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## Parental goal promotion and college students' self-esteem level and contingency: The mediating role of need satisfaction

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### ABSTRACT

The current study investigated the antecedent role of perceived parental goal promotion for students' self-esteem level and contingency. Additionally, we examined the mediating role of experienced need satisfaction. Using three-wave longitudinal data in a sample of 494 college students (mean age at Time 1 = 18.41 years, 84% female), we found that intrinsic parental goal promotion at baseline directly and positively predicted students' initial self-esteem level. Further, intrinsic parental goal promotion indirectly predicted both students' initial self-esteem level (positive effect) and initial self-esteem contingency (negative effect) via need satisfaction. Extrinsic goal promotion only directly and positively predicted students' initial self-esteem contingency. Limitations and suggestions for future research are discussed.

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### 1. Introduction

Based on a heterogeneous view of self-esteem, scholars have argued that aspects beyond self-esteem level (i.e., whether self-esteem is high or low) need to be considered in predicting behavior and adjustment (Heppner & Kernis, 2011). In particular, the concept of self-esteem contingency has recently received much attention. Self-esteem contingency can be defined as the global or domain-specific tendency to let one's self-esteem depend on external or internal conditions: To perceive themselves as good and worthy, individuals with high self-esteem contingency need to fulfill certain criteria. Such contingent functioning leads to self-esteem boosts when self-related standards are reached, but it also leads to self-esteem drops when these standards are not met. Moreover, because failure with regard to self-related goals is closely tied to one's worth as a person, such failure will not be easily dismissed (Crocker & Wolfe, 2001). Accordingly, researchers have demonstrated that higher self-esteem contingency is associated with serious costs for one's mental and physical health (e.g., Crocker & Park, 2004; Johnson, 2011).

Research has demonstrated that self-esteem contingency and self-esteem level refer to two distinct aspects of self-esteem which

are moderately negatively correlated (e.g., Bos, Huijding, Muris, Vogel, & Biesheuvel, 2010; Crocker & Luhtanen, 2003; Meier, Orth, Denissen, & Kühnel, 2011). This moderate negative association suggests that individuals with lower self-esteem levels are generally more prone to self-esteem contingency. This pattern fits with empirical findings showing that self-esteem level and self-esteem contingency have opposite associations with adjustment, with self-esteem level being negatively related and self-esteem contingency being positively related to maladjustment (Bos et al., 2010; Crocker & Luhtanen, 2003; Zeigler-Hill, 2013).

As both self-esteem level and self-esteem contingency have been found to predict individuals' well-being, it is important to identify their antecedents to inform prevention and intervention efforts. Parental antecedents seem particularly important, as parents are known to be particularly influential with regard to their children's development in general (Pianta & Walsh, 1996; Steinberg, 2001) and the development of children's self-esteem in particular (e.g., Verschueren, Marcoen, & Schoefs, 1996). Although research on parenting antecedents of self-esteem contingency is still scarce (see Wouters, Doumen, Germeijs, Colpin, & Verschueren, 2013 for an exception), researchers have contended that parents may affect their children's self-esteem contingency through the criteria they use to assess a person's worth (Crocker & Wolfe, 2001). As such, we argue that the extent to which students perceive their parents as emphasizing or valuing certain goals will affect their self-esteem contingency, and relatedly, their self-esteem level. Thus, we extended previous research by examining perceived parental goal promotion as a key antecedent of first-year college students' self-esteem level and contingency.

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Goal content theory (GCT; Deci & Ryan, 2000) distinguishes between extrinsic and intrinsic goals. The goals of financial success, social recognition, and physical attractiveness, for instance, are considered extrinsic goals because individuals who endorse these goals primarily aim at impressing others through acquiring external indicators of worth (referring to a more outward orientation). In contrast, intrinsic goals, such as self-development, community contribution, and affiliation, are considered inherently satisfying to pursue with a focus on developing one's personal interests and potentials (referring to a more inward orientation) (Duriez, Soenens, & Vansteenkiste, 2007; Kasser, 2002; Vansteenkiste, Lens, & Deci, 2006).

Research has shown that individuals' intrinsic goal pursuits relative to their extrinsic goal pursuits lead to higher levels of well-being such as an increased self-esteem level (Vansteenkiste et al., 2006). Similarly, we expected parental promotion of intrinsic goals to lead to an enhanced focus on self-actualization and, hence, more well-being. In the present study, we assessed self-esteem level and contingency longitudinally to allow for examining the influence of parental goal promotion on both initial level and rates of change of both self-esteem measures. With respect to the initial level of both self-esteem measures, we expected a positive effect of intrinsic goal promotion on students' self-esteem level and a negative effect on self-esteem contingency. With respect to growth, we hypothesized that a stronger promotion of intrinsic goals would be positively associated with growth in self-esteem level, but negatively associated with growth in self-esteem contingency. Extrinsic parental goal promotion, on the other hand, should make students more preoccupied with impressing others, social comparisons, and reaching external standards (Duriez et al., 2007; Kasser, 2002; Vansteenkiste et al., 2006). This outward orientation is expected to result in a need to prove oneself, leading to a negative effect on students' initial self-esteem level and a positive effect on their initial level of self-esteem contingency. A stronger promotion of extrinsic goals was also hypothesized to relate negatively to students' growth in self-esteem level and positively to their growth in self-esteem contingency.

The second study aim was to examine a mechanism through which parental goal promotion would shape college students' self-esteem level and contingency. In the present study, we focused on need satisfaction as a possible mediator. Scholars have argued that focusing on intrinsic goals with an inherent emphasis on self-growth and interpersonal relations is likely to satisfy individuals' basic psychological needs (i.e., their needs for autonomy, competence, and relatedness), whereas focusing too much on extrinsic goals with the associated 'having orientation' may thwart these needs or may be unrelated to need satisfaction (Duriez, Soenens, & Vansteenkiste, 2008; Vansteenkiste et al., 2006). Similar predictions may be formulated with regard to parental goal promotion in the current study. Furthermore, Deci and Ryan (1995) hypothesized, based on self-determination theory, that self-esteem level would be impaired when individuals' basic psychological needs are not satisfied. Accordingly, previous research has shown a positive relation between need satisfaction and self-esteem level (Deci et al., 2001). Further, self-esteem contingency is likely to increase when individuals' basic psychological needs are not satisfied, as thwarting of inner needs may promote individuals to seek external sources of self-worth, whereas individuals whose basic needs are satisfied may not need constant validation of their self-worth (Deci & Ryan, 1995). Thus, promotion of intrinsic goals should lead to more satisfied basic psychological needs which may, in turn, lead to a higher self-esteem level and less self-esteem contingency. Promotion of extrinsic goals, on the other hand, should lead to less satisfied basic psychological needs which will, in turn, lead to a lower self-esteem level and more self-esteem contingency. In sum, we hypothesized that the extent to which

students' basic psychological needs are satisfied will explain the link between intrinsic and extrinsic parental goal promotion, on the one hand, and self-esteem level and contingency, on the other.

## 2. Method

### 2.1. Participants and procedure

A longitudinal sample of freshman psychology students was recruited at a large university in the Dutch-speaking part of Belgium. Data were collected at three measurement waves with a three-month interval resulting in a total time span of 6 months; 500 students agreed to participate. We deleted six cases because they were older than 30 or did not have an age indication. Of the final sample of 494 students, 455 students participated at Time 1 (T1), 447 students participated at Time 2 (T2), and 418 students participated at Time 3 (T3). Mean age at T1 was 18.41 years ( $SD = 1.43$ ; range 17–29). Most participants (84%) were female. For the present set of variables, only 9.01% of the data at the scale level was missing in the final sample. Based on Little's (1988) Missing Completely At Random (MCAR) test, yielding a normed chi square of 1.32 which suggested that drop-out occurred completely at random, we used the Full Information Maximum Likelihood (FIML) procedure.

### 2.2. Measures

All questionnaires were administered in Dutch and all items were answered on a 5-point scale ranging from 1 (*completely disagree*) to 5 (*completely agree*).

At T1, students filled out the 18-item Parental Goal Promotion Questionnaire (Duriez et al., 2007), assessing the degree to which parents are perceived to promote extrinsic or intrinsic goals. The extrinsic goals of financial success ('My parents find it important that I'm financially successful in my life'), social recognition ('My parents find it important that I am popular'), and physical attractiveness ('My parents find it important that I'm physically attractive and appealing for others'), and the intrinsic goals of growth ('My parents find it important that I develop my talents'), community contribution ('My parents place high importance on helping other people in need'), and affiliation ('My parents find it important that I develop close relationships with a few friends') were assessed (three items each). Cronbach's alpha was .84 for perceived intrinsic goal promotion and .85 for perceived extrinsic goal promotion. Additionally, we measured the extent to which students' basic psychological needs are satisfied at T1 with the 9-item Need Satisfaction Scale (Luyckx, Vansteenkiste, Goossens, & Duriez, 2009). Satisfaction of the basic needs of autonomy ('I feel that my choices are based on my true interests and values'), competence ('I feel that I can successfully complete difficult tasks and projects'), and relatedness ('I feel a sense of contact with people who care for me, and whom I care for') were assessed. Cronbach's alpha for need satisfaction was .83.

At T1, T2, and T3, self-esteem level was measured with a Dutch version of the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965; Van der Linden, Dijkman, & Roeders, 1983) and self-esteem contingency with a Dutch version of the 15-item Contingent Self-Esteem Scale (Paradise & Kernis, 1999; Soenens & Duriez, 2012). Sample items were 'On the whole, I am satisfied with myself (self-esteem level)' and 'A big determinant of how much I like myself is how well I perform up to the standards that I have set for myself (self-esteem contingency)'. Cronbach's alphas ranged from .92 to .93 for self-esteem level and from .81 to .83 for self-esteem contingency.

### 3. Results

#### 3.1. Descriptive analyses

Table 1 presents all means, standard deviations, and intercorrelations. All correlations were in the expected direction. Intrinsic and extrinsic goal promotion were modestly positively correlated. Need satisfaction was positively correlated with intrinsic goal promotion, but not significantly correlated with extrinsic goal promotion. Need satisfaction and intrinsic goal promotion were positively related to self-esteem level, whereas need satisfaction was negatively and extrinsic goal promotion was generally positively associated with self-esteem contingency. Finally, self-esteem contingency was negatively correlated with self-esteem level at all time points. Additional independent *t*-tests showed that female students perceived their parents to promote extrinsic goals more strongly and reported more contingent self-esteem than male students. Thus, in all of the following models (except for the unconditional growth models), we controlled for sex by regressing all variables on sex.

#### 3.2. Main analyses

Using latent growth curve modeling in Mplus Version 6.1 we first estimated unconditional growth models to estimate students' initial level (Intercept; *I*) and growth (Slope; *S*) for both self-esteem variables separately (with a time coding of 0, 1, and 2). If there was significant variance in intercepts and slopes, we proceeded to explain this variance by including intrinsic and extrinsic parental goal promotion as direct predictors. Finally, we estimated two mediation models: a full mediation model and a mediation model with significant direct paths added. To correct for measurement error, we created latent factors for the goal promotion and need satisfaction variables using three item parcels for each variable. Each parcel contained one item from each underlying subdomain (e.g., each need satisfaction parcel contained one item measuring the need for autonomy, relatedness, and competence; Little, Cunningham, Shahar, & Widaman, 2002).

In the unconditional growth model for self-esteem level, both the intercept and the slope differed significantly from zero ( $I_{\text{mean}} = 3.75$ ,  $S_{\text{mean}} = 0.08$ ,  $p < .001$ ), although the growth in self-esteem level was small (an increase of 0.16 from T1 to T3 corresponds with 22% of the average *SD* in self-esteem level). In the model for self-esteem contingency, however, only the intercept differed significantly from zero ( $I_{\text{mean}} = 3.47$ ,  $p < .001$ ,  $S_{\text{mean}} = -0.01$ ,  $p = .20$ ). Furthermore, the significant variances of both growth factors in each growth model pointed to substantial differences among individuals in intercept and slope ( $I_{\text{variance}} = 0.43$ ,  $p < .001$ ,  $S_{\text{variance}} = 0.03$ ,  $p < .05$ ,  $I_{\text{variance}} = 0.19$ ,  $p < .001$ ,

$S_{\text{variance}} = 0.02$ ,  $p < .01$  for self-esteem level and contingency, respectively).

Next, we estimated a model in which intrinsic and extrinsic goal promotion were included as direct predictors of the intercept and slope of self-esteem level (Model A1:  $\chi^2(28) = 76.48$ ; RMSEA = .06; CFI = .98; SRMR = .04). Only one direct main path was significant: Perceived parental intrinsic goal promotion was positively associated with students' intercept of self-esteem level ( $\beta = .25$ ,  $p < .001$ ). The same model was estimated for self-esteem contingency (Model A2:  $\chi^2(28) = 86.33$ ; RMSEA = .07; CFI = .97; SRMR = .05). Again, only one direct main path was significant: Perceived parental extrinsic goal promotion was positively associated with students' intercept of self-esteem contingency ( $\beta = .14$ ,  $p < .05$ ).

In a third step, need satisfaction was included as a mediator in two full mediation models (Model B1 (self-esteem level):  $\chi^2(57) = 118.80$ ; RMSEA = .05; CFI = .98; SRMR = .04 and Model B2 (self-esteem contingency):  $\chi^2(57) = 140.68$ ; RMSEA = .06; CFI = .97; SRMR = .06). Additionally, we tested two mediation models (Models C1 and C2) in which the significant direct paths from Models A1 and A2 were included in Models B1 and B2. These models fitted the data well (Model C1 (self-esteem level):  $\chi^2(56) = 117.24$ ; RMSEA = .05; CFI = .98; SRMR = .04 and Model C2 (self-esteem contingency):  $\chi^2(56) = 131.43$ ; RMSEA = .05; CFI = .97; SRMR = .05).

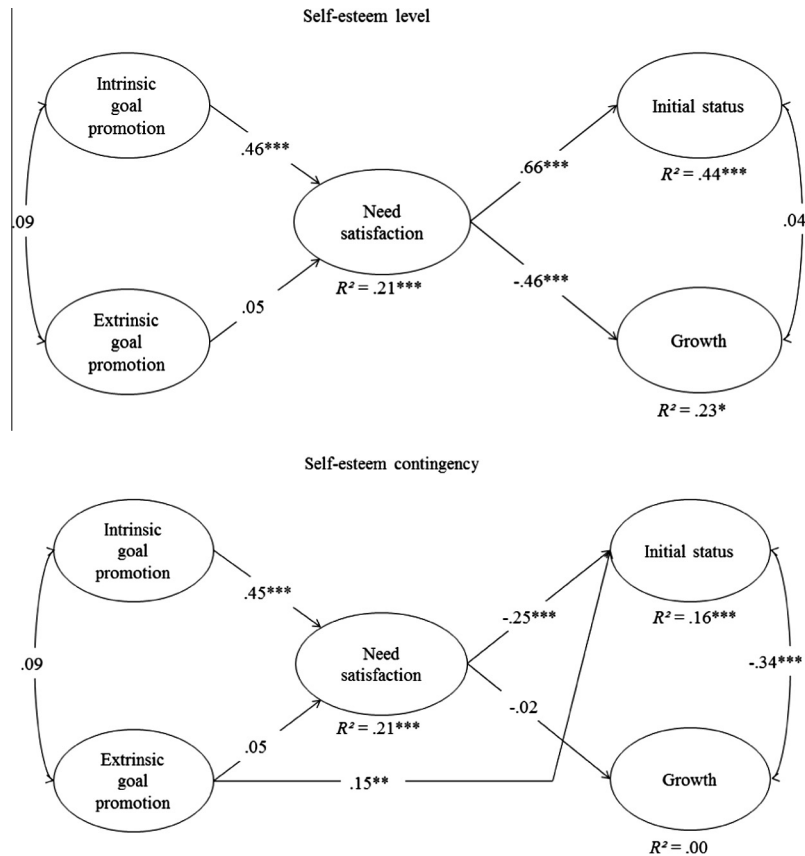
For self-esteem level, Model C1 did not fit the data significantly better than Model B1 ( $\Delta\chi^2(1) = 1.56$ ,  $p = .21$ ). The initial direct path from intrinsic goal promotion to level of self-esteem was no longer significant when need satisfaction was included. Thus, we chose Model B1 as the final model for predicting self-esteem level (see Fig. 1). All main paths to and from need satisfaction were significant, except for the path from extrinsic goal promotion to need satisfaction. For contingency level, Model C2 had a better fit than Model B2 ( $\Delta\chi^2(1) = 9.25$ ,  $p < 0.01$ ). Therefore, we chose Model C2 as the final model for predicting self-esteem contingency (see Fig. 1). All main paths to and from need satisfaction were significant, except for the paths from extrinsic goal promotion to need satisfaction and from need satisfaction to the slope of self-esteem contingency. The initial direct path from extrinsic goal promotion to the intercept of self-esteem contingency remained significant, even when need satisfaction was included.

Furthermore, as evaluated through bias corrected bootstrapping in Mplus with 5000 iterations, we found two significant indirect effects in these final models. Significant indirect effects were found from intrinsic goal promotion to the intercepts of self-esteem level, as well as contingency through need satisfaction (point estimate = .30, SE = .04, bias-corrected 95% CI = [.22; .38]; and point estimate = -.11, SE = .03, bias-corrected 95% CI = [-.17; -.05], respectively).

**Table 1**  
Intercorrelations, means, and standard deviations for all variables.

Variable	1	2	3	4	5	6	7	8	9
1. Promoted intrinsic goals T1	–								
2. Promoted extrinsic goals T1	.10*	–							
3. Need satisfaction T1	.41***	.09	–						
4. Self-esteem level T1	.22***	.02	.57***	–					
5. Self-esteem level T2	.17**	-.02	.45***	.78***	–				
6. Self-esteem level T3	.16**	-.04	.34***	.69***	.77***	–			
7. Self-esteem contingency T1	.04	.15**	-.21***	-.36***	-.27***	-.22***	–		
8. Self-esteem contingency T2	.09	.08	-.18***	-.35***	-.34***	-.27***	.72***	–	
9. Self-esteem contingency T3	.02	.15**	-.22***	-.35***	-.31***	-.26***	.65***	.72***	–
<i>M</i>	4.17	2.79	3.99	3.77	3.79	3.93	3.47	3.51	3.45
<i>SD</i>	0.49	0.63	0.52	0.72	0.71	0.74	0.47	0.48	0.48
<i>N</i>	454	454	455	454	447	418	454	447	418

Note. \* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$ .



**Fig. 1.** The final models with perceived parental goal promotion predicting self-esteem level and contingency and perceived need satisfaction as a mediator. Sex effects on all variables were estimated but not shown to keep the figure interpretable. \* $p < .05$  \*\* $p < .01$ . \*\*\* $p < .001$ .

#### 4. Discussion

Based on a heterogeneous view on self-esteem, we studied perceived parental goal promotion as a possible antecedent of self-esteem level and contingency in college students. Additionally, we investigated whether experienced need satisfaction mediated these associations. In line with our hypotheses, we found significant direct effects from parental goal promotion to the initial level of both self-esteem aspects. Interestingly, regarding students' self-esteem level, the degree of parents' intrinsic goal promotion seemed particularly relevant, whereas for students' self-esteem contingency, the degree of parents' extrinsic goal promotion seemed more relevant. A focus on extrinsic goals has been mainly associated with having to reach certain standards to impress others (Duriez et al., 2007; Vansteenkiste et al., 2006). Hence, adolescents encouraged to strive for these goals may be particularly inclined to base their self-esteem on whether or not they reach these standards. Adolescents who are encouraged to focus on personal growth and on contributing to and connecting with the community, however, may be particularly likely to experience a more positive view of themselves.

Additionally, our findings showed that the association between intrinsic goal promotion and self-esteem level may be explained by the extent to which students' basic psychological needs of autonomy, competence, and relatedness are satisfied. These findings corroborate previous research showing a positive relation between intrinsic goal promotion and need satisfaction, on the one hand, (Vansteenkiste et al., 2006) and between need satisfaction and self-esteem level, on the other (e.g., Deci et al., 2001). Interestingly, intrinsic goal promotion also indirectly and negatively affected students' initial level of self-esteem contingency through need

satisfaction. The effect of extrinsic goal promotion on the initial level of self-esteem contingency, however, was not explained by perceived need satisfaction. This was due to the fact that extrinsic goal promotion was not related to students' need satisfaction beyond the effect of intrinsic goal promotion. Probably, the absolute level of extrinsic goal promotion is less important with regard to need satisfaction as compared to its level relative to intrinsic goal promotion (Duriez, Giletta, Kuppens, & Vansteenkiste, 2013). Our results thus suggest that perceived parental promotion of intrinsic goals is particularly important because it may increase students' self-esteem level as well as reduce students' self-esteem contingency through its positive effect on need satisfaction.

Furthermore, we found a significant negative effect of need satisfaction on the slope of self-esteem level, indicating that the higher students' initial scores for need satisfaction, the smaller their increase in self-esteem level. This finding probably reflects a ceiling effect: Students whose needs are already satisfied initially will have a higher initial self-esteem level and thus will have less opportunity to increase even further in self-esteem. Importantly, we were not able to predict students' growth in contingency by including parental goal promotion or need satisfaction. Other factors (such as students' perceived stress or their adjustment to the college transition) may be more important in predicting changes in self-esteem contingency during their freshman year.

In addition, our results suggested that students generally experienced relatively high levels of self-esteem contingency in the beginning of their freshman year, but also relatively high levels of self-esteem (in comparison with the scale midpoints). This suggests that the insecurity and stress, associated with the new roles and demands of the transition to higher education, make students' self-esteem particularly dependent on certain outcomes, but do

not necessarily result in lower self-esteem levels. Furthermore, self-esteem level and contingency were relatively stable over time in our study, although significant inter-individual differences in growth rate were found. This relative stability may be explained by the short time interval of six months that was used in our study.

A first limitation of the present study is that we did not have longitudinal data for all variables. Hence, in future full-fledged longitudinal studies, cross-lagged analyses may be used to examine the direction of effects. Future research may also benefit from increasing the time lag between the data waves to examine if the effects remain similar across a longer time period. Second, research should be extended by looking for antecedents of domain-specific (instead of only global) self-esteem contingency. For example, students whose self-esteem is contingent on social approval might be particularly affected by parental goal promotion. Third, we only used self-report data in our study. Especially with regard to the parenting variables, upcoming studies may want to consider using parent reports or observer reports. Nevertheless, previous research (Duriez et al., 2008) has shown moderately positive correlations between parental and adolescent reports of parental goal promotion and adolescents' views on their parents are important in their own right, especially when trying to predict adolescents' self-esteem (Kernis, Brown, & Brody, 2000). Finally, our study was conducted among university students. Although we did not ask students about their living situation, we may assume based on previous studies with similar samples (freshman psychology students from our university; Luyckx, Soenens, Vansteenkiste, Goossens, & Berzonsky, 2007; Vanhalst, Luyckx, Raes, & Goossens, 2012) that most students stayed on the campus during the week and only returned home in the weekends. Possibly, stronger effects from parental goal promotion will be found when studying samples of students who still reside full-time at home (e.g., younger students in high school). Nevertheless, we did find significant effects of (perceived) parental characteristics on adolescent outcomes. This pattern of findings confirms that parental influence is still important – even in this group with presumably more limited parent-adolescent interactions.

Despite these limitations, our study adds to the scarce research evidence regarding the parental antecedents of self-esteem contingency and highlights the need to further study these antecedents in future research. In particular, although research has generally found moderate to large correlations between the goals promoted by parents and adolescents' own personal extrinsic/intrinsic goals (e.g., Duriez, 2011; Mouratidis, Vansteenkiste, Lens, Michou, & Soenens, 2013), it may be interesting to investigate whether students' personal goals have a unique effect above and beyond (perceived) parental goal promotion on different aspects of students' self-esteem. In addition, it would be interesting to study moderators that may attenuate or strengthen the relationship between parental goal promotion and self-esteem. Possibly, this relationship is stronger (i.e., more internalization of promoted goals) when adolescents are residing full-time at home, for example, or when they have a high-quality relationship with their parents. Knafo and Schwartz (2004), for instance, suggested that parental values are more easily accepted by adolescents who have a close relationship with their parents. These hypotheses should be investigated in future research.

In sum, our study contributes to ongoing research regarding multiple aspects of self-esteem by studying perceived parental goal promotion as an antecedent of college students' self-esteem level and contingency. Specifically, the current results demonstrated that intrinsic parental goal promotion directly affected students' initial self-esteem level as well as indirectly affected their initial self-esteem level and contingency through perceived adolescent need satisfaction. Additionally, results yielded a direct effect of extrinsic parental goal promotion on students' initial self-esteem contingency.

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