Parenting Style and the Promotion of Intrinsic and Extrinsic Goals

by

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B.A., University of Rochester, 2013

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of the Requirements for the Degree of

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Supervisory Committee

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Abstract

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According to the dual valuing process model (Grouzet, 2013), the social context can either facilitate the natural human tendency to pursue intrinsic goals, or thwart it by promoting extrinsic goals. Congruent with this idea, research in self-determination theory (Deci & Ryan, 2000) suggests that parental autonomy support (PAS) is associated with the development of intrinsic goals, whereas more controlling parenting styles, such as conditional regard (PCR), are expected to facilitate extrinsic goals. Results from two preliminary studies suggest that mothers tended to use PAS to promote goals that were more intrinsic, as well young adults were more likely to autonomously internalize these goals, whereas PCR was associated with more extrinsic goals. In the current study, we sought to extend these findings by including a general measure of perceived parenting style, as well as asking participants to recall a goal that was promoted during adolescence (i.e., 13-16 years). Results from this study indicate no difference in the type of goal that was promoted or the way in which it was internalized when mothers used either autonomy support or conditional regard, over and above general parenting style. Results will be further discussed with respect to parenting, self-determination theory, and the dual valuing process model.

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Parenting Style and the Promotion of Intrinsic and Extrinsic Goals

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Parenting Style and the Promotion of Intrinsic and Extrinsic Goals

As human beings, we have a natural, inherent tendency to move toward self-actualization (Maslow, 1962; Rogers, 1964). As we engage and interact with the world around us, we have an innate ability to actively seek out opportunities and set goals that will allow us to flourish and develop in a healthy way. This tendency begins in infancy and continues throughout our entire life (Rogers, 1964), and so it is important to acknowledge how the complexity of the social environment can either enhance or disrupt this natural process (Grouzet, 2013). Researchers so far have been quite successful in understanding the characteristics and consequences of environments that either detract from or lead to optimal human development (e.g., Deci & Ryan, 2013). However, one area that warrants further exploration is the impact parents may have on their children's goals. Parents are often considered the primary socializing agents, which allows them to have the greatest initial impact on goal development (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000; Davidov & Grusec, 2007). However, despite any good intentions parents may have, the type of goals they promote and the ways in which they are shared can sometimes do more harm than good (see Soenens & Beyers, 2012).

To further understand this issue, the purpose of the present research is to examine the impact mothers may have on the types of goals that their children pursue. Since this research is grounded in self-determination theory (SDT; Deci & Ryan, 2000), we will first provide an overview of intrinsic and extrinsic goals, followed by the dual valuing process model (Grouzet, 2013) and the role of the social context (i.e., parents) on the internalization of these goals. We then propose a series of studies that test the dual valuing process model by examining the relation between parenting style and the promotion, adoption, and internalization of intrinsic and extrinsic goals, which in turn impact well-being.

Differentiation of Intrinsic and Extrinsic Goals

Self-determination theory (Deci & Ryan, 2000) proposes two different types of goals that people tend to pursue throughout their life. Intrinsic goals for personal growth, community involvement, and developing mutual, positive relationships with others stand in stark contrast to extrinsic goals for social recognition, financial success, and having an appealing image (Kasser & Ryan, 1993, 1996). Rather than emphasizing two dichotomous categories of goals, Grouzet and colleagues (2005) suggest that intrinsic and extrinsic goals fall along a continuum, which is moderated by the extent to which a goal is representative of the physical self or self-transcendence. While the structure of goal contents in this circumplex model is universal, there are certainly individual differences with respect to the types of goals that people value and pursue in their daily life. As a result, there are fundamental and qualitatively different developmental outcomes that emerge depending on the type of goal that an individual predominately values. On one side, intrinsic goals are associated with satisfaction of the psychological needs for autonomy, competence, and relatedness, and therefore are more in line with our inherent, organismic desire for personal growth and optimal human functioning (Deci & Ryan, 2000; Grouzet, 2013). In contrast, extrinsic goals are not associated with need satisfaction, which may lead an individual to strive for satisfaction outside of the self, namely through external rewards, acquiring possessions, and seeking praise from others (e.g., Vansteenkiste et al., 2007). Individuals who value and pursue intrinsic goals are more likely to experience greater psychological health outcomes, including greater well-being (Kasser, 2002; Kasser & Ryan, 1993; Sheldon & Kasser, 1998), less distress and higher self-esteem (Kasser & Ryan, 1996), as well as less maladaptive behaviours such as drug use and risky sexual behaviour (Kasser & Ryan, 1993; Williams, Cox, Hedberg, & Deci, 2000). Conversely, valuing, pursuing, and

attaining extrinsic goals is associated with an increase in both physical (e.g., backaches, headaches) (Kasser & Ryan, 1993, 1996) and psychological symptoms (e.g., anxiety, depression) (Kasser & Ryan, 1993; Niemiec et al., 2009).

Internalization: A Self-Determination Theory Perspective

In addition to what an individual may inherently value, he or she must selectively choose which goals to adopt from those set forth by the external environment (e.g., parents, peers, media). Internalization is a process that refers to taking an external goal and transforming it into something more internal (Deci, Eghrari, Patrick, & Leone, 1994; Grolnick, 2003). Self-determination theory suggests that how an individual internalizes a goal depends on whether or not the three psychological needs are satisfied (Deci & Ryan, 2000; Grouzet, 2013; Ryan, 1995). These three psychological needs are *autonomy*, which refers to a sense of self-direction and volition, *competence*, which involves feeling capable and effective in mastering one's environment, and *relatedness*, which refers to the experience of warm, caring, and mutually concerned positive relationships with others. The extent to which the social context provides support for these three psychological needs is not only critical for an individual to flourish, but also for the internalization process. While the satisfaction of the psychological needs for competence and relatedness facilitates the process of internalization (Deci et al., 1994), the thwarting of these needs forestalls this process (Grolnick, Deci, & Ryan, 1997). Grouzet (2013) extends this idea by suggesting that satisfaction of the needs for competence and relatedness facilitates the effect of informative communication while the satisfaction of the need for autonomy will determine whether a goal is internalized through identification or introjection (i.e., for more or less autonomous reasons).

Introjection is the process where an individual develops an internal representation of a previously external contingency (Deci et al., 1994). While the contingency is no longer external, the individual applies the same pressure for approval by way of inducing internal guilt, shame or pride, just as an external entity would. Significant others (e.g., parents) convey what behaviours or ideas are considered “good” or “bad,” which eventually become internalized in order to maintain affection (from the significant other), rather than as a way to enhance the self (Rogers, 1964). For example, university students may take in the message that being popular is “good” or something that they *should* do (e.g., in order to be a good, well-rounded student). This internal pressure results in a sense of pride when a student actively maintains the standard of popularity, but generates feelings of guilt or shame when standards are not met. As a result of placing one’s sense of self-worth on external outcomes or people’s approval, the introjected goal will be less autonomous and ultimately the individual will suffer psychologically (e.g., developing feelings of tension, anxiety, and contingent self-esteem) (Grolnick, 2003; Nicholls, 1984; Ryan, 1982; Ryan & Connell, 1989).

In contrast, identification occurs when a goal is internalized in such a way that the individual acknowledges and accepts the underlying reason behind it (Deci et al., 1994; Ryan & Connell, 1989). From a Rogerian perspective, once individuals are able to accept and take stock of their own personal feelings and experiences, they will be able to live more freely and decide which values are more in tune with their needs (Rogers, 1967). As a result, individuals are more likely to autonomously internalize a goal because they find personal meaning in what they are pursuing and therefore, upon self-reflection, fully endorse the goal. Research suggests that identification promotes more positive outcomes, such as greater creativity (Koestner, Ryan,

Bernieri, & Holt, 1984), greater well-being (Ryan & Connell, 1989), and better quality of relationships (Ryan & Connell, 1989).

The Dual Valuing Process Model

In order to better understand the internalization (and prioritization) of intrinsic and extrinsic goals, Grouzet (2013) developed the dual valuing process model, which integrates Rogers', self-determination theory's, and social psychological perspectives through the interaction between the organismic and sociocognitive valuing processes.

The Organismic Valuing Process. Originally proposed by Rogers (1951, 1964), the organismic valuing process (OVP) explains why humans prefer and select experiences that serve to enhance or actualize their organism. Specifically, he states that an individual who is in touch with their own organism “knows what he likes and dislikes, and the origin of [his] value choices lie strictly within himself. He is the center of the valuing process, the evidence for his choices being supplied by his own senses” (Rogers, 1964, p. 161). Grouzet (2013) extended this idea by suggesting that people tend to pursue goals that will benefit the organism based on their own preferences and needs (see also Sheldon, Arndt, & Houser-Marko, 2003). An individual will naturally select these goals because intrinsic goals are presumably associated with satisfaction of the psychological needs. Grouzet (2013) further suggests that a need-supportive social context can activate the organismic valuing process and therefore the inherent desire for intrinsic goals, whereas a more threatening climate would forestall this process.

The Sociocognitive Valuing Process. While the OVP explains the natural tendency to pursue intrinsic goals, the sociocognitive valuing process (SVP) involves the development of both intrinsic and extrinsic goals through socialization (Grouzet, 2013). In this regard, the nature of the relationship between an individual and the social context can influence the way in which

goals are internalized, regardless of their content. According to the dual valuing process model, this influence can occur verbally, symbolically, or non-verbally (Grouzet, 2013). For example, a parent can withdraw affection when the child does not comply with the parents' demands. Therefore, the child may be likely to adopt the goal in order to restore affection. Despite the lack of verbal communication, the goal still gets successfully transmitted (albeit at the level of introjection) to the child. An additional proposition made by Grouzet (2013) is that the quality of the social context plays a key role in determining both the content of goals and the way in which they are internalized. To the extent that a parent provides a nurturing environment by supporting the child's psychological needs, it is likely that the child will internalize intrinsic goals through the process of identification. However, to the extent that the parent places contingencies on or makes threats against the child, they will likely develop extrinsic goals through the process of introjection. Within SDT, there are two parenting styles that correspond to the satisfaction or thwarting of these needs – autonomy support and conditional regard – both of which are of primary interest in the current research.

Parenting Styles: Conditional Regard versus Autonomy Support

In the context of parenting, the principles proposed by Rogers, self-determination theory and the dual valuing process model can lead to the distinction between parental conditional regard and parental autonomy support.

Parental Conditional Regard (PCR). According to Rogers (1957), humans have a fundamental need to be positively regarded by others, particularly by those who are important to them. However, once positive regard becomes contingent upon some aspect of the self, the individual being regarded (e.g., a child) is now pressured to think, feel, or behave in a way that may or may not be congruent with the self in order to maintain love and affection (e.g., from the

child's parents). Conditional regard is when an individual's sense of self worth is contingent upon the extent to which they agree with the values and beliefs of another (e.g., parents) (Rogers, 1957). Research by Assor, Roth, and Deci (2004) found that parental conditional regard promoted feelings of internal compulsion to comply with expectations (a measure of introjection) and increased resentment toward parents. To extend these findings, Roth, Assor, Niemiec, Ryan, and Deci (2009) differentiated between parental conditional positive regard (PCPR; i.e., providing more attention and affection when a child acts in accordance with the parent's wishes) and parental conditional negative regard (PCNR; i.e., withdrawing attention and affection when a child does not comply with parental demands). They found that PCPR was associated with introjection of behaviours proposed by parents, which in turn predicted both emotion dysregulation and suppression of negative emotions, as well as grade-focused academic engagement. Similarly, PCNR was associated with amotivation, which in turn predicted emotion dysregulation and lack of engagement in school. Drawing further attention to the maladaptive outcomes associated with PCPR, Assor and Tal (2012) suggested that PCPR is more than just positive feedback and positive reinforcement; rather, PCPR promoted feelings of self-aggrandizement following success, which in turn predicted compulsive over-investment in school. Additionally, PCPR was associated with feelings of self-devaluation and shame following failure, which in turn predicted both compulsive over-investment in school and avoidance of academic challenges.

Parental Autonomy Support (PAS). SDT proposes that autonomy supportive contexts are vital when promoting internalization and self-determination (Grolnick & Ryan, 1989). Important contextual factors include: (1) providing a meaningful rationale for why a goal may be important; (2) acknowledging the individual's perspective of the situation at hand; and (3)

providing a sense of choice rather than approaching a situation with expectations and control. The extent to which parents utilize these practices when raising and interacting with their children is referred to as parental autonomy support. Research suggests that parental autonomy support was associated with more autonomous motivation, which in turn predicted integrated regulation of emotions and interest-focused academic engagement (Roth et al., 2009). Additional outcomes associated with this parenting style include greater perceived need support, increased academic performance (Grolnick, Ryan, & Deci, 1991), increased well-being (Lekes, Gingras, Philippe, Koestner, & Fang, 2010), and greater autonomous self-regulation (Katz, Kaplan, & Buzukashvily, 2011).

Parenting Style and the Internalization of Goals

Grouzet (2013) further suggests that an autonomy supportive environment can facilitate “identification and profound goal system changes” (p. 66), whereas more controlling environments may forestall this process. While research has begun to explore the connection between autonomy supportive parenting styles and the development of intrinsic and extrinsic goals, researchers have yet to examine how controlling parenting styles, such as conditional regard, may also influence an individual’s goals. Research thus far suggests that intrinsic and extrinsic goals can be promoted by socializing agents, such as teachers and parents (Duriez, Soenens, & Vansteenkiste, 2007, 2008; Vansteenkiste, Lens, & Deci, 2006). Individuals who have autonomy supportive parents were more likely to develop intrinsic goals (Lekes et al., 2010; Williams et al., 2000), whereas adolescents with mothers who were not need-supportive tended to value financial success and were more materially oriented (Kasser, Ryan, Zax, & Sameroff, 1995). Further, having participants think about a conditionally regarding other has been shown to induce interpersonal threat, which in turn facilitates the valuing of extrinsic goals

(Sheldon & Kasser, 2008). These findings provide preliminary support for the idea that mothers tend to promote extrinsic goals when using a conditionally regarding parenting style. While the dual valuing process model supports these ideas theoretically, research so far is still in its infancy and so further work is necessary to support these propositions. As a result, this limited body of research warrants further investigation of the dual valuing process model, specifically whether the use of parental conditional regard may influence the promotion and internalization of intrinsic and extrinsic goals.

The Current Research

In a series of three studies we sought to examine what type of goals (intrinsic vs. extrinsic) is more likely to be promoted when mothers use autonomy support or conditional regard, as well as the extent to which these parenting styles lead to the internalization of the goals and subsequent well-being. The current research provides an empirical test of the dual valuing process model (Grouzet, 2013) while examining both parental autonomy support and parental conditional regard simultaneously, rather than in isolation as was done before (e.g., Soenens, Vansteenkiste, & Sierens, 2009). In the three studies, participants were young adults who were asked to retrieve memories about goals that their mother promoted using different forms of parenting style (using both between- and within-participant designs).

General Hypotheses. We hypothesized that goals promoted using autonomy support would be more intrinsic (than extrinsic) than goals promoted using conditional regard (Hypothesis 1). In addition, when a goal is promoted in an autonomy supportive way, it would be more autonomously internalized than a goal promoted in a conditionally regarding way (Hypothesis 2). Finally, we expected that the type of goals and the way in which they were internalized would interact to predict well-being and need satisfaction. Specifically, the more an

intrinsic goal was autonomously internalized, the greater need satisfaction and well-being would be (Hypothesis 3).

Study 1: Between-Person Effect of Parenting Styles

The purpose of Study 1 was to examine the types of goals (intrinsic vs. extrinsic) that are promoted (and then adopted) when mothers use either autonomy support or conditional regard. Participants were asked to identify a personal goal that their mother promoted in either an autonomy supportive (PAS Condition) or conditionally regarding (PCR Condition) way. In a control group, participants were simply asked to think about a goal that their mother promoted without any prompt specifying the way in which it was promoted. They were then asked to rate how similar their goal was to a list of intrinsic or extrinsic goals, as well as the reasons for why they pursued this goal. Finally, all participants rated their current need satisfaction and well-being. The first two hypotheses were that participants in the PAS condition would rate their goal as being more similar to intrinsic (vs. extrinsic) goals, and report more autonomous (vs. controlled) reasons for pursuing the goal than participants in the both the PCR and neutral conditions. The third hypothesis was that goals rated as being more similar to intrinsic (than extrinsic) goals and pursued for more autonomous (than controlled) reasons would be more strongly associated with need satisfaction and well-being than goals that are rated as more extrinsic and pursued for less autonomous reasons.

Method

Participants

Participants were 238 university students in psychology courses. Six participants were removed because they did not follow the instructions (e.g., did not write in a goal or their responses were unable to be coded by research assistants). Six univariate outliers were detected based on the criteria of a construct having a z-score greater than 3.0 (Kline, 2011); however, they were retained because their removal did not affect the results. No multivariate outliers were

detected under the assumption that the Mahalanobis distance statistic for each case (examined across 16 variables) is $p > .001$ (Kline, 2011). The final sample consisted of 232 university students (76.7% females), with ages ranging from 17 to 29 ($M = 19.34$, $SD = 1.96$), and 74% were Caucasian and 17% Asian. Participants received course extra credit for their participation.

Procedure

Participants came into a computer lab in groups of 1-8 to participate in a study on “how mothers (or mother figures) may influence the types of goals people pursue.” Participants completed demographic measures, including questions about their family structure. To ensure that we had equivalent numbers of males and females across each condition, we randomized participants within gender for each of three experimental conditions: parental autonomy support (PAS), parental conditional regard (PCR), or neutral. For the PAS condition participants were presented with the following:

At times, parents tend to be involved in their children's values and life goals. For example, parents may take their children's perspective and acknowledge their feelings with respect to their values and life goals. Similarly, parents may also provide choice and a meaningful rationale to help their children understand the importance of different values and life goals.

For the PCR condition, participants were presented with the following:

At times, parents tend to be involved in their children's values and life goals. For example, parents may withdraw their attention or affection when their children do not comply with their expectations regarding their values and life goals. Similarly, parents may also provide more attention and affection when their children comply with their expectations regarding their values and life goals.

For the neutral condition, participants were simply presented with the following: “At times, parents tend to be involved in their children's values and life goals.” After reading through the scenario, participants were asked “to think about a value or goal that [their] mother has promoted in this way, which [they] subsequently adopted, actively pursue and frequently think about.” After writing in a goal, participants were asked to describe two examples of parenting practices that their mother used to promote the goal that they listed. Participants were then asked to rate the extent to which their goal was similar to a list of 15 reference goals (Grouzet, 2008). Finally, participants completed a series of measures assessing the extent to which they have internalized the promoted goal, as well as their well-being and need satisfaction.

Measures

Parenting Practices. After identifying a goal, participants were asked to describe up to two examples of how their mother promoted that goal in the way described in the instructions. This method allowed us to determine whether participants did in fact come up with examples that match the condition they were in (e.g., if assigned to the PAS condition, did the participant provide examples of autonomy supportive parenting practices?). Subsequently, these examples were coded by 5 trained research assistants (including the first author) for the presence of practices that are congruent with autonomy support (3-items; e.g., “The participant’s mother takes the participant’s perspective and acknowledges his/her feelings”) or conditional regard (2-items; e.g., “The participant’s mother provides more attention and/or affection when the participant acts in an expected or desirable way”). The ratings of the three coders with the highest inter-rater reliability were averaged to compute a score for experienced conditional regard and a score for experienced autonomy support. The difference score represents the extent

to which the parenting practice used to promote the goal was more autonomy supportive than conditionally regarding.

Intrinsic and Extrinsic Nature of Goals. Participants rated the goal they have identified in terms of similarity to a list of 15 reference goals developed by Grouzet (2008), which is based on the list of goal types examined in Grouzet and colleagues (2005). Among them were three typical intrinsic goals: self-acceptance (i.e., “To have insight into why I do the things I do”), affiliation (i.e., “To be in a committed, intimate relationship”), and community feeling (i.e., “To assist people who need it, asking nothing in return”). Another three were typical extrinsic goals, including financial success (i.e., “To be financially successful”), image (i.e., “To have an image that others find appealing”), and popularity (i.e., “To be admired by many people”). Responses were made on a 5-point scale, from 1 (*very dissimilar*) to 5 (*very similar*). An adopted goal index was calculated by subtracting the highest rated of three extrinsic reference goals from the highest rated of three intrinsic reference goals (i.e., $\text{Intrinsic}_{Hi} - \text{Extrinsic}_{Hi}$). This method was used to account for the fact that a promoted goal may not be similar to all three intrinsic or to all three extrinsic goals. For example, a goal to help others may be more similar to the goal type “community feelings”, but not as similar to “self-acceptance”. A positive score on the goal index indicates that a participant’s goal was relatively more similar to a typical intrinsic goal than a typical extrinsic goal.

Internalization of Goals. Using a scale developed by Grouzet (2012a), participants were asked to report the different reasons why they pursued the goal that their mother promoted. Six different reasons were provided, each one corresponding to intrinsic motivation, identification, introjection, external pressure from their mother, external pressure from other individuals, and amotivation. Responses were made on a 7-point Likert scale, ranging from 1 (*not true at all*) to 7

(*very true*). An internalization index was calculated by subtracting the average of the controlled items (i.e., external mother, external other, and introjection) from the average of the autonomous items (i.e., intrinsic and identification), where a positive score indicates that the goal was more autonomously internalized (vs. internalized with an experience of control).

Subjective Well-Being. The Satisfaction with Life Scale (5-items; Diener, Emmons, Larsen, & Griffin, 1985) was used to assess how satisfied an individual was with his or her life (e.g., “In most ways my life is close to ideal”). Cronbach’s alpha coefficient for this scale was .84. To assess positive and negative affect, we used a list of 10 positive emotions and 10 negative emotions developed by Grouzet (2012b) to capture the two dimensions of emotions (i.e., positive vs. negative and high intensity vs. low intensity). Participants rated the extent to which they experienced these emotions within the past two weeks. Using EFA¹, we were able to determine a reliable and valid 5-item subset of positive emotions (i.e., love, happiness, cheerfulness, excitement, joy) and 5-item subset of negative emotions (i.e., anxiety, stress, worry, fear, sadness), which correspond to basic emotions. Cronbach’s alpha coefficient for the positive emotions subscale was .85, whereas the negative emotions subscale was .77. Responses for both measures were made on a 5-point Likert Scale, ranging from 1 (*very slightly or not at all*) to 5 (*extremely*). Affective balance was then calculated by subtracting the negative emotions score from the positive emotions score. Subsequently, subjective well-being was calculated by summing the life satisfaction and affective balance scores.

Psychological Well-Being. Two indicators were used to assess psychological well-being. First, we used the Flourishing Scale (8-items; Diener et al., 2010), which is a measure of well-

¹ The original 20-item scale had a reliability of .76 for positive emotions and .83 for negative emotions. However, EFA with principle axis factoring and direct oblimin rotation suggests a two-factor solution that correspond to positive and negative emotions, which account for approximately 34% of variance. Therefore, the 5 emotions with the highest loadings and suitable anti-image correlations from each factor were selected.

being that assesses how well an individual is doing in various areas of life, for example feeling a sense of purpose (e.g., “I lead a purposeful and meaningful life”) and positive relationships (e.g., “I actively contribute to the happiness and well-being of others”). Responses were made on a 7-point Likert scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). We calculated the average of all items, resulting in a Cronbach’s alpha coefficient of .86. Second, the Subjective Vitality Scale (7-items; Ryan & Frederick, 1997) assessed the extent to which an individual feels vital (e.g., “I feel alive and vital”) and energetic (e.g., “I have energy and spirit”) in one’s general life. Responses were made on a 7-point Likert scale, ranging from 1 (*not at all true*) to 7 (*very true*). An average of all items produced a Cronbach’s alpha coefficient of .63.

Psychological Need Satisfaction. The Balanced Measure of Psychological Needs (18-items; Sheldon & Hilpert, 2012) was used to assess the extent to which each of the three basic psychological needs was satisfied in one’s life. The scale is comprised of three satisfaction and three dissatisfaction items for each need: Autonomy (e.g., “I am free to do things my own way” or “I have to do things against my will”); Competence (e.g., “I take on and master hard challenges” or “I struggle to do things I should be good at”); and Relatedness (e.g., “I feel close and connected with other people who are important to me” or “I have disagreements or conflicts with people I usually get along with”). A need satisfaction score was calculated by reverse scoring all of the dissatisfaction items and then creating an average from all 18 items. Responses were made using a 5-point Likert scale, ranging from 1 (*no agreement*) to 5 (*much agreement*). Cronbach’s alpha coefficient for this scale is .84.

Analytical Plan

Hierarchical multiple regression analyses were conducted to test the different hypotheses. Since participants were randomized within gender for each condition, we included gender and the interactions between gender and each contrast code (i.e., $C_1 = \text{PAS vs. PCR}$ and $C_2 = \text{PAS/PCR vs. Neutral}$) as a control in Step 1 for each regression model. The first comparison (i.e., PAS vs. PCR) was coded such that PAS was given a weight of 1, PCR a weight of -1, and neutral a weight of 0. The second comparison (i.e., PAS and PCR with Neutral) was coded such that PAS and PCR were both given a weight of -1, whereas neutral was given a weight of +2.

To test mediational models, we used simple mediation analysis with bootstrap sampling (Hayes, 2013). Under the assumptions of ordinary least squares regression, normally this method is restricted when the independent variable is multicategorical (i.e., three or more groups) due to the inability to accurately represent the effect of all groups individually (i.e., $k-1$ contrast codes are required, where k is the number of conditions or groups) (see Hayes & Preacher, 2013 for a review); however, we used a modified approach proposed by Hayes and Preacher (2013), which incorporates contrast coding to simultaneously estimate the direct and relative indirect effects for each of the different comparisons (which in this case there are two).

Results

Table 1 presents the descriptive statistics for the sample, whereas Table 2 presents the descriptive statistics for each measure. Chi square tests and regression analyses revealed no significant differences between the groups for gender, type of mother (e.g., biological, adoptive), marital status of mother, or the frequency of interaction with one's mother.

Effect of Parenting Style

We first sought to examine the group differences associated with parenting styles.² As presented in Table 3, the example parenting practices that participants reported their mother used to promote the goal were more autonomy supportive in the PAS condition ($M = 2.46$, $SD = 1.19$) than in the PCR condition ($M = -1.11$, $SD = 2.26$), $\beta = .66$, $t(226) = 11.281$, $p < .001$, $d = 0.75$. Additionally, there was no difference in internalization for either the PAS condition ($M = 2.62$, $SD = 1.94$) or the PCR condition ($M = 2.07$, $SD = 2.04$), $\beta = .45$, $t(226) = 0.644$, $p = .653$, $d = 0.04$. With respect to the type of goal participants selected (i.e., goal index), no significant difference was observed, $\beta = .00$, $t(226) = -0.052$, $p = .959$, $d = .00$. We also examined the effects of parenting style on positive outcomes (see Table 4). The effect of conditions was significant for subjective well-being only, $\beta = .22$, $t(228) = 2.888$, $p = .004$, $d = .38$ such that participants in the PAS condition reported greater subjective well-being ($M = 5.56$, $SD = 2.15$) than those in the PCR condition ($M = 4.87$, $SD = 2.04$).

Parenting Practices as Mediator

In order to explain the absence of effect of the parenting conditions on the type of goals, we examined whether the parenting practices reported by participants mediated the relation between experimental conditions and the type of goal that participants selected (see Figure 2). Results suggest that participants in the PAS condition reported that their mother used parenting practices that were relatively more autonomy supportive (vs. conditionally regarding) than those in PCR condition, ($\beta = .66$, $p < .001$), which in turn led participants to select a relatively more intrinsic (vs. extrinsic) goal ($\beta = .21$, $p = .017$). Using simple mediation with multicategorical

² Gender was significantly associated with the type of goal that participants' selected, $\beta = -.13$, $t(228) = -2.008$, $p = .046$, $d = .27$, and internalization, $\beta = .13$, $t(228) = 2.034$, $p = .043$, $d = .27$, but not the parenting practices that participants' reported, $\beta = .00$, $t(228) = -.050$, $p = .960$, $d = .01$.

predictors (Hayes & Preacher, 2013), biased-corrected bootstrap confidence intervals for the relative indirect effects ($ab_1 = .25$; $ab_2 = .04$) based on 10,000 bootstrap samples were significant for the PAS vs. PCR comparison, 95% CI_{ab1}: [.06, .47], and the PAS/PCR vs. Neutral comparison, 95% CI_{ab2}: [.01, .09]. However, as observed previously, there was no evidence to suggest that parenting style directly influenced the type of goal that participants' selected ($\beta = -.14$, $p = .140$, $\beta = -.02$, $p = .836$).

Effect of Type of Goals and Internalization on Well-Being and Need Satisfaction

Finally, we examined the effects of the type of goal participants selected on well-being and need satisfaction (see Table 4). Results suggest that adoption of a more intrinsic (vs. extrinsic) goal was associated with subjective well-being ($\beta = .11$, $p = .109$), flourishing ($\beta = .09$, $p = .125$), vitality ($\beta = .09$, $p = .176$), and need satisfaction, ($\beta = .09$, $p = .145$). We also examined the relation between internalization and each outcome. Results suggest that internalization was either significantly or marginally associated with subjective well-being ($\beta = .19$, $p = .009$), flourishing ($\beta = .21$, $p = .003$), vitality ($\beta = .12$, $p = .093$), and need satisfaction ($\beta = .33$, $p < .001$). The effect for vitality was qualified by a significant interaction between internalization and the type of goal that was adopted, $\beta = -.25$, $t(222) = -2.293$, $p = .023$, but not for the effects for subjective well-being, $\beta = -.05$, $t(222) = -0.445$, $p = .657$, flourishing, $\beta = -.09$, $t(222) = -0.818$, $p = .414$, and need satisfaction, $\beta = -.07$, $t(222) = -0.729$, $p = .467$.

Brief Discussion

The purpose of this first study was to examine the type of goals (intrinsic vs. extrinsic) that were promoted (and then adopted) when mothers used either autonomy support or conditional regard. Results first suggest that there was no relation between parenting style and the type of goal that was promoted, such that goals promoted using autonomy support were no

different than goals promoted using conditional regard. However, when taking into consideration experienced parenting practices, the relation between parenting style and the type of goals becomes much clearer. As expected, participants in the PAS condition reported more autonomy supportive parenting practices than participants in the PCR condition, whereas participants in the PCR condition reported more conditional parenting practices than participants in the PAS condition. However, these associations between suggested parenting styles and experienced parenting practices were not absolute, which indicates that not all participants reported parenting practices that were congruent with the proposed parenting style. Therefore, it was the experienced parenting practice that was actually associated with the type of goals (intrinsic vs. extrinsic) that participants identified as being promoted by their mother. The same pattern emerged when examining the paths between parenting style and internalization. While parenting style does not have a direct effect on internalization, once experienced parenting practices are considered, participants in the PAS condition reported greater autonomous internalization.

One explanation for these results is that participants may have had a difficult time identifying a goal that they have adopted if their mother rarely, or even never, used the parenting style described in their condition to promote this specific goal. For example, participants may not be able to write about a goal promoted using PCR if their mother never actually used PCR, or if the goal has not been adopted. Subsequently, being in a condition incongruent with one's experience may have made the mother's predominate parenting style more salient, which would have a stronger impact on the parenting practice that was remembered and the type of goal that was then selected than the condition. Similarly, the lack of an association between parenting style and internalization can be accounted for by the fact that internalization cannot occur if a goal is never promoted to begin with. Overall, we believe that this cognitive process likely

weakened the activation of a condition-relevant goal promotion experience, and so this is something that is addressed in the next studies.

Study 2a: Within-Person Effects of Parenting Styles

The purpose of Study 2a was to elucidate the findings of Study 1 by making several important modifications. First, this study incorporated a within-person design where participants were asked to write about two goals that their mother promoted, one using autonomy support and the other conditional regard. This within-person design allowed us to examine the type of goals that were promoted when a mother used autonomy support and conditional regard, rather than just one parenting style that may or may not be congruent with the participant's experience. Second, participants were asked to identify a goal that their mother promoted, which may or may not have been adopted. They were then asked separately about the extent to which they have adopted that goal. The objective was to remove the restriction that existed in Study 1 where participants were asked to identify a goal that their mother promoted and that they subsequently adopted. In this study, they were thus able to identify a goal that has been promoted but that they did not adopt. We hypothesized that the promoted goal that is selected in the PAS condition would be rated as more congruent with intrinsic (vs. extrinsic) goals than the promoted goal that is selected in the PCR condition. Additionally, we expected that participants would rate the reasons for why they pursued this goal as being more autonomous (vs. controlled) when in the PAS condition than in the PCR condition. Finally, we hypothesized that goals rated as being more congruent with intrinsic goals and were pursued for more autonomous reasons would be associated with greater need satisfaction and well-being than goals rated as being more extrinsic and were pursued for more controlled reasons.

Method

Participants

Participants were 85 university students in psychology courses. Eight participants did not complete the narrative goal tasks, meaning they did not receive a condition task due to technical error or did not write anything (e.g., wrote “N.A.” for the task response). Additionally, no univariate or multivariate outliers were detected, but three participants were identified as outliers by having extreme incongruence for the pursuit and internalization of a promoted goal (i.e., they scored the maximum score of 7 on the item saying that they did not pursue the goal, but also had the maximum score of 7 on at least one internalization variable, which indicates that they did pursue the goal). Listwise deletion of invalid cases and outliers results in a sample of 74 university students (77% females), with ages ranging from 17 to 28 ($M = 19.65$, $SD = 2.57$), and 62% were Caucasian and 28% Asian. Participants received course extra credit for their participation.

Procedure

Similar to Study 1, participants came into a computer lab in groups of 1 to 8 to participate in a study on how mothers (or mother figures) may influence the types of goals people pursue. Using similar tasks as the previous study, participants were asked to independently think about two different goals, one that their mother promoted in an autonomy supportive manner and one that was promoted using conditional regard. The order of parenting styles was counterbalanced such that half of the participants were first placed in the PAS condition followed by the PCR condition, while for the second half this procedure was reversed. As a manipulation check, participants provided examples of the types of parenting practices that their mother used to promote the goal, which were coded only for correspondence to the assigned conditions.

Additionally, participants rated how congruent each goal was to a larger list of 17 reference goals (Grouzet, 2014). Following the same procedure as in Study 1, participants then reported the reasons why they pursued each goal (using the same measure developed by Grouzet (2012a), followed by the same series of measures assessing subjective well-being, psychological well-being, and need satisfaction. Cronbach's alpha for these measures ranged from .72 to .84.

Within-Person Measures

Promoted Goals. In order to determine whether a promoted goal was more intrinsic (vs. less intrinsic) in nature, participants rated how congruent their goal was to a larger list of 17 reference goals developed by Grouzet (2014). As with Study 1, the same traditional intrinsic and extrinsic goal types were used to calculate a promoted goal index (using the same formula) for each condition. In order to account for the within-person design, a difference score was then calculated by subtracting the index associated with the PCR condition from the index associated with the PAS condition (i.e., $[\text{Intrinsic}_{\text{Hi}} - \text{Extrinsic}_{\text{Hi}}]_{\text{PAS}} - [\text{Intrinsic}_{\text{Hi}} - \text{Extrinsic}_{\text{Hi}}]_{\text{PCR}}$).

Adopted Goals. Using a single item, participants were asked whether or not they actually pursued either goal that their mother promoted (i.e., “You don’t strive for this goal because you are not very interested in pursuing it”). Responses were made on a 7-point Likert scale, ranging from 1 (*not at all for this reason*) to 7 (*completely because of this reason*). Frequency analysis was used to establish a criterion to determine the score associated with the actual pursuit of the promoted goal. Results suggest that the point at which individuals in the PCR and PAS condition had an average internalization score less than zero (i.e., the goal was not adopted) is when they had a score of 4 or higher on this goal pursuit variable. None of the participants in the PAS condition scored a 4 for the item assessing whether or not the promoted goal was pursued; however, participants with a score of 5 had an average internalization score less than zero.

Despite this difference, the suggested criterion of 4 was maintained to maximize the validity for both conditions. Therefore, the cut-off for determining that a goal was actually adopted was having a score of 3 or less and will subsequently be used to generate a score to create an adopted goal index (see below).

Analytical Plan

A three-step analysis was used to examine the hypotheses (see Figure 1). Step I focused on the effect of condition on the type of goals that were promoted and internalization, whereas Step II focused on the association between the type of goals that were actually adopted by young adults. Finally, for Step III we examined the association between the types of goals young adults adopted on positive outcomes, including need satisfaction, subjective well-being, and psychological well-being. These analyses allowed us to determine the types of goals that were promoted, while also allowing us to examine the effects of the goals that are actually pursued on need satisfaction and well-being. Cohen's d_z was also calculated for all within-person effects according to the formula³ proposed by Rosenthal (1991) and Lakens (2013).

The Effects of Parenting Style on the Type of Goal that is Promoted

Our first interest was to examine the effect of parenting style on the type of goal that was promoted and internalization individually. In order to establish an independent effect of parenting style on the type of goal that was promoted, there must be condition differences between PAS and PCR. Similarly, there must also be condition differences between PAS and

³ Cohen's d is not sufficient in the case of within-person designs because one needs to account for the fact that the conditions are correlated. Thus, z denotes that the unit of analysis is the difference between X and Y (Lakens, 2013).

Specifically, $d_z = \frac{t}{\sqrt{n}}$ or $d_z = \frac{M_{diff}}{\sqrt{\frac{\sum (X_{diff} - M_{diff})^2}{N - 1}}}$

PCR for internalization of the promoted goals. Both of these effects were estimated using a paired sample *t*-test, as suggested by Judd and colleagues (2001).

The Effects of Parenting Style on the Type of Goal that is Adopted

In order to examine the effects of the types of goals that were adopted on need satisfaction and well-being, we needed to take into consideration the within-person design and determine which of the two goals were actually adopted. To reconcile this issue, we used the criteria (as previously mentioned) that anyone with a score of 3 or less was determined to have adopted the goal that their mother promoted (and therefore their goal score was carried forward), and anyone with a score of 4 or higher had their score nullified for this analysis (i.e., they received a goal score of 0 for any goal that fell under this criteria). Essentially, the adopted goal index is the same as the promoted goal index, but we only retained the scores based on the aforementioned criteria. Using the same suggestions as before, we conducted paired sample *t*-tests to examine the condition differences for both the type of goal that was adopted and internalization of the adopted goals.

The Effects of the Adopted Goal(s) on Well-Being and Need Satisfaction

Using hierarchical multiple regression, we controlled for gender, order of tasks, and the interaction between these two variables in Step 1. To account for the fact that a participant may have pursued both goals, the type of goal pursued and the internalization indices for PAS and PCR were entered simultaneously at Step 2, and their interactions at Step 3.

Results

The descriptive statistics for the sample and measures are presented in Tables 5 and 6. Results from the analyses where invalid cases and outliers were removed are presented.

The Effects of Parenting Style on the Promoted Goals

As presented in Table 7, results from a paired sample *t*-test suggests that there was a significant difference between PAS and PCR, such that goals promoted using autonomy support were relatively more intrinsic (vs. extrinsic) ($M = 1.14$, $SD = 1.44$) than goals promoted using conditional regard ($M = 0.46$, $SD = 1.31$), $t(73) = 3.56$, $p = .001$, $d_z = .42$. Similarly, we examined the effect of parenting style on internalization. As presented in Table 8, results from a paired sample *t*-test indicate that there was a significant difference between PAS and PCR, such that goals promoted using PAS were relatively more autonomously internalized ($M = 2.41$, $SD = 2.04$) than goals promoted using PCR ($M = 1.47$, $SD = 2.25$), $t(73) = 3.05$, $p = .003$, $d_z = .36$.

The Effects of Parenting Style on the Adopted Goals and Internalization

As presented in Table 9, results from a paired sample *t*-test suggests that there was a significant difference between PAS and PCR, such that goals promoted using PAS were relatively more intrinsic (vs. extrinsic) ($M = 1.18$, $SD = 1.38$) than goals promoted using PCR ($M = 0.42$, $SD = 1.19$), $t(73) = 4.22$, $p < .001$, $d_z = .49$. Similarly, we examined the effect of parenting style on internalization. As presented in Table 10, results from a paired sample *t*-test indicate that there was a significant difference between PAS and PCR, such that goals promoted using PAS were relatively more autonomously internalized ($M = 2.46$, $SD = 1.94$) than goals promoted using PCR ($M = 1.74$, $SD = 1.73$), $t(73) = 2.66$, $p = .010$, $d_z = .31$.

The Effects of the Adopted Goal(s) on Well-Being and Need Satisfaction

Results from hierarchical multiple regression analyses examining the effects of the type of goal that was adopted on well-being and need satisfaction are presented in Table 11.

Subjective Well-Being. Results suggest that there was a significant effect of internalization on subjective well-being for the PCR condition, such that the more a goal was autonomously internalized, the greater was subjective well-being, $\beta = .50$, $t(64) = 3.86$, $p < .001$, $d_z = .48$; however, there was no effect for the type of goal that was promoted, $\beta = -.02$, $t(64) = -0.09$, $p = .931$, $d_z = .01$, nor was there a significant interaction to qualify these effects, $\beta = -.26$, $t(64) = -1.36$, $p = .178$, $d_z = .31$. The results were the opposite for the PAS condition, such that there was a significant effect for the type of goal that was adopted, $\beta = .59$, $t(64) = 2.80$, $p = .003$, $d_z = .35$, but not for internalization, $\beta = .12$, $t(64) = 0.80$, $p = .426$, $d_z = .10$. Both of these effects were qualified by a significant interaction, $\beta = -.46$, $t(64) = -2.07$, $p = .043$, $d_z = .26$. As presented in Figure 3, simple slopes analysis indicated that there was a significant effect for lower levels of autonomous internalization (i.e., 1 SD below the mean), $\beta = .76$, $t(74) = 3.05$, $p = .003$, $d_z = .35$, such that those who adopted a relatively more intrinsic (vs. extrinsic) goal experienced higher levels of subjective well-being than individuals who adopted a less intrinsic (vs. extrinsic) goal, even if the goal was adopted for less autonomous reasons. There was no significant effect for higher levels of autonomous internalization (i.e., 1 SD above the mean), $\beta = .06$, $t(74) = .208$, $p = .836$, $d_z = .02$.

Psychological Well-Being. Next we examined the main effects and interaction between internalization and the type of goal that was adopted on flourishing and vitality for both the PAS and PCR conditions. For flourishing in the PCR condition, results indicate that there was a significant effect for internalization, $\beta = .42$, $t(64) = 3.17$, $p = .002$, $d_z = .40$, but not for the type of goal that was pursued, $\beta = .28$, $t(64) = 1.57$, $p = .122$, $d_z = .20$. However, these effects were qualified by a significant interaction, $\beta = -.42$, $t(64) = -2.15$, $p = .035$, $d_z = .27$. As presented in Figure 4, simple slopes analyses suggests that there was a significant effect for higher levels of

autonomous internalization (i.e., 1 SD above the mean), $\beta = -.14$, $t(74) = -5.74$, $p < .001$, $d_z = .67$, such that those who adopted a more intrinsic (vs. extrinsic) goal for more controlled reasons experienced greater levels of flourishing than individuals who adopted a less intrinsic (vs. extrinsic) goal for more controlled reasons. There was no significant effect for higher levels of autonomous internalization (i.e., 1 SD below the mean), $\beta = .14$, $t(74) = 1.59$, $p = .115$, $d_z = .18$. In contrast, results for flourishing in the PAS condition suggest that there was no main effect for either internalization, $\beta = .00$, $t(64) = 0.01$, $p = .993$, $d_z = .00$, or the type of goal that was adopted, $\beta = .31$, $t(64) = 1.55$, $p = .125$, $d_z = .19$, nor was there a significant interaction, $\beta = -.23$, $t(64) = -1.01$, $p = .318$, $d_z = .13$.

With respect to vitality, results suggest that there was only a significant effect for internalization for the PCR condition, $\beta = .29$, $t(64) = 2.10$, $p = .039$, $d_z = .26$, such that the more a goal was autonomously internalized, the greater vitality was. There were no significant effect for internalization in the PAS condition, $\beta = -.11$, $t(64) = -0.73$, $p = .468$, $d_z = .09$, or for the type of goal that was pursued for either the PCR, $\beta = .21$, $t(64) = 1.11$, $p = .468$, $d_z = .14$, or PAS conditions, $\beta = .03$, $t(64) = 0.12$, $p = .908$, $d_z = .02$. No effects were qualified by an interaction in either the PCR, $\beta = -.32$, $t(64) = -1.59$, $p = .118$, $d_z = .20$, or PAS conditions, $\beta = .03$, $t(64) = 0.12$, $p = .908$, $d_z = .02$.

Need Satisfaction. Finally, we examined the main effects and interaction between the type of goal that was adopted and internalization on need satisfaction. Results for the PCR condition suggest that there was a significant effect of internalization, $\beta = .45$, $t(64) = 3.61$, $p = .001$, $d_z = .45$, such that need satisfaction was greater when the goal was more autonomously internalized than when it was less autonomously internalized. However, there was no effect of the type of goal that was adopted, $\beta = .03$, $t(64) = 0.20$, $p = .839$, $d_z = .03$, nor was there a significant

interaction, $\beta = -.24$, $t(64) = -1.30$, $p = .199$, $d_z = .16$. In contrast, results for the PAS condition suggest that there was a significant effect of the type of goal that was adopted on need satisfaction, $\beta = .56$, $t(64) = 2.99$, $p = .004$, $d_z = .37$, but not for internalization, $\beta = .18$, $t(64) = 1.24$, $p = .221$, $d_z = .16$. These effects were qualified by a significant interaction, $\beta = -.51$, $t(64) = -2.35$, $p = .022$, $d_z = .29$. As presented in Figure 5, simple slopes analyses indicate that there was a significant effect for lower levels of autonomous internalization (i.e., 1 SD below the mean), $\beta = .24$, $t(74) = 2.67$, $p = .009$, $d_z = .31$, such that adopting an intrinsic (vs. extrinsic) was associated with greater need satisfaction, even when adopted for less autonomous reasons. There was no significant effect for higher levels of autonomous internalization (i.e., 1 SD above the mean), $\beta = -.02$, $t(74) = -0.15$, $p = .878$, $d_z = .02$.

Brief Discussion

The primary purpose of this study was to address the issue from Study 1. Specifically, participants may have been asked to recall a goal that their mother promoted using a parenting style that was not necessarily congruent with their experience. Using a within-person design, these findings indicate that mothers who used autonomy supportive parenting practices tended to promote goals that were more intrinsic (vs. extrinsic) than mothers who used conditional regard. Further, autonomous internalization was facilitated when mothers used autonomy support than when mothers used conditional regard. These results provide additional evidence for Grouzet's (2013) proposition that the quality of the social context may be related to both the type of goals that are promoted and the type of internalization.

Finally, with respect to need satisfaction and well-being, the findings indicate that intrinsic (vs. extrinsic) goals that mothers promoted using autonomy support (and then adopted by the young adults) were associated with subjective well-being and need satisfaction, but not

flourishing and vitality. When promoted using autonomy support, intrinsic goals that were adopted for more controlled reasons led to greater subjective well-being and need satisfaction than extrinsic goals that were pursued for the same reason. Further, when promoted using conditional regard, intrinsic goals that were adopted for more controlled reasons led to greater flourishing than extrinsic goals that were adopted for the same reason. Based on these findings, it seems that the way in which a goal is internalized does not matter when intrinsic goals are adopted, although it does when extrinsic goals are adopted. These findings stand in contrast to the self-concordance model of goal pursuit (Sheldon & Elliot, 1999), which suggests that well-being would be greatest when intrinsic goals are autonomously internalized and lowest when extrinsic goals are internalized with a sense of control.

Study 2b: Within-Person Effects Over and Above General Parenting Style

The purpose of Study 2b was to replicate findings from Study 2a, but with two important modifications. First, we had participants' recall a goal that their mother promoted when they were between the ages of 13 and 16 so as to capture goals where parents had a more direct influence (as opposed to participants' current situations where they may no longer be living with their parents, thus potentially reducing the impact). Secondly, we included a measure of general perceived parenting style. By controlling for general perceived parenting style, we would be able to examine how the specific experience associated with the mother promoting a goal can relate to the types of goals that were promoted and then adopted, as well as the effects of the adopted goals on well-being and need satisfaction. As a result, the hypotheses were the same as Study 2a with the exception that the same pattern would emerge, over and above general perceived parenting style.

Method

Participants

Participants were 147 university students in psychology courses who received course extra credit for their participation. Seven participants did not complete the narrative goal tasks (e.g., did not receive a task due to technical error or did not write anything) and were therefore dropped from the analyses. No univariate or multivariate outliers were detected, but one participant was identified as having extreme incongruence for the pursuit and internalization of a promoted goal. Listwise deletion of invalid cases and outliers resulted in a final sample of 139, which was comprised of 76% females, 78% Caucasians, 17% Asians, and had an average age of 20. Given that there were very few differences in the results between the total and adjusted samples, results from the analyses where outliers were removed are presented.

Procedure

The procedure was similar to Study 2a with the exception that participants were asked to identify a goal that their mother promoted when they were between the ages of 13 and 16. Participants were then asked to rate how congruent their goals are to the same list of 17 reference goals from Study 2a. Finally, at the very end of the study, participants completed a questionnaire assessing their perceptions of their mother's general parenting style. All measures previously used in Study 2a had a Cronbach's alpha coefficient above .80.

Measures

General Parenting Style. In order to assess a mother's relative general parenting style, we combined an adapted version of the Perceptions of Parental Conditional Regard Scale (10-items; Roth et al., 2009) and the college level version of the Perceptions of Parents scale (21-item mother subscale; Niemiec et al., 2006; Robbins, 1994). An example item for conditional regard is "My mother showed me more care and affection if I listened to her." An example item for autonomy support is "My mother was usually willing to consider things from my point of view." Responses were made on a 7-point Likert scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). In order to create an index of relative general parenting style, we averaged all 31 general PAS items and the reversed general PCR items, such that higher scores indicate greater perception of autonomy support than conditional regard. Cronbach's alpha coefficient for this index is .95.

Results

The analysis for this study was similar to Study 2a, with two exceptions. First, in order to control for general parenting style, repeated measures analysis of covariance with a Greenhouse-Geisser correction was used rather than the paired sampled *t*-tests proposed by Judd, Kenny, and

McClelland (2001). Additionally, we included the general parenting index as a control variable in Step 1 of the hierarchical multiple regression analyses. The descriptive statistics for the sample and measures are presented in Tables 5 and 12.

The Effects of Parenting Style on the Promoted Goals

As presented in Table 13, results suggest that there was no significant difference between the types of goals that were promoted using PAS ($M = .78$, $SD = 1.43$) and the goals that were promoted using PCR ($M = .84$, $SD = 1.51$), $F(1, 134) = 0.317$, $p = .574$, $\eta^2 = .002$. As presented in Table 14, results further suggest a significant difference for internalization, $F(1, 134) = 4.271$, $p = .041$, $\eta^2 = .031$, such that goals promoted using PAS were relatively more autonomously internalized ($M = 2.13$, $SD = 2.23$) than goals promoted using PCR ($M = 1.62$, $SD = 2.15$).

The Effects of Parenting Style on the Adopted Goals

As presented in Table 15, results suggest that there was no significant difference between the types of goals that were promoted using PAS ($M = .73$, $SD = 1.43$) and the goals that were promoted using PCR ($M = .74$, $SD = 1.35$), $F(1, 134) = 0.000$, $p = .993$, $\eta^2 = .000$. As presented in Table 16, results further suggest a marginal difference for internalization, $F(1, 134) = 2.895$, $p = .091$, $\eta^2 = .021$, such that goals adopted using PAS were more autonomously internalized ($M = 2.25$, $SD = 1.98$) than goals promoted using PCR ($M = 1.71$, $SD = 1.98$).

The Effects of the Adopted Goal(s) on Well-Being and Need Satisfaction

Results from hierarchical multiple regression analyses examining the effects of the types of goals that were adopted on well-being and need satisfaction are presented in Table 17.

Subjective Well-Being. Results suggest that there was a significant effect of general parenting, such that perceptions of mothers being more autonomy supportive (vs. conditionally regarding) was associated with greater subjective well-being, $\beta = .34$, $t(128) = 4.13$, $p < .001$,

$d_z = .37$. Further, results for the PCR condition suggest that there was no significant effect of internalization, $\beta = .08$, $t(128) = 0.08$, $p = .935$, $d_z = .01$, or for the type of goal that was adopted, $\beta = -.06$, $t(128) = -0.17$, $p = .869$, $d_z = .02$. However, these effects were qualified by a marginally significant interaction, $\beta = .22$, $t(128) = 1.77$, $p = .079$, $d_z = .20$. As presented in Figure 6, simple slopes analysis further indicated that there was a significant effect for higher levels of autonomous internalization (i.e., 1 SD above the mean), $\beta = -.63$, $t(139) = -3.15$, $p = .002$, $d_z = .27$, such that those who adopted a relatively more intrinsic (vs. extrinsic) goal for autonomous reasons reported higher levels of subjective well-being than individuals who adopted a less intrinsic (vs. extrinsic) goal for more autonomous reasons. There was no significant effect for lower levels of autonomous internalization (i.e., 1 SD below the mean), $\beta = -.05$, $t(139) = -.25$, $p = .805$, $d_z = .02$.

In contrast, results for the PAS condition suggest that there was a marginal effect for both the type of goal that was adopted, $\beta = .27$, $t(128) = 1.90$, $p = .060$, $d_z = .17$, and internalization, $\beta = .21$, $t(128) = 1.95$, $p = .054$, $d_z = .17$, and these effects were qualified by a significant interaction, $\beta = -.36$, $t(128) = -2.21$, $p = .029$, $d_z = .20$. As presented in Figure 7, simple slopes analysis further indicated that there was a marginally significant effect for lower levels of autonomous internalization (i.e., 1 SD below the mean), $\beta = .42$, $t(139) = 1.72$, $p = .087$, $d_z = .15$, such that those who adopted a more intrinsic (vs. extrinsic) goal for less autonomous reasons reported higher levels of subjective well-being than individuals who adopted a less intrinsic (vs. extrinsic) goal for less autonomous reasons. There was no significant effect for higher levels of autonomous internalization (i.e., 1 SD above the mean), $\beta = -.19$, $t(139) = -.47$, $p = .637$, $d_z = .04$.

Psychological Well-Being. Results suggest that there was a significant effect of general parenting, such that perceptions of mothers being more autonomy supportive (vs. conditionally

regarding) was associated with greater flourishing, $\beta = .39$, $t(128) = 4.84$, $p < .001$, $d_z = .43$. For the PCR condition, results indicate there was a marginally significant effect of internalization, $\beta = .19$, $t(128) = 1.78$, $p = .077$, $d_z = .16$, such that the more a goal was autonomously internalized, the greater flourishing was. However, there was no significant effect for the type of goal that was adopted, $\beta = -.01$, $t(128) = -0.10$, $p = .923$, $d_z = .01$, nor was there a significant interaction, $\beta = .01$, $t(128) = 0.06$, $p = .949$, $d_z = .01$. Additionally, results for flourishing in the PAS condition suggest that there was no main effect for either internalization, $\beta = .12$, $t(128) = 1.13$, $p = .260$, $d_z = .10$, or the type of goal that was pursued, $\beta = .19$, $t(128) = 1.41$, $p = .160$, $d_z = .12$, nor was there a significant interaction, $\beta = -.18$, $t(128) = -1.17$, $p = .246$, $d_z = .10$.

With respect to vitality, results suggest that there was a significant effect of general parenting, such that individuals' perceptions of their mother being more autonomy supportive (vs. conditionally regarding) was associated with greater vitality, $\beta = .24$, $t(128) = 2.73$, $p = .007$, $d_z = .24$. However, there were no significant effects for internalization for either the PCR, $\beta = .14$, $t(128) = 1.21$, $p = .226$, $d_z = .11$, or the PAS conditions, $\beta = .12$, $t(128) = 1.00$, $p = .322$, $d_z = .09$. Similarly, there were no significant effects for the type of goal that was adopted for either the PCR, $\beta = .02$, $t(128) = 0.23$, $p = .817$, $d_z = .02$, or PAS conditions, $\beta = .08$, $t(128) = 0.50$, $p = .616$, $d_z = .04$.

Need Satisfaction. Finally, we examined the main effects and interaction between the type of goal that was adopted and internalization for need satisfaction. Results suggest that there was a significant effect of general parenting, such that perceptions of mothers being more autonomy supportive (vs. conditionally regarding) was associated with greater need satisfaction, $\beta = .44$, $t(128) = 6.30$, $p < .001$, $d_z = .56$. Further, results for the PCR condition suggest that there

was no significant effect of internalization, $\beta = -.01$, $t(128) = -0.09$, $p = .926$, $d_z = .01$, or for the type of goal that was pursued, $\beta = -.07$, $t(128) = -0.83$, $p = .407$, $d_z = .07$. However, these effects were qualified by a marginally significant interaction, $\beta = .18$, $t(128) = 1.67$, $p = .098$, $d_z = .15$. Simple slopes analyses indicated that there was no significant effect for either higher (i.e., 1 SD above the mean), $\beta = .08$, $t(139) = 0.88$, $p = .378$, $d_z = .07$, or lower levels of autonomous internalization (i.e., 1 SD below the mean), $\beta = -.30$, $t(139) = -0.50$, $p = .621$, $d_z = .04$.

In contrast, results for the PAS condition suggest that there was an effect for both the type of goal that was adopted, $\beta = .31$, $t(128) = 2.55$, $p = .012$, $d_z = .23$, and for internalization, $\beta = .36$, $t(128) = 3.88$, $p < .001$, $d_z = .34$, and these effects were qualified by a significant interaction, $\beta = -.38$, $t(128) = -2.69$, $p = .008$, $d_z = .24$. As presented in Figure 8, simple slopes analyses indicated that there was a significant effect for lower levels of autonomous internalization (i.e., 1 SD below the mean), $\beta = .18$, $t(139) = 2.94$, $p = .023$, $d_z = .25$, such that adopting an intrinsic (vs. extrinsic) goal was associated with greater need satisfaction, but only when pursued for less autonomous reasons. There was no significant effect for higher levels of autonomous internalization (i.e., 1 SD above the mean), $\beta = -.05$, $t(139) = -0.54$, $p = .589$, $d_z = .05$.

Brief Discussion

The purpose of this third study was to replicate the previous findings, in addition to extending them by taking into consideration a mother's general parenting style. Overall, the findings indicate that there is no difference in the type of goal that was promoted when mothers used either autonomy support or conditional regard, over and above general parenting style. Similar findings emerged when taking into consideration only the goals that were adopted. The

findings also indicate that internalization was slightly more autonomous (vs. controlled) when a mother tended to use autonomy support versus conditional regard.

With respect to positive outcomes, well-being and need satisfaction were greater when the mother was perceived as more autonomy supportive than conditionally regarding in general. These findings replicate previous research (e.g., Lokes et al., 2010). In addition, the type of goals and the way in which they were internalized uniquely contribute to need satisfaction and subjective well-being, but not psychological well-being. When promoted using autonomy support, intrinsic goals that are adopted for more controlled reasons led to greater subjective well-being and need satisfaction than when extrinsic goals are adopted for the same reasons. Finally, the findings indicate that, when promoted using conditional regard, extrinsic goals that are adopted for more autonomous reasons are associated with greater subjective well-being than intrinsic goals adopted for the same reasons. Like in Study 2a, these findings stand in contrast to what has been found in the literature (e.g., Sheldon & Elliot, 1999). However, we would need to assess the extent to which goals were attained in order to better understand these findings, although this is beyond the scope of the present research.

General Discussion

The objective of the present research was to examine what type of goals (i.e., intrinsic vs. extrinsic) is promoted when mothers use parenting styles such as autonomy support and conditional regard, as well as how young adults internalize these different types of goals. The primary hypotheses were that intrinsic goals would be promoted and autonomous internalization would be facilitated when mothers used autonomy support rather than conditional regard. Results from three studies provide partial support for this hypothesis. We summarize the findings below, as well as provide an account for any inconsistencies that may have emerged. Subsequently, we discuss the secondary hypothesis, which was that the type of goals that are adopted (intrinsic vs. extrinsic) and how they were internalized (autonomous vs. controlled) would interact to predict need satisfaction and well-being. Finally, we conclude by discussing the implications of this research for the parenting literature and the dual valuing process model (Grouzet, 2013).

Parenting Styles and Goal Promotion

Findings from the three studies seem to indicate that parenting styles (i.e., autonomy support vs. conditional regard) are related to goal promotion. Although results from Study 1 indicate that the type of goal that was promoted does not significantly differ whether a mother used autonomy support or conditional regard, an examination of the actual parenting practices revealed that mothers who use autonomy supportive practices promoted goals that were more intrinsic than extrinsic. Using a within-participant design (Study 2a and 2b), we found partial support for these findings with a significant relation between parenting style and goal types in Study 2a but not in Study 2b. The best way to understand these results is to discuss the differences between studies.

In Study 1, we asked participants to think about a goal that their mother promoted, which they subsequently adopted. By combining both the promotion and adoption aspects of goal pursuit, we were unable to precisely assess the conditions in which different types of goals are promoted. Using this approach, we were losing important information that would actually be relevant to the hypotheses, for example, when a child chooses not to adopt a goal that was promoted to them. Further, the dominant type of parenting style may influence an individual's cognitive process when remembering about a goal that the mother promoted in a particular way. It may be the case that a mother used her autonomy supportive parenting style to help counter a time when she used a more controlling parenting style. For example, if a mother recognizes her transgression by acknowledging any negative feelings that may have formed as a result of her actions, and explains why she acted in that way (all of which are components of autonomy support), what originally started off as a conditionally regarding experience may be compensated by one that is more autonomy supportive.

In an effort to address these issues in Studies 2a and 2b, we asked young adults to describe two goals – one that their mother promoted using autonomy support and one that was promoted using conditional regard. As a result, the findings became much clearer. Results from Study 2a indicate that a goal that was promoted when mothers used autonomy support was more intrinsic than when they used conditional regard. However, when controlling for general parenting style (Study 2b), the type of goal that was promoted when mothers used autonomy support was not significantly more intrinsic than when mothers used conditional regard. The reasons why the findings from Study 2b do not support what was found in the previous studies might be related to the fact that we asked about a goal that was promoted when the participants were between the ages of 13 and 16, which is discussed in the next section.

Goal Promotion Experiences As Recalled by Young Adults

The inconsistency between Study 2a and 2b might be explained by the restriction of the age period (13-16-year old) during which participants could refer when they were asked to write about a goal that their mother promoted. One of the reasons to make this restriction was to reduce the impact of a potential recency effect, where participants only write about goals that happened most recently. This was particularly important given the characteristics of the samples (i.e., university students) that have a fairly large age range (i.e., across all studies, age ranged from 17 to 29). Developmentally speaking, the experiences with a mother, particularly with respect to the amount of influence she has on her child, is vastly different for a 17-year old, who is more influenced by their parents, and a 29-year old, who is more established and independent.

One explanation for the absence of a significant relation between parenting style and the type of goal that was promoted could be related to their stage of development. When between the ages of 13 and 16-years old, teenagers' personal goals are likely to be more transient since they are still in the exploration phase. Despite having an idea of what broader life goals or values are important for them, the specific personal goals may be more frequently changed. For example, a teenager may initially decide that he wants to be a teacher, but after taking a business elective he may discover that business is a more interesting career choice. Therefore, it may be interesting to observe mothers' influence on goals in later years (e.g., in university students who begin to form more concrete personal goals). Complementing this idea, data from Statistics Canada (2010) suggests that in 2007, the average age of students entering university was approximately 23, which suggests that students may be taking more time to explore their options before committing to more long-term goals (e.g., career options, starting a family). This is important to consider because parents are often worried about their children attending university and finding a career

(as evidenced by the nature of the most common goals reported by participants). Therefore, future research would benefit by shifting the target age range to a time where parents are still influential, but at the same time children are in a place where goals are becoming more significant (e.g., between the ages of 17-23, which is the typical age range for students entering university; Statistics Canada, 2010).

Another potential, albeit less likely explanation for these inconsistent findings is the potential for enhanced recall bias⁴, which could have compromised the internal validity of this measure. Given that we have a rather large age range, it may be more difficult for an individual who is 27 to recall a goal that their mother promoted 11 or so years before compared to someone who is only 17. Additionally, if a person is in a condition that is incongruent with their general experience with their mother (e.g., being in the autonomy support condition when their mother is predominately conditionally regarding), it would be even more difficult to recall such an experience from several years before (i.e., they would have to sort through more conditionally regarding experiences and put in more effort into remembering an experience related to the task). In an attempt to address this limitation, future research would benefit by replicating these studies with young adults who are in the actual age range of interest. The idea here is that, rather than asking participants to recall a goal that was promoted when they were between the ages of 13 and 16, we could just ask participants who fit this demographic, therefore reducing the potential for recall bias.

⁴ While all three studies have the potential for recall bias since we had participants think about a goal that their mother promoted, as well as provide examples of the parenting practices used, in Studies 1 and 2a there was no limitation to the time frame and so, presumably, participants would be able to have some experience that is already pretty salient to them. In contrast, Study 2a restricts this time frame to one that was approximately 3-5 years ago.

Experimental but Not Causal: A Methodological Note

While we took an experimental approach to study whether parenting style is associated with the types of goals that are promoted by mothers and subsequently adopted by young adults, causality cannot be inferred from the present findings. In order to make causal inferences, researchers must incorporate a “true” experimental design. This includes random assignment of conditions, the use of a control group, and manipulation of the independent variable (Dunn, 2008). The primary limitation of the present research involves manipulation of the independent variable. Given the nature of the designs that we used, we are not actually *manipulating* parenting style, but rather we are *activating* specific experiences from an individual’s past. An example of a true experiment may include randomly assigning some mothers to be autonomy supportive and others to be conditionally regarding and subsequently assess the types of goals they promote and which ones their children adopt. While this approach may isolate the mechanism of interest and allow for causal inferences (Myers, Well, & Lorch, 2010; Spencer, Zanna, & Fong, 2005), ultimately this specific example would not be an ethical procedure to use. While there have been intervention studies in different contexts that have manipulated autonomy support (see Su & Reeve, 2011 for a review), the problem arises when creating experiences of control. This is particularly problematic in the context of parenting because these experiences can ultimately have a lasting negative impact on the child’s life.

One potential explanation for the present findings is that parenting style is in fact associated with the types of goals that are promoted. The idea here is that, because a mother is autonomy supportive, she tends to promote more intrinsic goals, whereas the reason why a mother promotes extrinsic goals is because she uses conditional regard. This explanation is congruent with past research in self-determination theory, which suggests that parental autonomy

support is associated with the valuing of intrinsic goals (e.g., Lekes et al., 2010), and the dual valuing process model, which suggest that the quality of the social context will determine the type of goal being promoted. However, a mother may also select a different parenting style to promote different types of goals. For example, a mother who wants to promote intrinsic goals to her child may tend to use autonomy support. This may be because both intrinsic goals and parental autonomy support are both associated with satisfaction of the psychological needs, and this congruency between parenting style and goals could maximize the likelihood of adoption. Similarly, a mother who wants to promote extrinsic goals may use conditional regard. Since extrinsic goals are contingent upon approval from others, it would make sense to promote these goals using a parenting style that is congruent with these behaviours (i.e., PCR).

In order to better understand the relation between parenting style and goal promotion, future research may benefit from a longitudinal study that also takes the perspective of mothers. By incorporating a longitudinal design, we would be able to observe if there is a shift in the types of goals that are being promoted when mothers use autonomy support than when they use conditional regard. In this sense, not only could we see if certain parenting styles cause a mother to promote certain types of goals, we would also be able to examine any shift that may occur in the child's values.

Parenting Styles and Internalization

Findings from the three studies indicate that young adults are more likely to internalize the promoted goal for autonomous (vs. controlled) reasons when mothers use autonomy support than when they use conditional regard. These findings provide support to previous research suggesting that autonomy supportive parenting is associated with more autonomous internalization, whereas conditional regard is associated with internalization that is more

controlled. In the initial studies on parental conditional regard, Assor and colleagues (2004; Roth et al., 2009) took a domain-specific approach in examining the outcomes associated with conditional regard, including its association with internalization. They found that conditional regard was associated with introjection (Assor et al., 2004; Roth et al., 2009), whereas autonomy support was associated with identification (Roth et al., 2009). By including the within-person design and controlling for general parenting style, this research provides evidence for the notion that parents may use different parenting styles in different contexts (even though we didn't ask about specific domains). However, like most research on this topic, parenting styles were examined in isolation. The present findings build on the previous research by examining the relative nature of autonomy support and conditional regard. This is especially important to consider given that it seems that parents tend to switch between these two parenting styles, and so parenting style appears to be more like a continuum (i.e., it's not the case that mothers are only autonomy supportive or only conditionally regarding, rather they incorporate a mix of both styles).

While the present results appear to be consistent with the literature in SDT, they also provide evidence for the dual valuing process model (Grouzet, 2013). Just as the findings indicate, Grouzet (2013) suggests that the extent to which an environment is autonomy supportive or controlling can determine whether autonomous or controlled internalization will occur. Further detail on the dual valuing process model and internalization will be discussed in the next section.

Implications for the Dual Valuing Process Model

The dual valuing process model (Grouzet, 2013) has been developed to explain the promotion, internalization, and adoption of intrinsic and extrinsic goals. According to Grouzet (2013), the social context can influence the internalization of goals, regardless of their content. This is important in the current research because this can explain how young adults may adopt the goals that are promoted by their mother. Specifically, young adults adopt goals based on the fact that their mother promotes it. The current study provides evidence for this proposition because parenting style was related to the type of goal that was promoted and subsequently adopted. While in some instances there may not have been a difference between the type of goals each parenting style was associated with, when examined individually, each parenting style was associated with the pursuit and adoption of some type of goal. However, the current research does not explain why a mother would promote intrinsic goals or extrinsic goals. Future research would benefit by examining different possible explanations, including the extent to which a mother's need satisfaction could influence the type of environment she creates for her children (which could subsequently influence the types of goals she promotes).

Grouzet (2013) also suggests that the social context can influence an individual through verbal, symbolic, and non-verbal methods of communication. Indirect evidence for this proposition is related to the fact that we operationalized parenting styles using conditional regard and autonomy support. Conditional regard, as we defined according to Roth and colleagues (2009), is when parents use their love and attention to manipulate their child's behaviour, in this case to promote a specific goal. While positive regard may utilize a more direct method of communication by using techniques such as verbal praise and affection, negative regard embodies a more indirect technique by way of being cold and distant to express dissatisfaction.

While we did not specifically differentiate between positive and negative regard in the current analyses, in some cases we did find an effect of general conditional regard on the type of goal that was promoted and adopted; however, it would be beneficial for future research to differentiate between positive and negative regard, as research in other domains has found that these parenting styles can lead to slightly different, albeit still negative, outcomes (e.g., Assor & Tal, 2012; Roth et al., 2009).

Finally, the dual valuing process model also suggests that the quality of the social context determines both the type of internalization and the content of goals (Grouzet, 2013). Evidence for this proposition is supported by the findings in Studies 1 and 2a where parental autonomy support (vs. conditional regard) was associated with more autonomous (vs. controlled) internalization of the goal that was promoted.

Conditional Regard and Other Related Constructs

In the present studies “controlling” parenting style was defined by conditional regard, which could shed some light on the present findings. Within social and developmental psychology, there are many different parenting styles, practices, and techniques that can be used in the socialization process. With respect to maladaptive parenting, the notion of contingent love, affection, and/or attention remains consistent across many constructs. However, research thus far suggests that parental autonomy support is associated with the valuing of intrinsic goals (e.g., Leks et al., 2010), although the present research extends this finding by simultaneously examining whether more controlling parenting styles, in this case conditional regard, can also influence the promotion and adoption of intrinsic versus extrinsic goals. For the current research we ascribed to the concept of conditional regard as proposed by Roth and colleagues (2009), which is a parenting style that can either be domain-specific or used more generally. While there

are certainly other controlling parenting styles and practices, this conceptualization was important because it differentiates between positive and negative conditional regard, specifically emphasising the provision or withdrawal of attention and affection (Roth et al., 2009). This distinction provides a more well-rounded perspective of parenting, relative to the parenting practice of love withdrawal (Elliot & Thrash, 2004; Hoffman, 1970) and the parenting style of psychological control (e.g., Barber & Harmon, 2002; Soenens & Vansteenkiste, 2010), both of which only emphasize the use of negative regard.

One potential source of confusion, however, is the distinction between feedback and conditional regard. For example, positive feedback does not necessarily equate with conditional positive regard. In fact, a parent can provide a lot of positive feedback without the child feeling as though that feedback is contingent upon their attaining specific outcomes or complying with any sort of demands. Rather, feedback is likely to only be perceived as conditionally regarding when it is directly associated with a person's character or traits (Assor, Kanat-Maymon, & Roth, 2014). Upon inspecting the parenting styles that participants provided, there is potential for this misunderstanding to have weakened the activated experience (e.g., if a person wrote about a goal where their mother gave them non-contingent positive feedback, they would be less likely to experience the hypothesized effects of conditional regard, therefore attenuating the condition-relevant experience).

Another, slightly different, conceptualization of conditional regard is taken from the behaviourist perspective, whereby parents may use reinforcement or punishment to control their child's behaviour (Assor et al., 2014). From the behaviourist perspective, the notion of providing more attention would likely not be limited to compliance, as suggested by Roth and colleagues (2009). Rather the use of negative reinforcement and punishment would require providing more

attention to an undesirable behaviour with the expectation that it would cease. However, this technique then raises the question as to whether or not love is withdrawn when punishments or negative reinforcements are used. For example, two specific parenting styles that participants wrote about in the current research are yelling and removing a privilege (e.g., cellphone was taken away) when the child was non-compliant. With both of these examples, there is no evidence to suggest that love was necessarily taken away; rather such information can only be obtained from an individual providing their own perception of the situation. Given this ambiguity, goals promoted using these common parenting styles may or may not be included, ultimately biasing the participants' responses. Additionally, there may be differential effects between conditional regard that is driven by behaviour versus emotion, and so future research may wish to take that into consideration. Regardless of the perspective being taken, future research may also want to provide instructions that are explicitly clear about whether they are interested in emotional or behavioural aspects of conditional regard.

Overall, by asking participants to think about a goal that their mother promoted using both autonomy support and conditional regard, we were able to see that, not only does the promotion of different types of goals emerge from different parenting styles, but it is also possible for a mother to alternate between parenting styles when promoting different goals. This finding is congruent with the Roth and colleagues (2009) suggestion that the use of conditional regard can be context-specific, although future research may want to examine how context-specific versus stable parenting can influence goals and well-being (e.g., at the daily level using diary methods).

Internalized Goals and Well-Being

A secondary objective of this research was the relation between the type of goal that was promoted and then adopted, the way in which it was internalized, and well-being. For psychological well-being, results from the three studies seem to indicate that the type of goal that was adopted did not have an impact on psychological well-being. While the type of goal that was adopted was independently associated with vitality and flourishing in some cases, no consistent pattern emerged. This could be explained by the fact that only one or two goals promoted by the mother were examined as predictor of well-being. However, there are many different sources (e.g., peers, teachers) that may also contribute to the development of a system of goals, which, taken all together, will influence well-being.

With respect to subjective well-being and need satisfaction, findings across all three studies seem to indicate that the internalization of an intrinsic goal seems to be more related to subjective well-being and need satisfaction than the internalization of an extrinsic goals. However, this relation seems to occur when the goal is internalized in a controlled way. These findings stand in contrast to the self-concordance model of goal pursuit (Sheldon & Elliot, 1999), which suggests that intrinsic goals pursued for more autonomous reasons would lead to greater well-being. More surprisingly, however, results from Study 2a seem to further indicate that extrinsic goals that were promoted using conditional regard, but were pursued for autonomous reasons are associated with greater subjective well-being than intrinsic goals promoted using autonomy support.

This finding could be explained by the dual valuing process model (Grouzet, 2013), which suggests that the nature of the relationship between an individual and the social context can influence the way in which goals are internalized, *regardless of their content*. Also,

individuals have the potential to activate the OVP, which allows them to return to being the “center of his valuing process” despite the adverse conditions they are in. While the current research does not explore the underlying mechanisms that would facilitate this process, future research may wish to extend these findings by focusing on social and developmental processes that would allow for this phenomenon to occur (e.g., what factors would allow a child to overcome his experiences associated with maladaptive parenting?). For example, the dual valuing process model proposes that the organismic valuing process can be activated through mindfulness and self-reflection (Grouzet, 2013). Another possibility is to explore whether other non-parent relationships may help buffer against the detrimental impact of conditionally regarding parents (e.g., having autonomy supportive teachers, peers, etc.).

Conclusion

This series of studies was the first to examine the type of goal that is promoted in different parenting contexts, and how the goal is internalized. It seems that goals that are promoted with autonomy support are more intrinsic (vs. extrinsic) than when promoted using conditional regard. Further, goals are more likely to be adopted and more autonomously internalized when mothers promote them using autonomy support than when they use conditional regard. These findings can be explained by the dual valuing process model, specifically the socio-cognitive valuing process. This research contributes to a better understanding of why people value different types of goals, which will ultimately impact their life in the long-term.

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Table 1.

Descriptive Information for Each Experimental Condition for Study 1

	PAS	PCR	Neutral	Test Statistic	<i>p</i>
<i>n</i>	78	78	76		
Gender				$\chi^2(2) = .980$	.926
Female	78.2	75.6	76.3		
Age	19.0 (1.8)	19.5 (2.5)	19.1 (1.4)	$t_{c1}(229) = -.49$ $t_{c2}(229) = -1.30$	.624 .194
Ethnicity				$\chi^2(2) = .980$	.613
Caucasian	73.1	76.9	71.1		
Asian	20.6	14.1	17.1		
Mother				$\chi^2(2) = 1.983$	.371
Biological	97.4	98.7	100		
Marital Status				$\chi^2(2) = .957$	.620
Married	73.1	80.8	73.7		
Divorced	17.9	12.8	15.8		
Interaction				$\chi^2(2) = .572$	.751
> Once a week	74.4	71.8	71.1		
Once a week	14.1	17.9	13.2		

Note. Condition abbreviations: PAS = parental autonomy support; PCR = parental conditional regard. The *p* values from a Chi-Square test are presented for all group comparisons, except for Age which comes from regression. All group differences were based on a sample of 232, except for marital status which was based on 231.

Table 2.

Descriptive Statistics of All Path Variables for Each Experimental Condition for Study 1

Variable	PAS	PCR	Neutral
Parenting Styles	2.46 (1.19)	-1.11 (2.26)	1.53 (1.41)
Adopted Goal Index	0.88 (1.40)	0.86 (1.40)	0.86 (1.57)
Internalization Index	2.62 (1.94)	2.07 (2.04)	2.49 (2.01)
Subjective Well-Being	5.56 (2.15)	4.87 (2.04)	5.56 (2.09)
Psychological Well-Being			
Flourishing	5.48 (0.85)	5.40 (0.84)	5.59 (0.81)
Vitality	4.44 (0.77)	4.38 (0.77)	4.31 (0.83)
Need Satisfaction	4.72 (0.86)	4.65 (0.76)	4.89 (0.69)

Note. PAS = parental autonomy support; PCR = parental conditional regard

Table 3.

Hierarchical Multiple Regression Predicting the Mediators and Primary Dependent Variable for Study 1

Predictor	Parent Practices				Internalization Index				Adopted Goal Index			
	ΔR^2	B	β	<i>p</i>	ΔR^2	B	β	<i>p</i>	ΔR^2	B	β	<i>p</i>
Step 1	.45			.000	.05			.060	.02			.487
PAS vs. PCR		1.82	.66	.000		.09	.04	.653		-.01	.00	.959
PAS/PCR vs. N		.29	.18	.002		.07	.05	.507		.02	.02	.774
Gender		-.01	.00	.971		-.64	-.14	.037		-.45	-.13	.046
C1×Gender		-.07	-.02	.676		.34	.14	.074		.02	.01	.864
C2×Gender		-.02	-.01	.859		-.04	-.03	.732		-.05	-.05	.520
Step 2					.11			.000	.02			.017
PAS vs. PCR						-.64	-.26	.005		-.25	-.14	.140
PAS/PCR vs. N						-.04	-.03	.675		-.02	-.02	.836
Gender						-.64	-.14	.028		-.45	-.13	.045
C1×Gender						.36	.15	.041		.03	.02	.810
C2×Gender						-.03	-.02	.765		-.05	-.05	.534
Parent Practices						.40	.45	.000		.14	.21	.017
Step 3									.06			.000
PAS vs. PCR										-.13	-.07	.442
PAS/PCR vs. N										-.01	-.01	.916
Gender										-.33	-.10	.137
C1×Gender										-.04	-.02	.779
C2×Gender										-.04	-.04	.573
Parent Practices										.06	.09	.316
Internalization Index										.19	.27	.000

Note. PAS = parental autonomy support; PCR = parental conditional regard; N = neutral. C1 is the contrast code for the PAS vs. PCR comparison, where PAS was given a weight of 1, PCR a weight of -1, and neutral a weight of 0. C2 is the contrast code for the PAS/PCR vs. Neutral condition, where both PAS and PCR were given a weight of -1 and neutral was given a weight of -2.

Table 4.

Hierarchical Multiple Regression for Variables Predicting Positive Outcomes for Study 1

Predictor	SWB Index			Flourishing			Vitality			Need Satisfaction						
	ΔR^2	<i>B</i>	β	<i>p</i>	ΔR^2	<i>B</i>	β	<i>p</i>	ΔR^2	<i>B</i>	β	<i>p</i>				
Step 4	.00			.657	.00			.414	.02			.023	.00			.467
PAS vs. PCR		.67	.26	.007		.10	.09	.330		.03	.03	.749		.10	.10	.271
PAS/PCR vs. N		.16	.11	.158		.06	.10	.217		-.05	-.09	.254		.10	.18	.012
Gender		-.14	-.03	.676		-.25	-.13	.055		-.16	-.09	.198		-.07	-.04	.510
C1×Gender		-.50	-.20	.012		-.13	-.13	.087		-.04	-.04	.629		-.18	-.19	.009
C2×Gender		-.08	-.05	.471		-.02	-.03	.663		.01	.03	.740		-.08	-.14	.057
Parent Practices		-.06	-.07	.459		.00	-.01	.904		.01	.21	.801		.00	.00	.988
Internalization Index		.21	.20	.011		.10	.24	.003		.08	.25	.012		.14	.36	.000
Adopted Goal Index		.20	.14	.146		.09	.16	.091		.13	.09	.010		.07	.14	.121
Adopted Goal×Internalization		-.02	-.05	.657		-.02	-.09	.414		-.04	-.25	.023		-.01	-.07	.467

Note. Condition abbreviations: PAS = parental autonomy support; PCR = parental conditional regard; N = neutral. C1 is the contrast code for the PAS vs. PCR comparison. C1 is the contrast code for the PAS vs. PCR comparison, where PAS was given a weight of 1, PCR a weight of -1, and neutral a weight of 0. C2 is the contrast code for the PAS/PCR vs. Neutral condition, where both PAS and PCR were given a weight of -1 and neutral was given a weight of -2.

Table 5.
Descriptive Information for the Final Samples in Studies 2a and 2b

	Study 2a	Study 2b
<i>N</i>	74	140
Gender		
Female	77.0	75.0
Age	21.68 (2.58)	19.73 (2.02)
Ethnicity		
Caucasian	62.2	78.6
Asian	28.4	16.5
Mother		
Biological	98.6	98.6
Marital Status		
Married	85.1	78.6
Interaction w/Mother		
> Once a week	77.0	85.0
Once a week	14.9	8.6
Residence		
Live w/Parents	37.8	40.0

Table 6.

Descriptive Statistics for Between and Within-Person Outcome Variables for Study 2a

Variable	Items	Range		<i>M (SD)</i>	Skew	Kurtosis
		Potential	Actual			
PAS Promoted Goal Index	2	-3–3	-3.00–3.00	1.14 (1.44)	-.27	-0.49
PAS Internalization Index	6	-6–6	-2.83–6.00	2.41 (2.04)	-0.22	-.83
PCR Promoted Goal Index	2	-3–3	-3.00–3.00	0.46 (1.31)	0.03	0.10
PCR Internalization Index	6	-6–6	-6.00–6.00	1.47 (2.25)	-0.77	1.45
Subjective Well-Being	25	-3–13	0.20–9.00	5.32 (2.00)	-0.47	-0.06
Psychological Well-Being						
Flourishing	8	1–7	3.63–6.75	5.63 (0.62)	-0.91	1.45
Vitality	7	1–7	1.71–6.43	4.69 (1.06)	-0.57	-0.02
Need Satisfaction	18	1–7	2.72–6.17	4.66 (0.68)	-0.28	0.24

Note. PAS = parental autonomy support; PCR = parental conditional regard.

Table 7.
t-test Results Comparing PAS and PCR on the Promotion of Intrinsic and Extrinsic Goals for Study 2a

Parenting Style	<i>n</i>	Mean	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
PAS	74	1.14	1.44	3.56	73	.001
PCR	74	0.46	1.31			

Note. PAS = parental autonomy support; PCR = parental conditional regard.

Table 8.
t-test Results Comparing PAS and PCR on Internalization for Study 2a

Parenting Style	<i>n</i>	Mean	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
PAS	74	2.41	2.04	3.05	73	.003
PCR	74	1.47	2.25			

Note. PAS = parental autonomy support; PCR = parental conditional regard.

Table 9.

t-test Results Comparing PAS and PCR on the Adoption of Intrinsic and Extrinsic Goals for Study 2a

Parenting Style	<i>n</i>	Mean	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
PAS	74	1.18	1.38	4.22	73	.000
PCR	74	0.42	1.19			

Note. PAS = parental autonomy support; PCR = parental conditional regard.

Table 10.

t-test Results Comparing PAS and PCR on the Internalization of Adopted Goals for Study 2a

Parenting Style	<i>n</i>	Mean	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
PAS	74	2.46	1.94	2.66	73	.010
PCR	74	1.74	1.73			

Note. PAS = parental autonomy support; PCR = parental conditional regard.

Table 11.

Hierarchical Multiple Regression for the Variables Predicting Positive Outcomes for Study 2a

Predictor	SWB Index				Flourishing				Vitality				Need Satisfaction			
	ΔR^2	<i>B</i>	β	<i>p</i>	ΔR^2	<i>B</i>	β	<i>p</i>	ΔR^2	<i>B</i>	β	<i>p</i>	ΔR^2	<i>B</i>	β	<i>p</i>
Step 1	.04			.390	.11			.048	.07			.170	.11			.051
Gender		.10	.02	.896		.25	.17	.292		.24	.10	.566		.27	.17	.306
Order		1.04	.26	.290		.62	.50	.038		.82	.39	.113		.64	.47	.049
Order×Gender		-1.44	-.35	.198		-.86	-.68	.011		-1.12	-.52	.057		-.94	-.67	.013
Step 2	.18			.007	.08			.188	.09			.154	.14			.019
Gender		-.08	-.02	.919		.21	.14	.376		.16	.06	.705		.22	.13	.391
Order		.10	.03	.913		.43	.35	.155		.46	.22	.377		.38	.28	.240
Order×Gender		-.83	-.20	.452		-.71	-.56	.045		-.74	-.34	.222		-.77	-.55	.039
PAS Adopted Goal Index		.34	.23	.077		.04	.08	.534		.19	.25	.071		.09	.17	.174
PCR Adopted Goal Index		-.30	-.18	.157		.00	.01	.961		.00	-.01	.969		-.07	-.12	.345
PAS Internalization Index		.00	.00	.978		-.01	-.03	.812		-.04	-.08	.560		.02	.05	.726
PCR Internalization Index		.44	.38	.002		.10	.27	.031		.12	.19	.125		.13	.34	.005
Step 3	.08			.025	.08			.037	.03			.283	.09			.014
Gender		-.21	-.04	.771		.15	.10	.508		.09	.03	.837		.17	.11	.475
Order		-.57	-.14	.544		.25	.20	.410		.33	.16	.543		.13	.10	.670
Order×Gender		.08	.02	.942		-.48	-.38	.174		-.60	-.28	.344		-.44	-.32	.231
PAS Adopted Goal Index		.85	.59	.003		.14	.31	.125		.22	.28	.183		.28	.56	.004
PCR Adopted Goal Index		-.03	-.02	.931		.14	.28	.122		.18	.21	.270		.02	.03	.839
PAS Internalization		.12	.12	.426		.00	.00	.993		-.06	-.11	.468		.06	.18	.221
PCR Internalization		.57	.50	.000		.15	.42	.002		.18	.29	.039		.18	.45	.001
PAS Adopted Goal×Internalization		-.18	-.46	.043		-.03	-.23	.318		.01	.03	.908		-.07	-.51	.022
PCR Adopted Goal×Internalization		-.16	-.26	.178		-.08	-.42	.035		-.11	-.32	.118		-.05	-.24	.199

Note. Gender is coded as 1 for females and 0 for males; Order is coded as 1 for PCR/PAS and 2 for PAS/PCR; PAS = parental autonomy support; PCR = parental conditional regard.

Table 12.

Descriptive Statistics for Between-Person Outcome Variables for Study 2b

Variable	Items	Range		<i>M (SD)</i>	Skew	Kurtosis
		Potential	Actual			
PAS Promoted Goal Index	2	-3–3	-3.00–3.00	0.78 (1.43)	-.08	-0.45
PAS Internalization Index	6	-6–6	-4.33–6.00	2.13 (1.98)	-0.34	-.20
PCR Promoted Goal Index	2	-3–3	-3.00–3.00	0.83 (1.51)	-0.27	-0.52
PCR Internalization Index	6	-6–6	-3.17–6.00	1.62 (2.15)	0.13	-0.41
Subjective Well-Being	25	-3–13	-2.20–9.80	5.47 (2.25)	-0.55	0.25
Psychological Well-Being						
Flourishing	8	1–7	1.13–7.00	5.51 (0.91)	-0.90	2.63
Vitality	7	1–7	1.57–6.71	4.65 (1.12)	-0.36	-0.60
Need Satisfaction	18	1–7	1.11–6.39	4.73 (0.81)	-0.66	1.79
General Parenting	31	1–7	2.77–6.97	5.21 (0.95)	-0.48	-0.26

Note. PAS = parental autonomy support; PCR = parental conditional regard.

Table 13.

One-way Repeated Measures ANCOVA Results Comparing PAS and PCR on the Promotion of Intrinsic and Extrinsic Goals while Controlling for General Parenting Style for Study 2b

Source	SS	df	MS	<i>F</i>	<i>p</i>	η^2
Promoted Goal Index	0.496	1	0.496	.317	.574	.002
Promoted Goal Index×Gender	2.966	1	2.966	1.899	.171	.014
Promoted Goal Index×Order	1.228	1	1.228	.786	.377	.006
Promoted Goal Index×Gender×Order	0.096	1	0.096	.061	.805	.000
Promoted Goal Index×General Parenting	0.161	1	0.161	.103	.749	.001
Error	209.277	134	1.562			

Note. Gender is coded as 1 for females and 0 for males; Order is coded as 1 for PCR/PAS and 2 for PAS/PCR; PAS = parental autonomy support; PCR = parental conditional regard.

Table 14.

One-way Repeated Measures ANCOVA Results Comparing PAS and PCR on Internalization while Controlling for General Parenting Style for Study 2b

Source	SS	df	MS	<i>F</i>	<i>p</i>	η^2
Internalization Index	14.711	1	14.711	4.271	.041	.031
Internalization Index×Gender	2.542	1	2.542	.738	.392	.005
Internalization Index×Order	27.623	1	27.632	8.019	.005	.056
Internalization Index×Gender×Order	0.002	1	0.002	.000	.982	.000
Internalization Index×General Parenting	0.615	1	0.615	.179	.673	.001
Error	461.571	134	3.445			

Note. Gender is coded as 1 for females and 0 for males; Order is coded as 1 for PCR/PAS and 2 for PAS/PCR; PAS = parental autonomy support; PCR = parental conditional regard.

Table 15.

One-way Repeated Measures ANCOVA Results Comparing PAS and PCR on the Adoption of Intrinsic and Extrinsic Goals while Controlling for General Parenting Style for Study 2b

Source	SS	df	MS	<i>F</i>	<i>p</i>	η^2
Adopted Goal Index	0.000	1	0.000	.000	.993	.000
Adopted Goal Index×Gender	1.046	1	1.046	.714	.400	.005
Adopted Goal Index×Order	0.071	1	0.071	.048	.826	.000
Adopted Goal Index×Gender×Order	0.003	1	0.003	.002	.964	.000
Adopted Goal Index×General Parenting	0.295	1	0.295	.201	.654	.002
Error	196.167	134	1.464			

Note. Gender is coded as 1 for females and 0 for males; Order is coded as 1 for PCR/PAS and 2 for PAS/PCR; PAS = parental autonomy support; PCR = parental conditional regard.

Table 16.

One-way Repeated Measures ANCOVA Results Comparing PAS and PCR on the Internalization of Adopted Goals while Controlling for General Parenting Style for Study 2b

Source	SS	df	MS	<i>F</i>	<i>p</i>	η^2
Internalization Index	8.078	1	8.078	2.895	.091	.021
Internalization Index×Gender	0.831	1	0.831	.298	.586	.002
Internalization Index×Order	19.987	1	19.987	7.162	.008	.051
Internalization Index×Gender×Order	0.009	1	0.009	.003	.954	.000
Internalization Index×General Parenting	0.074	1	0.074	.027	.871	.000
Error	373.946	134	2.791			

Note. Gender is coded as 1 for females and 0 for males; Order is coded as 1 for PCR/PAS and 2 for PAS/PCR; PAS = parental autonomy support; PCR = parental conditional regard.

Table 17.
Hierarchical Multiple Regression for the Variables Predicting Positive Outcomes for Study 2b

Predictor	SWB Index				Flourishing				Vitality				Need Satisfaction			
	ΔR^2	<i>B</i>	β	<i>p</i>	ΔR^2	<i>B</i>	β	<i>p</i>	ΔR^2	<i>B</i>	β	<i>p</i>	ΔR^2	<i>B</i>	β	<i>p</i>
Step 1	.22			.000	.28			.000	.13			.001	.37			.000
Gender		-.30	-.06	.594		.00	.00	.992		-.08	-.03	.780		-.09	-.05	.644
Order		-1.23	-.28	.077		-.70	-.39	.010		.07	.03	.859		-.59	-.36	.010
Gender×Order		.61	.13	.442		.43	.23	.166		-.06	-.03	.891		.29	.17	.271
General Parenting		1.03	.44	.000		.45	.47	.000		.42	.36	.000		.48	.56	.000
Step 2	.05			.098	.05			.074	.07			.030	.08			.001
Gender		-.36	-.07	.519		-.04	-.02	.870		-.11	-.04	.697		-.10	-.05	.574
Order		-1.24	-.28	.083		-.75	-.41	.007		.02	.01	.957		-.50	-.31	.025
Gender×Order		.66	.14	.402		.45	.24	.146		-.04	-.02	.933		.30	.18	.226
General Parenting		.81	.34	.000		.37	.38	.000		.28	.24	.006		.38	.45	.000
Adopted Goal Index.PAS		.10	.06	.507		.05	.07	.427		.03	.03	.720		.05	.08	.288
Adopted Goal Index.PCR		.13	.08	.341		.00	-.01	.935		.07	.09	.333		.00	.01	.923
Internalization Index.PAS		.10	.08	.383		.03	.06	.515		.04	.08	.445		.10	.23	.006
Internalization Index.PCR		.15	.13	.132		.09	.20	.020		.12	.21	.023		.04	.10	.210
Step 3	.04			.036	.01			.503	.01			.549	.04			.015
Gender		-.13	-.02	.820		.01	.01	.961		-.08	-.03	.788		-.01	-.01	.950
Order		-1.06	-.24	.130		-.73	-.40	.009		.06	.03	.875		-.44	-.28	.042
Gender×Order		.43	.09	.578		.43	.23	.165		-.09	-.04	.821		.23	.14	.350
General Parenting		.79	.34	.000		.37	.39	.000		.28	.24	.007		.38	.44	.000
Adopted Goal Index.PAS		.44	.27	.060		.13	.19	.160		.06	.08	.616		.18	.31	.012
Adopted Goal Index.PCR		-.03	-.02	.869		-.01	-.01	.923		.02	.02	.817		-.04	-.07	.407
Internalization Index.PAS		.24	.21	.054		.06	.12	.260		.07	.12	.322		.15	.36	.000
Internalization Index.PCR		.01	.01	.935		.09	.19	.077		.08	.14	.226		.00	-.01	.926
Adopted Goal×Internalization.PAS		-.16	-.36	.029		-.03	-.19	.246		-.02	-.10	.579		-.06	-.38	.008
Adopted Goal×Internalization.PCR		.11	.22	.079		.00	.01	.949		.03	.14	.304		.03	.18	.098

Note. Gender is coded as 1 for females and 0 for males; Order is coded as 1 for PCR/PAS and 2 for PAS/PCR; PAS = parental autonomy support; PCR = parental conditional regard.

Figure 1. The conceptual model depicting the effects of autonomy supportive versus conditionally regarding parenting styles on goals.

Figure 2. Simple mediation model for Study 1 using multicategorical contrast coding to examine the relation between parenting style and the extent to which the selected goal was intrinsic, as mediated by parenting practices reported by participants (as coded by research assistants).

Note. Coefficients are standardized. Analysis was conducted controlling for Gender, C1×Gender, and C2×Gender. The total effect is presented in parentheses. Relative indirect effects: 95% CI_{C1}: [.05, .51] ; 95% CI_{C2}: [-.02, .13].

† $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$

Figure 3. Interaction between the type of goal that was promoted and internalization on SWB for the PAS condition in Study 2a.

Figure 4. Interaction between the type of goal that was promoted and internalization on flourishing for the PCR condition in Study 2a.

Figure 5. Interaction between the type of goal that was promoted and internalization on need satisfaction for the PAS condition in Study 2a.

Figure 6. Interaction between the type of goal that was promoted and internalization on SWB for the PCR condition in Study 2b.

Figure 7. Interaction between the type of goal that was promoted and internalization on SWB for the PAS condition in Study 2b.

Figure 8. Interaction between the type of goal that was promoted and internalization on need satisfaction for the PAS condition in Study 2b.