similarly, Richins and Dawson (1992) found materialism to negatively predict voluntary simplicity, that is, a lifestyle that is characterized by low consumption and high ecological responsibility (see also Kilbourne & Pickett, in press). Finally, in an experimental role playing study, Sheldon and McGregor (2000) showed that extrinsic relative to intrinsic goal oriented individuals were more likely to keep a greater proportion of scarce natural resources to themselves.

CONTEXTUAL PROMOTION OF INTRINSIC VERSUS EXTRINSIC GOALS

The previous section detailed the differential consequences that are related to individuals' pursuit of intrinsic versus extrinsic goal contents. Hence, this line of SDT-research has investigated the impact of intrinsic versus extrinsic goals from an *individual difference* perspective, that is, the degree to which people focus upon the attainment of intrinsic versus extrinsic goals. However, authority figures, such as parents, teachers, managers, and doctors as well as the broader culture play an important role in spreading, promoting, and reinforcing these goals. From the SDT-perspective, analogous to the differential effects of holding intrinsic and extrinsic goals, the contextual promotion of these goal contents is likely to yield differential psychological dynamics as well. Several recent experimental and correlational studies have provided evidence for this notion.

In a set of experimental studies (Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004), the effects of framing a learning task in terms of intrinsic versus extrinsic goal attainment on quality of learning, performance, and persistence were examined. In a first study, students were invited to read a text on recycling and were either told that learning more about this could help them to attain the intrinsic goal of community contribution or the extrinsic goal of a monetary benefit. Then, they were tested on text knowledge and were given questionnaires assessing deep and rote learning. Finally, it was recorded which students visited the library to get additional

information on recycling, and which students chose to visit a recycling plant on a weekday after school a few days after the experiment.

It was reasoned that intrinsic goals, because of their closer link with individuals' inherent growth tendencies, are more likely to promote a deep commitment toward the learning activity. In contrast, extrinsic goal framing would shift learners' attention from the learning toward external indicators of worth, thereby resulting in poorer commitment and reduced learning. Consistent with this, intrinsic relative to extrinsic goal framing promoted self-reported deep processing and resulted in superior performance and higher persistence. These results were replicated using different activities (i.e., exercising rather than reading), different intrinsic goals (i.e., self-development and health), different extrinsic goals (i.e., physical attractiveness), and different age groups (i.e., children instead of adolescents; Vansteenkiste, Simons, Lens, Soenens, & Matos, 2005).

In another series of experimental studies, Vansteenkiste, Simons, Braet, Bachman, and Deci (2007) explored the impact of intrinsic versus extrinsic goal framing among a group of severely obese children. They examined whether framing a learning text on the four-leafed clover (a simplified version of the food pyramid) in terms of the attainment of the intrinsic goal of physical fitness versus the extrinsic goal of physical attractiveness would affect (a) adoption and maintenance of healthy lifestyles, (b) continued engagement in a diet program, (c) longitudinal participation in physical exercise, and (d) weight loss assessed up to two years after participation in the experiment.

Although extrinsic goal framing might prompt some behavioral change, it was expected that initial changes were unlikely to be maintained over time, as the newly adopted behaviors were undertaken in a strategic and conditional fashion, that is, to attain the anticipated extrinsic goal of physical attractiveness. Consistent with this, it was found that both intrinsic and extrinsic goal framing promoted the adoption of a healthier lifestyle, but that these gains were only maintained among participants placed in the intrinsic goal condition. Furthermore, intrinsic relative to extrinsic goal framing resulted in a more continuous engagement in the diet program and greater weight loss at 6 weeks, 14 weeks, 1 year, and 2 year follow-up assessments.

Subsequent work (Duriez, Soenens, & Vansteenkiste, & De Witte, 2007) examined whether parents' promotion of intrinsic rather than extrinsic goals would affect children's social functioning, as indexed by their socially aggressive and domineering attitude towards other social groups. Thus, rather than studying the impact of intrinsic and extrinsic goal promotion at the situational level (i.e., with respect to a particular activity), intrinsic relative to extrinsic goal promotion was studied at the global level, as parenting is likely to affect children's general functioning. Complementing the experimental research, perceived parental intrinsic relative to extrinsic goal promotion was found to both concurrently and longitudinally predict adolescents' social dominance orientation which, as mentioned before, represents a strong predictor of ethnic prejudice (e.g., Pratto et al., 1994). Notably, the effects of parental goal promotion emerged above and

Page Number: 64

beyond the effects of the quality of parents' rearing style (i.e., how parents interact with their children). These findings thus suggest that, in order to evaluate the impact of socializing agents (e.g., parents, coaches, managers, etc.), it is not only critical to consider the way people interact with others and the type of emotional climate they create but also to consider the type of goals they try to transmit.

Finally, Schwartz (2006) provided interesting evidence on how the extrinsic and capitalistic versus more intrinsic character of a country's economy is associated with and represented in the cultural orientation of that country as well as in the average importance individuals within these countries attribute to particular values. Using an index developed by Hall and Gingerich (2004) that reflects the extent to which a national economy is coordinated by competitive market principles rather than strategic principles, Schwartz (2006) showed that the strategic vs. competitive coordination index was strongly positively correlated with a cultural emphasis on intrinsic ideals including (a) harmony (i.e., a concern with nature and world peace), (b) egalitarianism (i.e., a focus on equality, social justice, and honesty), and (c) intellectual autonomy (i.e., a focus on broadmindedness, curiosity, and creativity), whereas it was negatively correlated with a cultural orientation toward more extrinsic oriented endeavors, including (a) mastery (i.e., an emphasis on ambition, and success), (b) hierarchy (i.e., an emphasis on authority, social power, and wealth), and (c) embeddedness (i.e., a focus on tradition, social order, and obedience). Along similar lines, individuals within more capitalistic societies were found to attribute, on average, a stronger importance to extrinsic values, such as achievement and power, whereas placing less importance on intrinsic values, such as universalism and self-direction.

ALTERNATIVE ACCOUNTS OF THE INTRINSIC VERSUS EXTRINSIC GOAL DISTINCTION

SDT's intrinsic versus extrinsic goal conceptualization has been criticized from different angles. One of the reasons why this distinction is critically received is the fact that the SDT perspective on goals is regarded as highly "value-laden." Indeed, the research reviewed previously suggests that intrinsic goals are to be preferred over extrinsic goals and, as such, should be encouraged at the expense of extrinsic goals. However, many scholars are hesitant to make such prescriptive suggestions. Skepticism vis-à-vis the desirability of intrinsic rather than extrinsic goals has even led some scholars to severely criticize the intrinsic-extrinsic goal distinction.

Specifically, three different types of criticisms have been forwarded. First, it has been argued that this distinction is a "false" one because it represents nothing but a different way of speaking about autonomous versus controlled regulations. Second, based on quantitative theories of motivation, it can be argued that intrinsic goal framing results in more adaptive learning than extrinsic goal framing because it induces a higher quantity or amount of motivation rather than a different quality of

Page Number: 65

Positive Alternative to Strivings for Material Success and Thin Ideal 65

motivation. Third, it has been suggested that the negative impact of extrinsic relative to intrinsic goal pursuits would be limited (a) to individuals residing within intrinsic goal environments and (b) to individuals who do not attain their extrinsic ambitions (e.g., people with low income). Similarly, the detrimental impact of extrinsic goal framing would be limited to individuals with an intrinsic goal orientation. We will now discuss each of these critical claims in more detail.

Intrinsic versus Extrinsic Goals: A False Distinction

One of the problems that various theorists point out with a "selfactualization model" as provided by SDT is that it is difficult to specify a priori what anyone's true self consists of (e.g., Carver & Scheier, 2000). If an individual has a real interest in accumulating wealth, for example, why can this not be truly self-actualizing for that person? If an elderly individual wants to hide the signs of aging by buying new clothes, visiting a hair stylist, and purchasing the latest antiwrinkle cream, why would such an endeavor not represent a core goal for that person? Carver and colleagues thus doubt that some goals are more inherently need-satisfying and congruent with the self than others. In line with this, they suggested that the intrinsic-extrinsic goal distinction is a false one that can be conceptually reduced to the differentiation between an autonomous and controlled regulation (Carver & Baird, 1998; Srivastava, Locke, & Barthol, 2001). Carver and Baird (1998) argued that the effect of intrinsic versus extrinsic goals can be fully explained by the reasons or motives underlying people's goal pursuit. Specifically, these authors contend that extrinsically oriented individuals display more signs of ill-being because they feel more pressured and coerced (i.e., controlled) during their goal pursuits. In contrast, intrinsically oriented individuals are happier and more fulfilled because they pursue these goals in a more volitional (i.e., autonomous) manner. In other words, the impact of intrinsic versus extrinsic goal striving could be completely carried by the extent to which people pursue their goals for autonomous rather than for controlled reasons. If this were the case, the effect of goal pursuits on well-being would disappear after controlling for type of regulation, and the effect of the intrinsic versus extrinsic goal dimension would be fully accounted for by its underlying autonomous versus controlled regulation.

In spite of their criticism, Carver and Baird (1998) could not provide compelling evidence for their claim. Consistent with other work (e.g., Kasser & Ryan, 1996), the results of Carver and Baird's (1998) hierarchical regression analyses indicate that the intrinsic versus extrinsic goal dimension positively predicted well-being, even after controlling for the autonomous versus controlled reasons that underlie the goal pursuits. In another study, Srivastava et al. (2001) found the negative effect of pursuing financial success on well-being among business students and entrepreneurs to disappear after entering three types of motives for valuing financial success, that is, positive motives (e.g., helping one's family), freedom of action motives

Page Number: 66

(e.g., charity), and negative motives (e.g., appearing worthy). Whereas positive motives were positively associated with well-being, negative motives yielded a negative relationship.

The findings of Srivastava et al. (2001) were criticized by Sheldon, Ryan, Deci, and Kasser (2004), who suggested that, among other things, some motive scales (e.g., charity) reflect higher order goals rather than reasons for pursuing a goal. Hence, because of this mixture of goals and motives in their motive measure, it should not be surprising that aspiring financial success could not explain additional variance.

However, although Sheldon, Ryan, et al. (2004) refuted Carver and Baird's (1998) criticism, they did recognize that intrinsic and extrinsic goals and autonomous and controlled regulations are correlated. Specifically, previous studies (e.g., Sheldon & Kasser, 1995) demonstrated that the pursuit of intrinsic goals is positively related to an autonomous regulation (correlation of about .30), whereas the pursuit of extrinsic goals is positively related to a controlled regulation (correlation of about .30). The strength of these correlations suggests that goals and regulations are indeed related, as suggested by Carver and Baird (1998). Yet, the size of these correlations also suggests that they are empirically distinguishable.

Indeed, it is quite possible to, for instance, follow a language course to develop one's talents (i.e., an intrinsic goal) because one is pressured by one's boss to improve one's language skills (i.e., controlled regulation) or because one is personally interested in learning languages (i.e., autonomous regulation). Conversely, a person can be focused on being attractive and good-looking (i.e., extrinsic goal) because he feels an inner obligation to do so (i.e., controlled regulation) or because he personally values beauty and attractiveness (i.e., autonomous regulation). In spite of these relationships between goals and motives, past research has shown that both predict independent variance in well-being and adjustment (Sheldon, Ryan, et al., 2004; Sheldon & Kasser, 1995), and similar results were reported in the exercise domain (Sebire, Standage, & Vansteenkiste, 2007).

If intrinsic and extrinsic goal contents could be conceptually equated with an autonomous and controlled regulation, this would also imply that framing a learning activity in terms of the attainment of intrinsic versus extrinsic goals should be fully (instead of partially) accounted for by the autonomous versus controlled motives underlying one's activity engagement. The experimental work on goals thus opened new ways to test this criticism. Although autonomous motivation fully explained the goal framing effects on five out of 11 outcomes, it only partially reduced the relation in the remaining six outcomes (Vansteenkiste, Simons, et al., 2004), providing reasonable evidence for the assertion that the intrinsic- versus extrinsic-goal framing effect cannot be reduced to the underlying regulation it induces.

Although research to date suggests that goals seem to matter above and beyond their underlying motives, more research is needed to further test this alternative explanation of the effects of intrinsic versus extrinsic goals. We suggest that, if the criticism by Carver and Baird were true, *any* observed effect of intrinsic versus extrinsic goals on any outcome (e.g., well-being, ethical functioning, performance) should disappear when

Positive Alternative to Strivings for Material Success and Thin Ideal 67

controlling for individuals' motives. In this respect, it should also be noted that, maybe, goals only have an independent effect in some domains or for some outcomes. Given that goals are more cognitive in nature than regulations or motives (which are more affective in nature), it is possible that goals yield unique effects on cognitive and attitudinal outcomes (e.g., prejudice, fair play attitudes) whereas motives would be more strongly related to affective and well-being outcomes. To the best of our knowledge, no study to date has explicitly tested this hypothesis of specialized effects of individuals' goals and motives.

Quantity rather than Quality of Motivation

Experimental goal-framing research has indicated that extrinsic goal framing hinders conceptual learning, presumably because it shifts attention away from the activity at hand toward external indicators of worth (Vansteenkiste, Lens, & Deci, 2006). In contrast, intrinsic goal framing promotes learning and achievement presumably because it leads to a qualitatively different approach of and engagement in the learning activity. However, based on quantitative conceptualizations of motivation, as articulated within expectancy-value theories (Eccles & Wigfield, 2002) and instrumentality models (Husman & Lens, 1999), the effects of goal framing on learning can also be explained in a different way. Given that intrinsic goals are, on average, more highly valued than extrinsic goals (Kasser, 2002), presenting a particular learning activity as serving a more highly valued intrinsic goal should increase the perceived utility value (Eccles & Wigfield, 2002) of the learning activity compared with framing that activity in terms of the attainment of a less valued extrinsic goal. This enhanced utility would increase learners' quantity or amount of motivation, resulting in higher performance and persistence.

This alternative account was tested in several studies. In a first study (Vansteenkiste, Simons, Soenens, Lens, Matos, & Lacante, 2004), a learning activity was portrayed as serving either an intrinsic goal, an extrinsic goal, or both an intrinsic and an extrinsic goal. This allowed investigating the effects of double versus single goal framing upon learning and achievement. From a quantitative motivational perspective, the perceived utility value in a double goal condition is higher than in the single goal conditions. Hence, providing two goals should always result in better learning than providing only a single goal. However, according to a qualitative view on goals, as defended within SDT, not only the number of goals but also their quality needs to be considered (Vansteenkiste, Lens, & Deci, 2006). Providing an extrinsic goal in addition to an already present intrinsic goal is likely to shift attention from the learning activity to external signs of worth, thereby hindering the learning process. In contrast, providing an intrinsic goal in addition to an extrinsic goal is likely to increase a thoughtful and task-focused commitment toward the activity, so that individuals in the double goal framing condition get more fully engaged in the activity. The predictions derived from SDT were supported such that intrinsic goal

Page Number: 68

framing enhanced performance and persistence compared with both extrinsic goal framing and double goal framing; yet, the perceived utility of the activity was greater in the double goal condition.

Comparing the effects of intrinsic versus extrinsic goal framing does not allow the derivation of strict conclusions regarding the impact of extrinsic goal framing per se: It is quite possible that indicating how a learning task relates to an extrinsic goal leads to better learning outcomes compared to a control-group where no goal references are made. In fact, on the basis of quantitative theories on motivation, it can be hypothesized that extrinsic goal framing enhances the perceived utility of the activity, so that better outcomes should follow in the extrinsic goal condition compared with when the relevance of the activity is not stressed at all. However, in contrast to this view, SDT holds that extrinsic goal framing will result in poorer quality learning compared with a no-goal control group. The findings of an experimental study by Vansteenkiste, Simons, Soenens, and Lens (2004) were in line with SDT-based hypotheses: Whereas intrinsic goal framing resulted in better performance and greater persistence than no goal framing, extrinsic goal framing undermined performance and persistence.

Limited Negative Effects of Extrinsic Goal Pursuit and Extrinsic Goal Framing

Match Perspective

The match perspective, which maintains that optimal functioning and well-being will occur when individuals' own goals fit with the goals that are promoted within the environment, has received considerable attention in a broad array of fields, including social psychology (e.g., Sagiv & Schwartz, 2000), educational psychology (e.g., Harackiewicz & Elliot, 1998), organizational psychology (e.g., Edwards, 1991), developmental psychology (e.g., Eccles, Lord, & Midgley, 1991), and sports psychology (e.g., Amiot, Vallerand, & Blanchard, 2006).

One example of the match perspective is an employee who experiences lower well-being and job satisfaction when his own values are discrepant from those promoted in the organization. Hence, the impact of goals for well-being and functioning would not depend on the content of the goals as such but on the extent to which individuals' own goals correspond to or match with the goals promoted in the immediate social environment. In other words, the negative impact of extrinsic goals would be limited to people residing in an environment that promotes intrinsic goals. Also, the negative effects of pursuing extrinsic relative to intrinsic goals, as observed in a number of previous studies (e.g., Kasser & Ryan, 1996), would be primarily carried by individuals involved in intrinsic goal oriented climates. The negative effects of extrinsic relative to intrinsic goal pursuits would be offset or even reversed among people who find themselves in an extrinsic goal promoting environment.

Overall, the match perspective assumption posits, at least implicitly, that any kind of goal can be incorporated within one's sense of self. In this respect, the match perspective fits a social-constructivist viewpoint

(Berzonsky, 1990; Markus & Kitayama, 2003), which rejects the idea that individuals are inherently oriented toward particular goals (i.e., intrinsic goals). Instead, one's goals and the identity that is based on them are considered constructions, obtained in part through socialization processes.

The extent to which internalized goals are successful in regulating behavior and the extent to which they are associated with optimal functioning merely depends on the degree to which goals are also adopted in the social context. Thus, the same goals may be negatively associated to well-being in one environment but not in another. For instance, the pursuit of the extrinsic goal of financial success might be positively related to well-being in a business organization or in a culture that highlights such goals but may negatively predict adjustment in an organization that emphasizes intrinsic goal attainment or in a society that promotes generativity and solidarity between its members.

Yet, if one assumes that a fundamental, psychological make-up underlies the human psyche, as in an organismic theory such as SDT, it becomes important to consider whether individuals' goals or the goals promoted by the social environment are consistent with basic elements of human nature. SDT assumes that the basic psychological needs for autonomy, competence, and relatedness form an inherent part of the human organism. Thus, to derive predictions about the adaptive value of goals, SDT considers the extent to which people's goals are congruent with these universal propensities (i.e., people's basic psychological needs) rather than with the goals prevailing in the social environment. Therefore, SDT maintains that the pursuit of intrinsic relative to extrinsic goals should predict well-being because it is more likely to be associated with basic need satisfaction. In sum, within SDT the most important criterion to evaluate whether goals promote or detract from well-being is whether these goals contribute to the satisfaction of human basic needs and not whether goals match the requirements of particular environments (Vansteenkiste, Lens, & Deci, 2006).

In line with the match perspective, in a sample of psychology and business students, Sagiv and Schwartz (2000) showed that the effect of valuing extrinsic over intrinsic goals on well-being interacted with participants' study environment. Business students who valued extrinsic over intrinsic goals reported higher psychological well-being, whereas psychology students reported more optimal functioning when they valued intrinsic over extrinsic goals. In contrast to this, in two subsequent studies (Kasser & Ahuvia, 2002; Vansteenkiste, Duriez, Simons, & Soenens, 2006), extrinsic relative to intrinsic goal pursuits were associated with lower well-being and more internal distress among business students, even though extrinsic goals tend to be emphasized in their environment (see also Srivastava et al., 2001). Furthermore, Sheldon and Krieger (2004) reported that law students shifted away from intrinsic toward extrinsic goal pursuits during the first year of law school. Given that law schools typically foster status-seeking, competition, and image-building (Krieger, 1998), a match perspective would suggest that such changes should be adaptive. In spite of this, these changes were found to be positively related to a decline in psychological well-being.

Pursuing Human Flourishing

The experimental induction of intrinsic and extrinsic goals provided a new avenue to further test these two conflicting perspectives, as it could examine whether extrinsic goal oriented individuals would benefit from being placed in an extrinsic goal framing condition. Based on the match perspective, it is suggested that the negative effects of extrinsic goal framing are limited to learners who value intrinsic over extrinsic goals and that the overall enhancement of learning and persistence in the intrinsic goal conditions of the studies reviewed earlier were primarily carried by learners whose goal orientation was more intrinsic than extrinsic. A study among business students provided preliminary counterevidence for this viewpoint by showing that extrinsic goal framing undermined business' students learning and performance (Vansteenkiste, Simons, Lens, et al., 2004, Study 2). Unfortunately, in this study, participants' personal goal orientations were not measured prior to the goal exposure. This was the case in a study among 5th- and 6th-grade children (Vansteenkiste, Timmermans, Lens, Soenens, & Van den Broeck, in press). Results confirmed SDT as the performance and persistence of children preferring either intrinsic or extrinsic goals was enhanced when placed in an intrinsic instead of an extrinsic goal framing condition. Although more research is needed on this issue, the existing empirical evidence suggests that the negative effects of extrinsic relative to intrinsic goal pursuits are unlikely to be altered depending upon the goals that are promoted in the environment.

Aspiration Theory

Although a stronger valuation of extrinsic relative to intrinsic goals might be associated with lower well-being, the aspiration theory (e.g., Campbell, Converse, & Rodgers, 1967; McGill, 1967) would predict that the attainment of extrinsic goals should produce well-being as it provides people with rewards and a sense of self-efficacy. Thus, according to this theory, because well-being is a function of the discrepancy between people's aspirations or goals and their attaining these aspirations and goals, attaining one's materialist goals should be associated with enhanced well-being. For instance, the negative effects associated with aspiring financial success are limited to the pursuit of such success but should disappear or even be inversed once people are capable of attaining these aspirations.

In contrast to such predictions, Kasser and Ryan (2001) showed that, whereas intrinsic goal attainment was conducive to psychological wellbeing, extrinsic goal attainment was not. Similar results were reported by Ryan et al. (1999) in a sample of Russian adults. Furthermore, in a longitudinal study, Sheldon and Kasser (1998) showed that making progress at extrinsic goals over a semester did not result in an increase in well-being, whereas intrinsic goal progress positively predicted enhanced well-being. Most recently, in a sample of older adults (>65 years), Van Hiel and Vansteenkiste (2007) showed that reported attainment of intrinsic goals over the life course was positively predictive of feelings of ego integrity and

death acceptance, whereas extrinsic goal attainment was not. These results fit the idea that, if people are able to attain goals that are consistent with their natural growth-trajectory, they experience more harmony and seem more ready to face the "final curtain."

The question whether the negative effects of aspiring financial success disappear when one is able to actually attain financial success has been examined in a second line of research as well. In a number of studies, it was examined whether the well-being effect of pursuing materialist goals would be different for individuals with low compared with high income. LaBarbera and Gürhan (1997) argued that pursuing materialist goals should positively predict well-being for individuals with a high income, because these individuals reached their materialist goals. LaBarbera and Gürhan (1997) provided partial support for the hypothesis derived from the aspiration theory: Two of their materialism subscales, nongenerosity and possessiveness (Belk, 1985), interacted with income in the prediction of general affect, and materialism did not negatively predict general affect for people with a high income. Similarly, in a longitudinal study, Nickerson, Schwartz, Diener, and Kahneman (2003) found that the negative impact of aspiring financial success on life and job satisfaction diminished for people earning a high income. Such moderation effects were not found for satisfaction with family life.

In contrast to these studies, Kasser and Ryan (1996) found that the negative effects of extrinsic relative to intrinsic goals on a broad range of self-reported and rated well-being outcomes (i.e., self-actualization, vitality, depression, anxiety, and physical symptoms) were not offset for people with a high level of income. Similarly, Vansteenkiste, Neyrinck, et al. (2007) found that the negative effect of holding an extrinsic relative to an intrinsic work value orientation on life and job satisfaction was not moderated by income, suggesting that the negative well-being effect of pursuing material goals equally applies to individuals with a low and a high income.

Instead, they reported that objectively earning a higher income had a small but positive effect on job and life satisfaction (Diener, Suh, Lucas, & Smith, 1999), whereas the personal valuation of a higher income over more intrinsic work aspirations was negatively related to well-being. This was referred to as the "income-paradox": Whereas objectively making more money increases happiness, subjectively valuing money seems to have the opposite effect.

This brief overview suggests that more research is needed in this area of inquiry. In particular, it would be interesting to explore whether the attributed meaning (e.g., autonomous versus controlled, Deci & Ryan, 2000) would be different for people with different income levels. This might help to achieve further insight in which circumstances (i.e., income level) and for which reason the pursuit of materialist aspirations yield negative well-being implications. We turn to the latter issue in more detail in the following section, when a number of macro- and micro-mediational mechanisms are proposed that might help clarify the link between intrinsic relative to extrinsic goals and optimal functioning.

Page Number: 72

MACRO- AND MICRO-MEDIATIONAL MECHANISMS UNDERLYING GOAL EFFECTS

Macro-Mediational Mechanisms: Basic Psychological Need Satisfaction

A variety of processes explain the relation between an intrinsic relative to an extrinsic goal pursuit and optimal functioning. For instance, because time is a limited resource requiring people to make choices that will determine the content and quality of their lives, it has been suggested that investing too much time pursuing extrinsic goals is likely to occur at the expense of devoting time to intrinsic goals (e.g., Ryan et al., 1996; Sheldon, Ryan, et al., 2004). As stated by Csikzsentmihalyi (1999, p. 823), for materialist individuals, "the opportunity costs of playing with one's child, reading poetry, or attending a family reunion might become too high, and so one stops doing these irrational things." Put differently, intrinsic activities are likely to be crowded out by an overly strong investment in extrinsic goals.

Furthermore, within SDT, it is suggested that the pursuit of intrinsic, relative to extrinsic, goals is likely to be differentially linked to psychological well-being because of their differential effect on basic psychological need satisfaction. SDT maintains that people are endowed with three basic innate psychological needs (Ryan, 1995): (a) the need for *autonomy* or the desire to feel volitional with respect to one's behavior, (b) the need for *belonginess* or relatedness or the desire to care for and feel cared for by others, and (c) the need for *competence* or the desire to feel effective in the actions one undertakes.

These basic needs—which can best be remembered through the acronym "ABC", because of the first letter of the three basic terms—propel and instigate a wide variety of human behaviors across different contexts, and their satisfaction is said to promote the realization of one's basic growth tendencies. Indeed, the satisfaction of these psychological needs is considered equally fundamental for people's psychological thriving, integrity, and well-being, as satisfaction of physical needs (e.g., hunger and thirst) is for their physical survival and growth (Ryan, 1995).

Basic need satisfaction is thus considered to be the energizing and driving force behind individuals' growth, so that basic need satisfaction would foster the pursuit of intrinsic rather than extrinsic goals. The relationship between people's growth tendencies and basic need satisfaction is, however, likely to be bidirectional, as the pursuit of intrinsic relative to extrinsic goals is likely to yield more optimal functioning because it allows for a greater satisfaction of the basic needs for autonomy, competence, and relatedness (Deci & Ryan, 2000; Kasser, 2002).

Although various studies provide indirect evidence for these claims (see Kasser, 2002, for an overview), the mediational role of basic need satisfaction has only recently been investigated. For instance, fashion models—who are likely to personally value the body ideal and definitely work in a social environment that places high emphasis on physical attractiveness and body image—were recently found to experience lower daily need satisfaction

relative to a control-group (Meyer, Enström, Harstveit, Bowles, & Beevers, 2007). This lower need satisfaction could in turn, account for the mean-level differences in psychological well-being between models and nonmodels. Further, Rijavec, Brdar, and Miljikovic (2006) found intrinsic relative to extrinsic goal pursuits to relate positively to need satisfaction.

Similarly, in the organizational domain, Vansteenkiste, Neyrinck, et al. (2007) found that intrinsic relative to extrinsic work value orientations positively predicted need satisfaction at work, which, in turn, predicted job well-being. Finally, Sebire, Standage, and Vansteenkiste (2007) reported intrinsic relative to extrinsic goal pursuits during exercising to be more strongly linked to basic need satisfaction, which, in turn, predicted a variety of well-being outcomes.

What kind of mechanisms can account for the link between intrinsic relative to extrinsic goal pursuit and basic need satisfaction? We believe that people will approach activities and other people differently depending on their dominant goal orientation, resulting in different need satisfaction opportunities. In the following section, three different micro-mediational mechanisms are discussed that might explain how and why pursuing extrinsic versus intrinsic goals or being exposed to extrinsic versus intrinsic goal promotion is differentially linked to need satisfaction: (a) attention shift, (b) interpersonal comparison, and (c) conditional approach (see also Vansteenkiste, Soenens, & Lens, 2007). We suggest that these attentional and cognitive mechanisms help break down the marco-mediational mechanism of basic need satisfaction into lower-level processes.

Micro-Mediational Mechanisms: Cognitive-Attentional Processes

Attention Shift

Let us assume that an absorbed and committed activity engagement represents the best way to get one's basic needs for autonomy, competence, and relatedness met. When people are fully immersed in an activity, they are more likely to express their own interests and values (autonomy) and are more likely to effectively deal with the challenges of the activity (competence). Similarly, when people are fully absorbed in a conversation, they are more likely to derive a sense of satisfaction from it and to experience a sense of connectedness with the other person (relatedness). If an absorbed activity engagement is a necessary condition for basic need satisfaction, it can be concluded that any goal that precludes such an engagement will yield less optimal effects. We suggest that extrinsic goals are likely to shift individuals' attention away from the activity at hand and, as such, forestall need satisfaction (see Figure 4.1).

Consider an extrinsic goal oriented female exerciser who is exercising as a way to improve her sex appeal and attractiveness. Instead of being immersed in the exercise activity at hand, she is likely to be "number-checking" during a work-out session (e.g., "how many calories did I already burn?") because such information helps her to monitor her progress toward the extrinsic goal ambitions. Or consider an academic who is

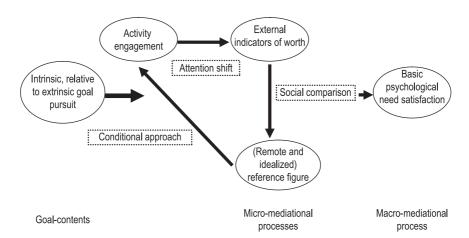


Figure 4.1. Graphical Representation of Different Micro-Mediational Processes involved in the Pursuit of Intrinsic versus Extrinsic Goals.

focused on building up a prestigious academic career. When giving a talk at a conference, instead of being focused on the content of the talk, he is likely to feel stressed and anxious because his perceived academic status and worth is contingent upon the quality of the presentation.

These anecdotes suggest that extrinsic goal oriented people's attention is more likely to shift away from the content of the activity. In line with this, experimental studies have shown that extrinsic relative to intrinsic goal framing resulted in poorer conceptual integration of the learning material and lower subsequent achievement because it hindered committed and task-oriented learning (e.g., Vansteenkiste, Simons, Lens, et al., 2005; Vansteenkiste, Simons, Lens, Soenens, et al., 2004). A number of other empirical studies, although not based on the SDT-perspective, also provided evidence for the distracting role of extrinsic goals. Quin, Kallen, Twenge, and Frederickson (2006) reported that when women's attention was oriented toward their physical looks, they displayed decreased performance on a Stroop task, presumably because their attention focus was disrupted. Furthermore, Kashdan and Breen (2007) showed that the pursuit of materialism is associated with greater experiential avoidance, representing a lack of willingness to be in contact with negatively evaluated thoughts, feelings, and bodily sensations. Thus, materialist individuals do not seem as receptive to their momentary unfolding emotions, presumably because their attention is focused on attaining external indicators of worth (Kasser, 2002).

As a consequence of shifting their attention away from the activity at hand, people are less likely to fulfill their needs.

First, a lack of thorough engagement in an activity typically results in poorer performance and achievement, thus undermining individuals' need for competence. Second, a focus on external indicators of worth is stressful and autonomy inhibiting because it induces a preoccupation with self-worth concerns. Third, such a focus is also likely to elicit self-involvement

and egoism, such that extrinsic goal oriented individuals may fail to be attuned to the needs and concerns of others.

Interpersonal Comparison

After becoming concerned with her bodily attractiveness during a workout session, the female exerciser is likely to gaze in the mirror to check her own figure and to check the difference with other exercisers' figures or with role models. Similarly, being concerned with academic status, a researcher is likely to compare the own publication record with the record of his colleagues or with an admired researcher. Indeed, several researchers in different fields of psychology, including consumer psychology (Sirgy, 1998; Van Boven, 2005) and health psychology (Dittmar, 2007), have suggested that a focus on extrinsic goal pursuits is likely to increase people's tendency to engage in interpersonal comparisons. That is, after turning to the external indicators of worth, individuals are likely to start comparing their own extrinsic goal realizations with those of others (see Figure 4.1).

Several studies have now provided evidence for this claim. For instance, studies in the body image literature have shown that women engage in social comparison processes after being exposed to attractive comparison targets (e.g., Patrick, Neighbors, & Knee, 2004; Tiggeman & McGill, 2004). Furthermore, in the domain of education, extrinsic relative to intrinsic goal framing was found to provoke a stronger performance-approach orientation (Elliot, 1999), that is, a desire to outperform others (e.g., Vansteenkiste, Matos, Lens, & Soenens, 2007). By definition, a performance orientation involves making comparisons of one's own achievements with the achievements of others. Extrinsic goals are not only associated with interpersonal but also with intergroup comparisons, as indexed by a stronger adoption of a social dominance attitude (Duriez, Vansteenkiste, et al., 2007).

A first likely result of such comparisons is that the pursuit of extrinsic goals or the exposure to extrinsic goal messages will be experienced as stressful and controlling, as people experience an inner urge to achieve the high standards exemplified by reference figures. Consistent with this, extrinsic goal framing was found to result in a more stressful learning experience and to prompt more controlled engagement in learning activities, signaling lack of autonomy satisfaction (Vansteenkiste, Simons, Lens, Sheldon, et al. 2004; Vansteenkiste, Simons, Soenens, et al., 2004).

Second, in addition to failing to provide autonomy satisfaction, engagement in interpersonal comparisons is likely to make people feel inferior to others because there are always people that outperform a person in attaining an extrinsic goal. Moreover, extrinsic goal oriented individuals tend to overidealize wealth and physical appeal and are more likely to monitor their success against the success of romanticized and rather remote reference figures (e.g., models, successful managers; Kasser, 2002). As a result, extrinsic goal oriented individuals are more likely to make upward comparisons (Sirgy, 1998), which provoke a sense of frustration and unhappiness and

Page Number: 76

fuel their feelings of incompetence and insecurity. Even if people are momentarily able to meet their extrinsic ambitions, the benefits associated with extrinsic goal attainment are said to be quite short-lived. This is because, although extrinsic goal attainment might yield some hedonic satisfaction, its attainment is unlikely to engender a sense of eudaimonia and self-realization (Ryan, Huta, & Deci, in press). As a result, new extrinsic ambitions are likely to set quickly in place, leading extrinsic goal oriented people to get trapped in a "hedonic treadmill" (Brickman & Campbell, 1977). This treadmill would be further fed by the ongoing gap extrinsic oriented individuals experience between their current realized and desired extrinsic ambitions (Solberg, Diener, & Robinson, 2004).

The notion that extrinsic aspirations would result in reduced competence satisfaction through processes of social comparison has recently received some evidence. In a meta-analytical review, Groesz, Levine, and Murnen (2002) showed that the experimental exposure to the thin ideal resulted in decreased body satisfaction (d = -.31), an effect that was more pronounced among women with an eating disorder or body dissatisfaction history.

Similarly, in a sample of male participants, Gulas and McKeage (2000) reported that self-esteem dropped when presented with ads referring to physical appeal or financial success, especially if participants were sensitive to idealized images. Notably, not only the exposure to attractive professional models but also to thinner peers was found to result in decreased body satisfaction (e.g., Krones, Stice, Batres, & Orjada, 2005). Research even suggests that expose to attractive peers might be more harmful than exposure to attractive models (Cash, Cash, & Butters, 1983), presumably because one might perceive attaining an attractive body of a peer as easier, such that a failure to do so might engender a stronger sense of incompetence, body dissatisfaction, and related psychological insecurity compared with being exposed to a professional attractive model.

Several studies have begun to explicitly elucidate the explanatory role of social comparison. Strahan, Wilson, Cressman, and Buote (2006) showed that, when being asked to freely describe their weight and body shape, women (but not men) appear more likely to make upward rather than downward comparisons, and, more important, that the number of spontaneously generated upward comparisons was positively correlated with the number of negative self-statements with regard to their physical appearance.

Using an experimental design, Tiggeman and McGill (2004) reported that the frequency of engaging in social comparisons mediated the negative effect of exposure to media images on negative mood and body dissatisfaction. Thus, after being exposed to ads depicting highly attractive models with (presumably) unattainable appearances, women tended to feel less competent and worthy of their own bodies because they compared their own appearance and figure with an unattainable ideal in a critical and self-evaluative fashion (Martin & Gentry, 1997). Similar mediational findings were reported by Bessendorf (2006), who showed that women who experienced a large discrepancy between their current and ideal body images were especially vulnerable to social comparison processes and, as a result, were

also more at risk for increased body dissatisfaction and depressive feelings after being exposed to thin-ideal advertisements.

Third, upward interpersonal comparisons are also likely to be experienced as socially alienating and to interfere with the possibility of deeply relating to others. By devoting attention and energy to interpersonal comparisons, the woman in the fitness room would fail to share exercise enjoyment with her friends and would be less likely to feel connected to them. By comparing the own publication record with the record of others, the extrinsic goal oriented academic might become envious of other people's successes and less inclined to collaborate with them. Thus, the competitive and performance-oriented focus that is activated through engaging in interpersonal comparisons is unlikely to contribute to the development of trustful relationships.

Conditional Approach

The lack of need satisfaction that is associated with an attention shift and with engagement in interpersonal comparison might lead people to feel insecure about their competencies, relationships, and personal values. Such insecurity might provoke two different reactions.

First, insecurity and anxiety are likely to prompt various defensive behaviors that are intended to reduce anxiety and threat. For instance, an individual could try to minimize the extrinsic goal attainments of others when observing that he or she was less successful in attaining these goals, or such an individual might be more likely to provide external, and hence more self-protective, explanations (i.e., attributions) for failure to attain extrinsic goals.

Second, the heightened insecurity might also prompt people to acquire more external indicators of worth to improve their standing relative to others, as a way to prove their worth (see Figure 4.1). After having observed that she was a bit fatter than her friends, the woman in the fitness room might put extra effort into the exercises to show her friends that she is able to live up to the extrinsic ideals. Alternatively, she might put her friends down or provide a self-protective excuse for her failure to attain a slim body in an attempt to ameliorate her insecurity and feel better about herself. Similarly, after finding out that his colleagues are more successful, the extrinsically oriented academic might decide to work harder to get another project finished, increasing the chances of work–family interference (Vansteenkiste, Neyrinck, et al., 2007). Alternatively, this person might defensively minimize the publication record of colleagues or provide rather external attributions for his lack of academic success.

Previous research has provided evidence for these hypotheses. For instance, Schimel, Arndt, Pyszczyinski, and Greenberg (2001) demonstrated that defensive behavior in a new situation is more likely to occur when people's extrinsic goals rather than their intrinsic goals are activated. Duriez, Vansteenkiste et al. (2007) found that extrinsically oriented individuals were more right-wing authoritarian, presumably because adopting

Page Number: 78

such attitudes helped them to alleviate the intraindividual insecurity that extrinsic goal pursuits engender. Similarly, Duriez, Soenens, and Vansteenkiste (2007) showed that parents who emphasized the attainment of extrinsic relative to intrinsic goals in their child rearing had children who displayed stronger right-wing authoritarian attitudes.

In addition to these defensive reactions, more extrinsically oriented individuals might display more interest in other people or put extra effort in activities that help them attain the desired external indicators of worth. Unfortunately, they are likely to approach other people and activities in a nonoptimal, that is, a conditional way. Specifically, extrinsic goal oriented individuals would only select activities and would only interact with individuals as far as other people are perceived as being useful or instrumental for the achievement of their own extrinsic ambitions. Kasser (2002) used the term "objectifying stance" to refer to the conditional interest that extrinsically oriented individuals show in other people. Extrinsically oriented individuals would perceive others as objects that need to be used (and even abused) in the most efficient way to get ahead in their extrinsic strivings.

Such a self-centered approach stands in opposition with the more empathic stance that characterizes an intrinsic goal orientation. In line with this, an intrinsic relative to an extrinsic goal orientation has been found to be inversely related to Machiavellian attitudes (McHoskey, 1999) while being positively associated with empathy (Sheldon & Kasser, 1995). As a result of these different relational attitudes, individuals will be more or less likely to get their basic need for relatedness satisfied. It is interesting to note that extrinsic goal oriented individuals not only consider others as objects but also tend to adopt a self-objectifying stance toward themselves as well (Frederickson & Roberts, 1997). Specifically, when people are selfobjectifying, they perceive their bodies from a third-person perspective, thereby focusing on body attributes ("How does my bum look?") rather than from a first-person perspective, thereby focusing on nonobservable body attributes ("How do I feel?"). Such a self-objectifying stance would increase the vulnerability for low competence satisfaction, as illustrated by the finding that self-objectification predicts body shame, which, in turn, predicts low body satisfaction (Noll & Frederickson, 1998).

In addition to observing oneself and others in a conditional fashion, more extrinsically oriented individuals tend to approach activities in a conditional way, which is equally unlikely to contribute to one's need satisfaction because activities are more likely to be carried out in a rigid and narrowly focused way. In line with this, it has been shown that, although participants in an extrinsic goal condition are engaged in the learning activity, the learning material is processed in a relatively superficial fashion (Vansteenkiste, Simons, Lens, Sheldon, et al., 2004; Vansteenkiste, Simons, Lens, et al., 2005).

This suggests that extrinsically oriented students only focus on those elements that are perceived as instrumental in performing on the test, which is likely to preclude feeling a sense of competence. Further, although such a rigid approach promoted initial persistence, these gains were not maintained in the longer run (e.g., Vansteenkiste, Simons, Soenens, et al.,

Positive Alternative to Strivings for Material Success and Thin Ideal 79

2004), leaving individuals with a sense of ineffectiveness and incompetence for failing to persist at the requested behaviors.

In sum, extrinsic versus intrinsic goal pursuits and the exposure to extrinsic versus intrinsic goal promotion seem to affect a set of related attention and cognitive processes that might explain why these different goals are differentially related to basic need satisfaction. Drawing upon the existing data on extrinsic and intrinsic goals, we propose that extrinsic relative to intrinsic goals promote an attention shift away from the activity at hand toward external indicators of worth. When people become concerned with living up to these external indicators, they are more likely to compare their own realizations with those of others, which can involve both romanticized and remote reference figures as social partners in one's direct environment. These upward comparisons will, on average, hinder basic need satisfaction and will leave people with a sense of insecurity and intraindividual threat. Such insecurity and threat can evoke defensive behavior or a more proactive tendency to garner external indicators of worth. As a result, and rather paradoxically, such individuals' attention shifts back to the activity at hand, as the instigated insecurity might lead them to become more strongly focused on attaining their extrinsic ideals (Kasser et al., 2004). However, more extrinsically goal oriented people approach the activity at hand and other people around them in a conditional, and hence, more rigid and selfcentered fashion, which, is—rather unfortunately—likely to further interfere with basic need satisfaction, thereby fuelling a sense of insecurity and thus further activating the negative vicious cycle.

CONCLUSION

The question whether materialist strivings buy happiness has received increasing attention by psychologists over the past 15 years. Self-determination theory discerns materialist strivings and other extrinsic aspirations such as social status and physical appeal from more organismic and intrinsic strivings such as self-acceptance and emotional intimacy. The articulation of a positive alternative for the pursuit of extrinsic strivings is very much needed, as researchers within the fields of consumer psychology and the body image literature have tended to study extrinsic goals in relative isolation from a more rewarding and growth-promoting alternative. Moreover, the study of such a positive alternative seems to fit very well within the current zeitgeist in the psychological literature to focus on those social conditions and personal attributes that facilitate the deployment of one's potential and contribute to growth.

The work reviewed in this chapter suggests the pursuit and promotion of intrinsic, relative to extrinsic, goals yields a host of differential effects, including people's personal well-being and health, the quality of their social relationships, their ethical functioning, their concern with ecological welfare, and their performance. Moreover, several lines of research begin to show that these conclusions are not only valid for people's general life aspirations but also hold when looking at different life domains as diverse as

sports and exercising, work, education, and health care. Future research might shed further insight in why these effects occur. The proposed macromediatonal process of basic need satisfaction as well as the three intervening micro-mediational mechanisms might provide some inspiration in this regard.

PERSONAL MINI-EXPERIMENT

Discovering the Intrinsic and Extrinsic Goal Importance of your Daily Strivings

Personal Strivings: Try to think for a while about your personal strivings. These are midlevel goals you have set for yourself. They represent what you typically try to do in your daily behavior, such as learning to play guitar, trying to exercise more, trying to put extra effort in your job, spending more time with your children, or cleaning your house. Please write down three different personal strivings you have set for yourself for the next 3 months.

Intrinsic and Extrinsic Goal Importance of Your Strivings: Now, ask yourself why these strivings are so important for you? To what extent is the pursuit of each of these strivings helpful in achieving different life goals? To help you brainstorm, you can write down how helpful each striving is in terms of achieving the following:

- 1) financial success in your life
- 2) helping other people in need
- 3) increasing your physical appeal to others
- 4) developing your talents
- 5) being more socially admired by others
- 6) being in better physical shape
- 7) having a stronger influence over others
- 8) developing stronger relational bonds with others

For each of these goals, indicate whether your current strivings help you in achieving them by scoring them from 1 (not helpful at all) to 5 (very helpful). Then, sum your scores across the three strivings for goals 1, 3, 5, and 7, and your scores for goals 2, 4, 6, and 8. The first set of goals assesses the importance of extrinsic goal strivings, and the second set of goals measures the importance of intrinsic goal strivings.

Look at your results. If your intrinsic goal score is much higher than your extrinsic goal score, your daily strivings are centered around goals that promote growth. If your extrinsic goals score is higher than your intrinsic goal score, your daily strivings are focused on material gain. Take a moment to reflect on your goals. What is it that makes extrinsic goals so important for you? What are the benefits to pursuing them? What are the costs? How do you pursue other people around you when you have an extrinsic goal on your mind when engaging in an activity? If you manage to attain an extrinsic goal, how long does the satisfaction of goal attainment last?

These kinds of questions might help you to gain further insight in the dynamic effects that are associated with the pursuit of intrinsic and extrinsic goals and might perhaps ultimately lead you to alter your perspective on your goals, to abandon some of them, and to select new ones.

REFERENCES

- Amiot, C. E., Vallerand, R. J., & Blanchard, C. M. (2006). Passion and psychological adjustment: A test of the person-environment fit hypothesis. *Personality and Social Psychology Bulletin*, 32, 220–229.
- Belk, R. W. (1985). Materialism: Trait aspects of living in the material world. *Journal of Consumer Research*, 12, 265–280.
- Berzonsky, M. D. (1990). Self-construction over the life-span: A process perspective on identity formation. *Advances in Personal Construct Psychology*, 1, 155–186.
- Bessendorf, G. R. (2006). Can the media affect us? Social comparison, self-discrepancy, and the thin ideal. *Psychology of Women Quarterly*, 30, 239–251.
- Brickman, P., & Campbell, D. (1977). Hedonic relativism and planning the good society. In M. H. Appley (Ed.), *Social comparison processes: Theoretical and empirical perspectives*. New York: Wiley/Halsted.
- Brown, K. W., & Kasser, T. (2005). Are psychological and ecological well-being compatible? The role of values, mindfulness, and lifestyle. *Social Indicators Research*, 74, 349–368.
- Campbell, A., Converse, P. E., & Rodgers, W. L. (1967). The quality of American life: Perceptions, evaluations, and satisfactions. New York: Russell Sage.
- Carver, C. S., & Baird, E. (1998). The American dream revisited: Is it what you want or why you want it that matters? *Psychological Science*, *9*, 289–292.
- Carver, C. S., & Scheier, M. F. (2000). Autonomy and self-regulation. *Psychological Inquiry*, 11, 284–290.
- Cash, T. F., Cash, D. W., & Butters, J. W. (1983). "Mirror, mirror, on the wall?": Contrast effects and self-evaluations of physical attractiveness. *Personality and Social Psychology Bulletin*, 9, 351–358.
- Csikszentmihalyi, M. (1999). If we are so rich, why aren't we happy? *American Psychologist*, 54, 821–827.
- Cohen, P., & Cohen, J. (1996). Life values and adolescent mental health. NJ:
- Deci, E. L., & Ryan, R. M. (2000). The "what" and the "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227–268.
- Diener, E., Suh, E. M., Luca, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125, 276–302.
- Dittmar, H. (2005). Compulsive buying—a growing concern? An examination of gender, age, and endorsement of materialistic values as predictors. *British Journal of Psychology*, 96, 467–491.
- Dittmar, H. (2007). The costs of consumer culture and the "cage within": The impact of the material "good life" and "body perfect" ideals on individuals' identity and well-being. *Psychological Inquiry*, 18, 23–59.
- Dohnt, H. K., & Tiggeman, M. (2006a). Body image concerns in young girls: The role of peers and media prior to adolescence. *Journal of Youth and Adolescence*, 35, 141–151.
- Dohnt, H. K., & Tiggeman, M. (2006b). The contribution of peer and media influences on the development of body satisfaction and self-esteem in young girls: A prospective study. *Developmental Psychology*, 42, 929–936.
- Duriez, B., Soenens, B., & Vansteenkiste, M. (2007). In search of the antecedents of adolescent authoritarianism: The relative contribution of parental goal promotion and parenting style dimensions. *European Journal of Personality*, 21, 507–527.

Page Number: 82

- Duriez, B., Vansteenkiste, M., Soenens, B., & De Witte, H. (2007). The social costs of extrinsic relative to intrinsic goal pursuits: Their relation with social dominance and racial and ethnic prejudice. Journal of Personality, 75, 757-782.
- Eccles, J. S., Lord, S., & Midgley, C. (1991). What are we doing to early adolescents? The impact of educational contexts on early adolescents. American Journal of Education, 99, 521-541.
- Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. Annual Review of Psychology, 53, 109-132.
- Edwards, J. R. (1991). Person-job fit: A conceptual integration, literature review, and methodological critique. In C. L. Cooper, & I.T. Robertson (Eds.). International review of industrial and organizational psychology (pp. 283-357). Oxford: Wiley.
- Elizur, D. (1984). Facets of work values: A structural analysis of work outcomes. Journal of Applied Psychology, 69, 379–389.
- Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. Educational Psychologist, 34, 169-189.
- Frederickson, B. L., & Roberts, T. A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. Psychology of Women Quarterly, 21, 173-206.
- Fromm, E. (1976). To have or to be? New York: Continuum.
- Groesz, L. M., Levine, M. P., & Murnen, S. K. (2002). The effect of experimental presentation of thin media images on body satisfaction: A meta-analytical review. International Journal of Eating Disorders, 31, 1-16.
- Grouzet, F. M. E., Kasser, T., Ahuvia, A., Dols, J. M. F., Kim, Y., Lau, S., et al. (2006). The structure of goal contents across 15 cultures. Journal of Personality and Social Psychology, 89, 800-816.
- Gulas, C. S., & McKeage, K. (2000). Extending social comparison: An examination of the unintended consequences of idealized advertising imagery. Journal of Advertising, 2, 17-28.
- Hall, P. A., & Gingerich, D. W. (2004). Varietiess of capitalism and institutional complementarities in the macroeconomy: An empirical analysis. Berliner Journal fur Soziologie, 14, 5.
- Harackiewicz, J. M., & Elliot, A. J. (1998). The joint effects of target and purpose goals on intrinsic motivation: A mediational analysis. Personality and Social Psychology Bulletin, 24, 675-689.
- Husman, J., & Lens, W. (1999). The role of the future in student motivation. Educational Psychologist, 34, 113-125.
- Inglehart, R. (1990). Culture shift in advanced industrial society. Princeton, NJ: Princeton University Press.
- Kashdan, T. B., & Breen, W. E. (2007). Materialism and diminished well-being: Experiential avoidance as a mediating mechanisms. Journal of Social and Clinical Psychology, 26, 521-539.
- Kasser, T. (2002). The high price of materialism. London: MIT Press.
- Kasser, T. (2005). Frugality, generosity, and materialism in children and adolescents. In K. A. Moore, & L. H. Lippman (Eds.), What do children need to flourish?: Conceptualizing and measuring indicators of positive development (pp. 357–373). New York: Springer Science.
- Kasser, T., & Ahuvia, A. (2002). Materialistic values and well-being in business students. European Journal of Social Psychology, 32, 137–146.
- Kasser, T., Cohn, S., Kanner, A. D., & Ryan, R. M. (2007). Some costs of American corporate capitalism: A psychological exploration of value and goal conflicts. Psychological Inquiry, 18, 1-22.

Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as central life aspiration. Journal of Personality and Social Psychology, 65, 410-422.

Positive Alternative to Strivings for Material Success and Thin Ideal 83

- Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. Personality and Social Psychology Bulletin, 22, 280-287.
- Kasser, T., & Ryan, R. M. (2001). Be careful for what you wish: Optimal functioning and the relative attainment of intrinsic and extrinsic goals. In P. Schmuck, & K. M. Sheldon (Eds.), Life goals and well-being: Toward a positive psychology of human striving (pp. 116–131). Goettingen, Germany: Hogrefe & Huber.
- Kasser, T., Ryan, R. M., Couchman, C. E., & Sheldon, K. M. (2004). Materialistic values: Their causes and consequences. In T. Kasser, & A. D. Kanfer (Eds.), Psychology and consumer cultures: The struggle for a good life in a materialistic world (pp. 11-28). Washington, DC: American Psychological Association.
- Kasser, T., & Sheldon, K. M. (2002). What makes for a merry Christmas? Journal of Happiness Studies, 3, 313-329.
- Kasser, T., Vansteenkiste, M., & Deckop, J. R. (2006). The ethical problems of a materialist value orientation for business. In J. R. Deckop (Ed.), Human resource management ethics. Greenwich, CT: Information Age Publishers.
- Kilbourne, W., & Pickette, G. (in press). How materialism affects environmental beliefs, concern, and environmentally responsible behavior. Journal of Business Research.
- Krieger, L. S. (1998). What we're not telling law students—and lawyers—that they really need to know: Some thoughts-in-acting toward revitalizing the profession from its roots. Journal of Law and Health, 13, 1-48.
- Krones, P., Stice, E., Batres, C., & Orjada, K. (2005). In vivo social comparison to a thin-deal peer promotes body dissatisfaction: A randomized experiment. International Journal of Eating Disorders, 38, 134-142.
- LaBarbera, P., & Gürhan, Z. (1997). The role of materialism, religiosity, and demographics in subjective well-being. Psychology and Marketing, 14, 71-97.
- Markus, H. R., & Kitayama, S. K. (2003). Models of agency: Socio-cultural diversity in the construction of action. In V. Murphy-Berman, & J. J. Berman (Eds.), Nebraska symposium on motivation: Vol. 49. Cross-cultural differences in perspectives on the self (pp. 1-57). Lincoln, NE: University of Nebraska Press.
- Martin, M. C., & Gentry, J. W. (1997). Stuck in the model trap: The effects of beautiful models in ads on female pre-adolescents and adolescents. The Journal of Advertising, 2, 19-33.
- McGill, V. J. (1967). The idea of happiness. New York: Praeger.
- McHoskey, J. W. (1999). Machiavellianism, intrinsic versus extrinsic goals, and social interest: A self-determination theory analysis. Motivation and Emotion, 23, 267-283.
- Meyer, B., Enström, M. K., Harstveit, M., Bowles, D. P., & Beevers, C. G. (2007). Happiness and despair on the catwalk: Need satisfaction, wellbeing, and personality adjustment among fashion models. Journal of Positive Psychology, 2007, 2-17.
- Nickerson, C., Schartz, N., Diener, E., & Kahneman, D. (2003). Zeroing in on the dark side of the American dream: A closer look at the negative consequences of the goal for financial success. Psychological Science, 14, 531-536.
- Noll, S. M., & Frederickson, B. L. (1998). A mediational model linking self-objectification, body shame and disorder eating. Psychology of Women Quarterly, 22, 623-636.

- Patrick, H., Neighbors, C., & Knee, C. R. (2004). Appearance-related social comparisons: The role of contingent self-esteem and self-perceptions of attractiveness. Personality and Social Psychology Bulletin, 30, 501-514.
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. Journal of Personality and Social Psychology, 67, 741-763.
- Quin, D. M., Kallen, R. W., Twenge, J. M., & Frederickson, B. L. (2006). The disruptive effect of self-objectification on performance. Psychology of Women Quarterly, 30, 59–64.
- Richins, M. L., & Dawson, S. (1992). A consumer value orientation for materialism and its measurement: Scale development and validation. Journal of Consumer Research, 19, 303-316.
- Rijavec, M., Brdar, I., & Miljikovic, D. (2006). Extrinsic vs. intrinsic life goals, psychological needs and life satisfaction. In A. Delle Fave (Ed.), Dimensions of well-being. Research and Intervention (pp. 91-104). Milan: Franco
- Roberts, J. A., & Clement, A. (2007). Materialism and satisfaction with overall quality of life and eight life domains. Social Indicators Research, 82, 79-92.
- Roets, A., Van Hiel, A., & Cornelis, I. (2006). Does materialism predict racism? Materialism as a distinctive social attitude and a predictor of prejudice. European Journal of Personality, 20, 155-168.
- Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. Journal of Personality, 63, 397-427.
- Ryan, R. M., Chirkov, V. I., Little, T. D., Sheldon, K. M., Timoshina, E., & Deci, E. L. (1999). The American dream in Russia: Extrinsic aspirations and well-being in two cultures. Personality and Social Psychology Bulletin, 25, 1509–1524.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psychologist, 55, 68-78.
- Ryan, R. M., Huta, V., & Deci, E. L. (in press). Living well: A self-determination theory perspective on eudaimonia. Journal of Happiness Studies.
- Ryan, R. M., Sheldon, K. M., Kasser, T., & Deci, E. L. (1996). All goals were not created equal: An organismic perspective on the nature of goals and their regulation. In P. M. Gollwitzer, & J. A. Bargh (Eds.), The psychology of action: Linking motivation and cognition to behavior (pp. 7-26). New York:
- Sagiv, L., & Schwartz, S. H. (2000). Value priorities and subjective well-being: Direct relations and congruity effects. European Journal of Social Psychology, 30, 177-198.
- Schimel, J., Arndt, J., Pyszczyinski, T., & Greenberg, J. (2001). Being accepted for who we are: Evidence that social validation of the intrinsic self reduces general defensiveness. Journal of Personality and Social Psychology, 80, 35-52.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Ed.), Advances in experimental social psychology (Vol. 25, pp. 1-65). San Diego, CA, and London: Academic Press.
- Schwartz, S. H. (2006). Cultural and individual value correlates of capitalism: A comparative analysis. Psychological Inquiry, 18, 52-57.
- Sebire, S., Standage, M., & Vansteenkiste, M. (2007). Development and validation of the Goal Content for Exercise Questionnaire. Manuscript submitted for publication.

- Seligman, M. E. P., & Csikszentminhalyi, M. (2000). Positive psychology: An introduction. American Psychologist, 55, 5-14.
- Sheldon, K. M., Arndt, J., & Houser-Marko, L. (2003). In search of the organismic valuing process: The human tendency to move toward beneficial goal choices. Journal of Personality, 71, 835-886.
- Sheldon, K. M., & Kasser, T. (1995). Coherence and congruence: Two aspects of personality integration. Journal of Personality and Social Psychology, 68, 531-543.
- Sheldon, K. M., & Kasser, T. (1998). Pursuing personal goals: Skills enable progress, but not all progress is beneficial. Personality and Social Psychology Bulletin, 24, 1319-1331.
- Sheldon, K. M., & Kasser, T. (2001). Goals, congruence, and positive well-being: New empirical support for humanistic theories. Journal of Humanistic Psychology, 41, 30-50.
- Sheldon, K. M., & Krieger, L. S. (2004). Does legal education have undermining effects on law students? Evaluating changes in motivation, values, and wellbeing. Behavioral Sciences and the Law, 22, 261-286.
- Sheldon, K. M., & McGregor, H. (2000). Extrinsic value orientation and the tragedy of the commons. Journal of Personality, 68, 383-411.
- Sheldon, K. M., Ryan, R. M., Deci, E. L., & Kasser, T. (2004). The independent effects of goal contents and motives on well-being: It's both what you pursue and why you pursue it. Personality and Social Psychology Bulletin, 30, 475-486.
- Sirgy, M. J. (1998). Materialism and quality of life. Social Indicators Research, 43, 227-260.
- Solberg, E. G., Diener, E., & Robinson, M. D. (2004). Why are materialists less satisfied? In T. Kasser & A. D. Kanner (Eds.), Psychology and consumer culture: The struggle for a good life in a materialistic world (pp. 29-48). Washington, DC: American Psychological Association.
- Srivastava, A., Locke, E. A., & Bartol, K. M. (2001). Money and subjective wellbeing: It's not the money, it's the motives. Journal of Personality and Social Psychology, 80, 959-971.
- Stice, E., & Shaw, H. E. (1994). Adverse effects of the media portrayed thin-ideal on women and linkages to bulimic symptomatology. Journal of Social and Clinical Psychology, 13, 288-308.
- Strahan, E. J., Wilson, A. E., Cressman, K. E., & Buote, V. M. (2006). Comparing to perfection: How cultural norms for appearance affect social comparisons and self-image. Body Image, 3, 211-227.
- Tang, T. L., & Chiu, R. K. (2003). Income, money ethic, pay satisfaction, and unethical behavior: Is the love of money the root of evil for Hong Kong employees? Journal of Business Ethics, 46, 13-30.
- Tiggeman, M., & McGill, B. (2004). The role of social comparison in the effect of magazine advertisements on women's mood and body dissatisfaction. Journal of Social and Clinical Psychology, 23, 23-44.
- Van Boven, L. (2005). Experientialism, materialism, and the hedonics of consumption. Review of General Psychology, 9, 132-142.
- Van Boven, L., & Gilovich, T. (2003). To do or to have? That is the question. Journal of Personality and Social Psychology, 85, 1193–1202.
- Van Hiel, A., & Vansteenkiste, M. (2007). "Ambitions fulfilled?" The effects of intrinsic versus extrinsic goal attainment on psychological well-being and ego-integrity, and death attitudes among the elderly. Manuscript submitted for publication.
- Vansteenkiste, M. (2007, September). The effects of intrinsic vs. extrinsic goal pursuit on ethical functioning. Paper presented to the British Association of Sport and Exercise Sciences Annual Conference, Bath, United Kingdom.

GWD-LOPEZ-08-0210-004/

- Vansteenkiste, M., Duriez, B., Simons, J., & Soenens, B. (2006). Materialistic values and well-being among business students: Further evidence for their detrimental effect. *Journal of Applied Social Psychology*, 36, 2892–2908.
- Vansteenkiste, M., Lens, W., & Deci, E. L. (2006). Intrinsic vs. extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation. *Educational Psychologist*, 41, 19–31.
- Vansteenkiste, M., Matos, L., Lens, W., & Soenens, B. (2007). Understanding the impact of intrinsic versus extrinsic goal framing on exercise performance: The conflicting role of task and ego involvement. *Psychology of Sport and Exercise*, 8, 771–794.
- Vansteenkiste, M., Neyrinck, B., Niemiec, C. P., Soenens, B., De Witte, H., & Van den Broeck, A. (2007). On the relations among work value orientations, psychological need satisfaction, and job outcomes: A self-determination theory approach. *Journal of Occupational and Organizational Psychology*, 80, 251–277.
- Vansteenkiste, M., Simons, J., Braet, C., Bachman, C., & Deci, E. L. (2007). Promoting maintained weight loss through healthy lifestyle changes among severely obese children: An experimental test of self-determination theory. Manuscript submitted for publication.
- Vansteenkiste, M., Simons, J., Lens, W., Sheldon, K. M., & Deci, E. L. (2004). Motivation learning, performance and persistence: The synergistic effects of intrinsic goal contents and autonomy-supportive contexts. *Journal of Personality and Social Psychology*, 87, 246–260.
- Vansteenkiste, M., Simons, J., Lens, W., Soenens, B., Matos, L., & Lacante, M. (2004). "Less is sometimes more": Goal-content matters. *Journal of Educational Psychology*, 96, 755–764.
- Vansteenkiste, M., Simons, J., Lens, W., Soenens, B., & Matos, L. (2005). Examining the impact of extrinsic vs. intrinsic goal framing and internally controlling vs. autonomy-supportive communication style upon early adolescents' academic achievement. *Child Development*, 76, 483–501.
- Vansteenkiste, M., Simons, J., Soenens, B., & Lens, W. (2004). How to become a persevering exerciser? Providing a clear, future intrinsic goal in an autonomy supportive way. *Journal of Sport & Exercise Psychology*, 26, 232–249.
- Vansteenkiste, M., Soenens, B., & Lens, W. (2007). Intrinsic versus extrinsic goal promotion in sport and exercise: Understanding their differential impact on performance and persistence. In M. S. Hagger and N. Chatzisarantis (Eds.) Self-Determination Theory in exercise and sport (pp 167–180). Champaign, IL: Human Kinetics.
- Vansteenkiste, M., Timmermans, T., Lens, W., Soenens, B., & Van den Broeck, A. (in press). Does extrinsic goal framing enhance extrinsic goal oriented individuals' learning and performance? An experimental test of the match-perspective vs. self-determination theory. *Journal of Educational Psychology*.
- Williams, G. C., Cox, E. M., Hedberg, V. A. & Deci, E. L. (2000). Extrinsic life goals and health-risk behaviours among adolescents. *Journal of Applied Social Psychology*, 30, 1756–1771.