

The Emotional Costs of Parents' Conditional Regard: A Self-Determination Theory Analysis

Avi Assor

Guy Roth

Ben Gurion University of the Negev

Edward L. Deci

University of Rochester

ABSTRACT Parents' use of conditional regard as a socializing practice was hypothesized to predict their children's introjected internalization (indexed by a sense of internal compulsion), resentment toward parents, and ill-being. In Study 1, involving three generations, mothers' reports of their parents' having used conditional regard to promote academic achievement predicted (a) the mothers' poor well-being and controlling parenting attitudes, and (b) their college-aged daughters' viewing them as having used conditional regard, thus showing both negative affective consequences from and intergenerational transmission of conditional regard. Study 2 expanded on the first by using four domains, including both genders, and examining mediating processes. College students' perceptions of their mothers' and fathers' having used conditional regard in four domains (emotion control, prosocial, academic, sport) were found

Avi Assor and Guy Roth, Department of Education, Ben-Gurion University of the Negev; Edward L. Deci, Department of Psychology, University of Rochester.

The authors thank Shua Cohen for her contributions to study 1. The research was supported in part by grants from the National Institute of Child Health and Human Development and the National Institute of Mental Health.

Correspondence concerning this article may be addressed either to Avi Assor, Department of Education, Ben-Gurion University of the Negev, PO Box 653, Beer-Sheva 84105, Israel. E-mail: assor@bgumail.bgu.ac.il or to Edward L. Deci, Department of Psychology, University of Rochester, Rochester, New York 14627. E-mail: deci@psych.rochester.edu.

Journal of Personality 72:1, February 2004.
Blackwell Publishing 2004

to relate to introjected internalization, behavioral enactment, fluctuations in self-esteem, perceived parental disapproval, and resentment of parents. Introjection mediated the link from conditional regard to behavioral enactment. The results suggest that use of conditional regard as a socializing practice can promote enactment of the desired behaviors but does so with significant affective costs.

The approach to socialization in which parents provide love and affection when their children display particular behaviors or attributes and withhold love and affection when the children do not is frequently used and widely endorsed, although psychologists differ in their view of its effectiveness. Advocates of the approach maintain that parents' use of conditional (or contingent) regard leads children to perform the behaviors that parents believe to be in the children's best interests (see, e.g., Aronfreed, 1968). From an operant perspective, conditional affection represents the contingent administration of reinforcements and punishments, which is expected to improve discrimination between desired and undesired behaviors and to increase the likelihood of desired behaviors being emitted in the presence of reinforcement contingencies (Gewirtz & Pelaez-Nogueras, 1991; McDowell, 1988).

Mead's (1934) theory of symbolic interactionism, which views selves as being constituted by social processes and as being reflections of them, implies that parents' conditional regard will lead children to develop conditional self-evaluations and regulate their behavior accordingly. Similarly, a recent model of "self-esteem as a sociometer" (Leary & Baumeister, 2000; Leary & Downs, 1995) suggests that contingent self-esteem enhances people's sensitivity to social expectations that would serve to minimize their social exclusion. This implies that parents' conditional regard could contribute to their children's adaptive social sensitivity and improved social adjustment.

Other psychological theorists have presented quite different views of the desirability of conditional acceptance as a socializing strategy. Rogers (1951) proposed that parents' conditional regard undermines children's self-esteem and interferes with personal exploration and self-regulation. Object relations theorists such as Miller (1981) have suggested that children, when they learn they are not loved unconditionally, behave in ways they imagine will yield the desired love. The instrumental behaviors thus persist, but the

satisfaction the children experience when they successfully execute the behaviors is fleeting because the behaviors never yield the unconditional love the children truly desire. More recent theorists have also suggested that conditional regard and the consequent contingent self-esteem will be associated with thwarted personal growth and less optimal psychological functioning (e.g., Baldwin, 1994; Deci & Ryan, 1995; Harter, 1993).

Despite the varied theoretical views and the practical importance of the consequences of parents' using conditional regard, systematic research addressing this issue is relatively scarce.

Research on the Relations of Conditional Regard to Internalization and Well-Being

In their classic monograph, Sears, Maccoby, and Levin (1957) argued that the use of love withdrawal (i.e., one form of conditional regard) is an effective socializing practice, and they reported evidence that this technique prompted internalization of prosocial values. They suggested that there might be some negative affective consequences, although they did not report data concerning this issue. Aronfreed (1968) stated that withdrawal of affection following an undesired behavior induces anxiety and that subsequent reinstatement of pleasurable social stimulation following behavior change reduces the anxiety and induces a positive affective state. This technique, which often involves a temporary separation of children from their parents, results in discriminant anxiety that can operate in the parents' absence to motivate the children's suppression of transgressions or their corrective responses to such transgressions.

Aronfreed's description of anxiety as the key motivating element that results from conditional affection gave no indication that such a process might have unintended negative effects. However, a thoughtful consideration of anxiety as a primary motivator of moral or prosocial behavior suggests that it could have quite problematic affective consequences. It was not surprising, therefore, that Coopersmith (1967) reported preliminary, marginally significant evidence from a study of 10-year-olds suggesting that parental use of contingent love as a control strategy may be associated with the children's developing low self-esteem. Subsequently, Hoffman (1970) concluded that love withdrawal has an inconsistent relation with the development of moral behavior and, further, that children's

behavioral regulation resulting from this parenting approach tends to be rigid and rule-bound.

A study of infants by Chapman and Zahn-Waxler (1982) further highlighted the complexity of the relation between love withdrawal and socializing outcomes. They found that use of love withdrawal was related both to complying with the implicit demand and to avoiding the socializing agent, thus implying ambivalent feelings in the child. Barber (1996), in a study of the correlates of parents' psychological control, proposed that love withdrawal was one of several components of psychological control, along with personal attacks and erratic emotional behavior. He reported that parents' use of psychological control was associated with various indicators of their children's ill-being, including poor impulse control and depression, although it is unclear what part the love-withdrawal strategy may have played in this relation.

Beyond these few studies of parents' using conditional regard to socialize their children, recent social-cognitive experiments have examined contingent social acceptance more generally in relationships. Baldwin and Sinclair (1996) used a lexical decision task to examine the extent to which people with high versus low self-esteem perceive their acceptance or rejection by others as dependent on their performance. The results were consistent with the view that the perception of interpersonal acceptance as conditional on performance is associated with precarious or vulnerable self-esteem. Other studies by Baldwin and colleagues indicated that activation of a contingent-acceptance schema can lead people to evaluate themselves negatively (e.g., Baldwin, 1994; Baldwin, Carrell, & Lopez, 1990). Schimel, Arndt, Pyszczynski, and Greenberg (2001) found, further, that being liked by others for what one has achieved, relative to being liked for intrinsic characteristics of oneself, resulted in greater defensiveness, which the researchers interpreted as being consistent with the idea of detrimental consequences of contingency-based self-esteem.

In sum, studies of love withdrawal and contingency-based interpersonal acceptance lead to the inference that parents' use of conditional regard to socialize children may promote not only immediate display of the desired behaviors but also internalization of the behavioral regulation. However, it also seems that this internalization may be accompanied by negative affect, diminished self-esteem, and ambivalence toward the parents. Further, it is

possible that the behaviors, when subsequently performed, will tend to be enacted rigidly. Still, the empirical evidence from research on parent–child relationships that directly supports these conclusions is relatively scant and has been limited primarily to the effects of love withdrawal on internalization in the domain of prosocial values and behavior. In addition, no study has examined the self-regulatory processes underlying behaviors that were initially prompted by parents' conditional regard. Accordingly, the present investigations examined the relations of Parental Conditional Regard (PCR) within four behavioral domains to affective outcomes and explored the self-regulatory process that mediates the relation of PCR to children's subsequent enactment of the instrumental behaviors.

In the current research we examine behavioral and affective consequences of perceived parental conditional regard by using a differentiated conception of internalization provided by self-determination theory (SDT; Deci & Ryan, 1991; Ryan & Deci, 2000). SDT proposes that regulations can be internalized to differing degrees and will, accordingly, be associated with different affective experiences. We specifically hypothesize that parents' conditional regard will lead to a nonoptimal type of internalization (referred to as introjection), which prompts pressured enactment of the target behaviors and has negative affective consequences.

Self-Determination Theory of Internalization

Deci and Ryan (1985b, 2000) differentiated the concept of internalization by suggesting that different types of internalization can be characterized in terms of a self-determination continuum based on the degree to which a behavioral regulation has been internalized. SDT specifies four types of behavioral regulation that will be evident when a behavior and its accompanying value have been internalized to differing degrees. Before any internalization of a specific behavior has occurred, the behavior is said to be enacted through *external regulation*. To the extent that the behavior is displayed, it is because the child complies with specific demands and contingencies. Behavior so regulated is said to be controlled by those contingencies rather than enacted volitionally or autonomously (Ryan & Connell, 1989). The behaviors, which persist only when the contingencies are present, are associated with poor adjustment and well-being (Grolnick & Ryan, 1989).

The first and least effective type of internalization is introjection, which results in *introjected regulation* of the relevant behaviors. Introjection involves the child rigidly taking in the behavioral regulation but not accepting its value as his or her own. With introjected regulation, the behavior is said to be controlled by the desire for feelings of generalized social approval and self-worth, which are experienced as dependent on specific behaviors or attributes. In other words, introjected regulation is not dependent on specific external contingencies, but it is still considered relatively controlled (rather than autonomous) because the person feels compelled to do the behavior. Specifically, it is controlled by internal contingencies that link feelings of self-esteem and social acceptance to the display of the target behaviors or attributes.

According to SDT, introjected regulation involves internal pressure and tension. That is, central to this regulatory process is the experience of inner compulsion, the sense that one has to behave in specific ways to be worthy. The theory predicts that being internally controlled in this way will typically yield the target behaviors, but the behaviors are expected to be associated with a variety of negative affective consequences. Because self-esteem is dependent on successful enactment of target behaviors, even small successes and failures can generate significant fluctuations in self-esteem. And with the continual pressure to live up to the introjected standards, the experience of satisfaction following a success is expected to be short-lived, as the pressure to meet yet another standard will soon take over. Finally, failure to perform successfully is expected to yield negative self-related affects such as shame and guilt.

Past studies have provided some support for this reasoning. For example, Grolnick and Ryan (1989) found introjected regulation to be associated with poor coping and anxiety following failure, while Kernis, Paradise, Whitaker, Wheatman, and Goldman (2000) found it to be associated with unstable self-esteem.

Within SDT, a fuller type of internalization is said to result from identifying with the importance of the behavior vis-a-vis one's personal values and goals. The resulting regulation, which is referred to as *identified regulation*, is considered relatively autonomous because the person has accepted the value of the activity as his or her own. Research has shown this form of regulation to be accompanied by the experience of choice rather than pressure and by proactive coping and well-being (Grolnick & Ryan, 1989; Ryan, Rigby, & King, 1993).

The fullest internalization, resulting in the most effective form of internalized regulation, is referred to as integration and results from reciprocally assimilating the identification with other aspects of one's self. Underlying subsequent behavioral enactment will be *integrated regulation*. Both identified and integrated regulation are considered relatively autonomous, and when so regulated, people experience a sense of choice.

In addition, SDT states that some behaviors are intrinsically motivating so their enactment does not depend on internalization but, rather, stems from intrinsic interests.

To summarize, the SDT model of behavioral regulation proposes that external and introjected regulations are controlled, whereas identified and integrated regulations (as well as intrinsic motivation) are autonomous or self-determined. Studies have found autonomous, relative to controlled, regulation to be related to more positive performance and mental-health consequences across domains as varied as politics (Koestner, Losier, Vallerand, & Carducci, 1996), education (Williams & Deci, 1996), and health care (Williams, Grow, Freedman, Ryan, & Deci, 1996).

The Socializing Context in Self-Determination Theory

SDT elaborates conditions under which individuals would be expected only to introject a regulation as opposed to integrate it more fully. Specifically, the theory distinguishes between socializing contexts that are controlling versus autonomy supportive. *Controlling contexts* are ones that pressure the child to think, feel, or behave in particular ways. For example, use of reward contingencies to prompt behaviors have, under most circumstances, been found to be controlling (Deci, Koestner, & Ryan, 1999), as have threats (Deci & Cascio, 1972), deadlines (Amabile, DeJong, & Lepper, 1976), and pressuring locution (Ryan, 1982). In contrast, *autonomy-supportive contexts* involve taking the child's perspective, minimizing pressure, and acknowledging his or her feelings (e.g., Deci, Eghrari, Patrick, & Leone, 1994; Koestner, Ryan, Bernieri, & Holt, 1984). When parents provide an autonomy supportive socializing context, children are predicted to identify with and integrate the attributes and values parents endorse, whereas when the context is controlling, the children are expected merely to introject the attributes and values (Grolnick, Deci, & Ryan, 1997).

Effects of Conditional Regard on Internalization, Well-Being, Behavior, and Family Relations

Internalization and affective outcomes. From the perspective of SDT, the socializing strategy in which affection and regard are made conditional upon the display of particular behaviors is considered relatively controlling because it pressures children to behave out of their desire to gain affection and their fear of losing it. As such, conditional regard is predicted to result in the children's merely introjecting regulations rather than identifying with them. In fact, conditional affection represents a prototypic context for promoting introjection, because the contingent esteem from parents can be readily transformed into the contingent self-esteem that underlies introjected regulation (see Deci & Ryan, 1995). Introjected regulation would be experienced directly as a sense of internal compulsion and, in line with past research (see, e.g., Grolnick et al., 1997; Kernis, Brown, & Brody, 1998), is expected to be accompanied by (a) fluctuations in self-esteem because it is dependent on succeeding at the target behaviors, (b) short-lived satisfaction after success because the next demand is soon exerting its pressure, and (c) negative self-related responses to failure because it carries the implication of being unworthy.

Behavioral outcomes. If a behavioral regulation is internalized, regardless of the type of internalization, one would expect some degree of subsequent enactment of the behavior. Thus, to the degree that PCR promotes introjection, it is expected to result in the instrumental behaviors. For example, if a boy experiences his parents' affection as dependent on his engaging in sports, he is predicted to introject the behavioral regulation and subsequently participate in sports, even in his parents' absence. The important point, however, is that, because this positive behavioral outcome results from introjected regulation, it will be accompanied by a sense of inner compulsion and will accrue at the cost of negative affective consequences.

Family relations. Parents' use of conditional regard is controlling in part because it conveys to children that they are not loved for who they are but for what they do, that they have to behave in particular ways to be accepted. The pressure to behave in specific ways and the strong linkage of the parent's affection to that pressure can easily

be construed by children as indicating an underlying parental rejection or disapproval. Thus, we hypothesized that (a) the children who perceived their parents as using conditional regard would tend to feel disapproval from the parents and (b) this experience of disapproval would, in turn, evoke resentment toward the parents.

An interesting question that arises concerning the use of conditional regard by parents is the degree to which the children might in turn come to advocate and use conditional regard in their own interpersonal relationships, especially, in their eventual parenting. Past research guided by SDT (Deci & Ryan, 1985a) found that individuals who were relatively controlled in their own self-regulation tended to be controlling in their approach to motivating others. This suggests that people who experienced conditional regard from their parents, and thus become relatively controlled themselves, would in turn tend to be controlling with others. Indeed, they might internalize the controlling interpersonal approach of conditional regard for which they themselves paid emotional costs. We thus hypothesized that people whose parents used conditional regard would express controlling attitudes toward child rearing and would use conditional regard in parenting their own children.

To summarize, according to SDT, the use of conditional affection to socialize domain-specific behaviors (i.e., to facilitate internalization of behavioral regulations) was predicted to result in a rigid and controlling type of internalization (viz., introjection), accompanied by various emotional costs, including resentment toward parents. These predictions are in line with the pattern of evidence summarized earlier concerning withdrawal of love. Further, we predicted that, because the children's enactment of behaviors initially prompted by PCR would result from introjected internalization, the primary indicator of introjection (viz., internal compulsion) would mediate the relation between PCR and the children's behaviors. Finally, we posited that experiencing conditional regard from parents would be associated with endorsement of controlling child-rearing attitudes and use of conditional regard in one's own approach to parenting.

The Present Studies

Two studies were conducted to test the SDT analysis of parental conditional regard as an approach to socialization within domains.

The first study focused on the use of PCR in the academic domain with daughters to provide a preliminary test of the hypothesis that perceived PCR would be associated with significant emotional costs. Further, in that study, we examined the possibility that this controlling parenting approach would be transmitted across generations. The second study expanded the investigation of the emotional costs of PCR into four domains (emotion control, prosocial behavior, and sport achievement, as well as academic achievement) with participants of both genders. Study 2 examined the SDT proposition that introjected internalization would mediate the relation of PCR to maintained enactment of the behaviors on which parental regard was perceived to depend. It also examined whether perceived PCR would be associated with resentment toward parents and whether this relation would be mediated by the children's feeling disapproved of by their parents.

STUDY 1

This study tested the hypotheses that the controlling strategy of PCR would be negatively related to children's adjustment and coping as assessed by general self-esteem (Rosenberg, 1979) and positive coping skills (Rosenbaum, 1980), and that the children would internalize the parenting approach such that they, in turn, would value controlling parenting approaches and would be perceived by their children as using the strategy of conditional acceptance.

To examine this, the study considered three generations. The target individuals (referred to as mothers) were the mothers of female university students (referred to as daughters). The mothers described their parents (referred to as grandparents) in terms of the degree to which they provided conditional affection in the academic domain. Mothers also provided data on their own self-esteem and coping skills and on their attitudes toward child rearing. Finally, the daughters described the mothers in terms of the degree to which they used conditional regard.

For this initial examination of our hypotheses, we used only female reporters because they were a convenience sample, and we used the academic domain because it was obviously a relevant and important domain for university students and their mothers.

METHOD

Participants and Overview

Target participants were 124 mothers and their university-student daughters. The mothers, who were contacted through the daughters, completed questionnaires about the degree to which their parents (the grandmothers and grandfathers) had used conditional regard to socialize their (the mothers') academic achievement. The mothers also reported on their own global self-esteem, the degree to which they possess skills that allow them to cope effectively with stress, and their attitudes toward child rearing (viz., whether they are relatively autonomy supportive versus controlling). Finally, the daughters reported on the degree to which the mothers tend to provide conditional regard with respect to the daughters' academic pursuits.

Assessments

Perceptions of Parental Conditional Regard Scale-Academics (PCRS-A). Perceived PCR was assessed with three items about mothers and a parallel set of three items about fathers. The six items were used by the mothers in this study reporting on their parents, whereas only the three mother items were used by the mothers' daughters to report on the mothers.

The six items used in this study represent the academic domain subscale of the Domain-specific Perceptions of Parental Conditional Regard Scale (DPCRS) which was developed for use in these two studies as well as several others (Assor, Roth, Cohen, & Avraham, 1997; Roth & Assor, 2002). The full scale contains six items from each of four domains (emotional control, prosocial behavior, academics, and sport). Development of the DPCRS will be presented more fully in Study 2 where all four domains were used. Items in the academic subscale refer to being engaged in and doing well at school. A sample item in this domain is "As a child or adolescent, I often felt that my mother's affection for me depended on my academic success." The Cronbach alpha for the father subscale was 0.83 and for the mother subscale was 0.87.

Global self-esteem. The widely used Rosenberg self-esteem scale (1965, 1979) consists of 10 items (Cronbach alpha = .86 in this study). Sample items are "I feel that I have a number of good characteristics." and "In general, I am satisfied with myself."

Coping skills. The extent to which the mothers possessed skills that allow them to cope effectively with various types of emotional stress was assessed with Rosenbaum's (1980) 36-item self-control schedule. It

describes various self-regulatory strategies that help people cope well with stressful events and thus function effectively in the face of those events. Sample items are “When I do boring work, I try to find some interest in that work and think of the benefits that the work would bring”; “When I try to get rid of a bad habit, I first try to find out what are the reasons that I stick to that habit”; “Often, I can’t stop myself from thinking about bad events that might happen to me” (reversed). In this study, the self-control schedule had a Cronbach alpha of 0.84.

Parenting attitudes toward autonomy support. This scale, assessing attitudes toward autonomy support versus control in child rearing, was adapted by Orr, Assor, and Priel (1989) from the autonomy subscale of Schaefer and Bell’s (1958) Parental Attitudes Research Instrument. It contains 8 items and had a Cronbach alpha of 0.91. A sample item is “A child has a right to have an opinion of his/her own, and he/she should be given an opportunity to express it.”

RESULTS

Table 1 presents the correlations testing the predictions. As expected, when grandmothers and grandfathers were perceived to be conditionally affectionate, mothers felt less worthy and were less likely to use effective coping strategies.

The more interesting finding concerns the relation between the mothers’ perceptions of the degree to which the grandparents were conditional in their affection regarding school work and both the degree to which the mothers valued controlling parenting practices and actually used the controlling practice of conditional regard with respect to their daughters’ academic achievement. As the table shows, the extent to which the mothers experienced the grandmothers and the grandfathers as providing conditional regard (a) was significantly negatively related to their (the mothers’) valuing autonomy-supportive parenting, and (b) was significantly positively related to their being perceived by their daughters as providing conditional regard.

BRIEF DISCUSSION

Results linking perceived parental conditional regard to global self-esteem and positive coping skills are consistent with the view that PCR has negative well-being consequences. The finding that, if

Table 1
Correlations of Perceptions of Parental Conditional Regard in the Academic Domain With Indicators of Psychological Well-being and Child-Rearing Strategies

	Mothers' psychological well-being		Mothers' child-rearing attitudes and behaviors
	Mothers' general self-esteem	Mothers' self-reported positive coping skills	Mothers' attitude toward autonomy-supportive parenting
Perceived use of conditional regard			Daughters' perceptions of mothers' use of conditional regard (intergenerational transmission)
Mothers' perception of grandmothers' use of conditional regard	-.19*	-.19*	-.24*
Mothers' perception of grandfathers' use of conditional regard	-.31*	-.17 ⁺	-.26*
			.21*

⁺ $p < .10$. * $p < .05$. ** $p < .01$.

grandparents attempted to promote academic achievement with conditional affection, the mothers tended, in turn, to do the same thing with their daughters is particularly striking because it appears that the mothers used PCR with their own children in spite of the strategy having had negative effects on them. The finding is consistent with the self-determination theory view that the controlling strategy of PCR would, itself, tend to be introjected and subsequently enacted in a rigid way (Deci & Ryan, 2000). It would be interesting, in future research, to examine whether parents who were socialized with PCR felt internally compelled to use the strategy because that would support the idea that PCR tends to be introjected and enacted rigidly.

The results of Study 1 are very encouraging in terms of our hypothesis that domain-specific use of PCR relates negatively to well-being, yet it was limited to females and to the academic domain. In Study 2 we included three additional domains (emotion control, prosocial behavior, and sport),¹ considered both genders, examined the relation of PCR to introjection and, in turn, to the enactment of the instrumental behaviors, and explored the children's feelings towards parents who use PCR.

STUDY 2

Study 2 had four goals. The first was to test whether domain-specific perceived parental conditional regard would be associated with children's introjecting the regulation of instrumental behaviors and subsequently enacting those behaviors. Second, we tested the prediction that introjection, indexed as feeling internal compulsion, would mediate the relation between perceived PCR and enactment of the target behaviors. The third goal was to test whether perceived PCR would be positively associated with children's feeling resentment toward their parents, and the fourth was to test the hypothesis that perceived disapproval from parents would mediate the relation between PCR and resentment toward parents.

Although we believe that conditional regard at the general level would also have ill-being and negative family-relation consequences,

1. We chose the academic, emotion-control, prosocial, and sport domains because we believed they would all be relevant to the lives of the university students who were recruited for this study, although we expect that any other relevant domain would have yielded comparable results.

we focused on domain-specific conditional regard in order to examine the effects of conditional regard on enactment of specific behaviors. As shown by many studies in the area of attitudes and behavior (see Azjen, 1987), there is greater predictability of specific behaviors from domain-specific dispositions than from general dispositions. In addition, the focus on domain-specific parental regard is consistent with Crocker and Wolfe's (2001) emphasis on domain-specific contingencies of self-worth.

METHOD

Participants

One hundred and ten university students (60 female and 50 male) received extra credit in an introductory psychology course for their participation in this study. Each participant completed questionnaires in two sessions separated by 2 to 3 weeks. In one session they completed the Domain-specific Perceptions of Parental Conditional Regard Scale concerning the four domains, as well as questionnaires concerning behavioral enactment and feelings of internal compulsion, choice, satisfaction, guilt, and shame. In the second session, they completed questionnaires concerning their feelings toward their parents and fluctuation in their own self-esteem.

Assessments

Domain-specific Perceptions of Parental Conditional Regard Scale (DPCRS). This scale, which was introduced in Study 1, included 12 items about mothers and 12 about fathers, with three of each type pertaining to each of the four domains. Items in the emotion-control domain refer to the suppression of anger, fear, and sadness. A sample item is "As a child or adolescent, I often felt that my father's affection toward me depended on my not showing fear and/or not crying." Items in the prosocial domain refer to being helpful and considerate toward others. A sample item is "As a child or adolescent, I often felt that my mother would show me more affection or approval than she usually did if I was helpful and considerate toward others." The academic domain was discussed in Study 1, and an additional item from it is "As a child or adolescent, I often felt that I would lose much of my father's affection if I did poorly at school." A sample item in the sports domain is "As a child or adolescent, I often felt that my mother's affection for me depended on my practicing hard for sports."

The construct validity of the DPCRS was examined with factor analyses, computation of the internal consistency coefficients for the four

subscales, and correlations among the subscales. Factor analyses were performed separately for father items and mother items with varimax rotation. Results of the factor analysis performed on the mother items showed that participants clearly distinguished among the four domains of conditional maternal regard. Without restricting the number of factors, four factors emerged with eigenvalues ranging from 5.35 to 1.02. Every item loaded on the appropriate domain factor, and the loadings were all high and unique (above 0.60 in the emotion-control domain, 0.55 in the prosocial domain, 0.69 in the academic domain, and 0.70 in the sport domain). Results of the factor analysis performed on the father items revealed three factors, with eigenvalues greater than 1.00. The eigenvalues ranged from 5.85 to 1.40. The prosocial and sport domains had clean factors, with loadings above 0.59 in the prosocial domain and above 0.87 in the sport domain. The third factor included the three emotion-control items and two academic items, all with loadings above 0.54. The factors extracted for mothers accounted for 66.3% of the variance and for fathers accounted for 67.4% of the variance. We then repeated the factor analysis of father items restricting the number of factors to four, and we found that the emotion-control and academic items loaded on separate domain-specific factors. Therefore, for the primary analyses, we used the four separate domains for fathers so the analyses of maternal conditional regard and paternal conditional regard could be conducted in a parallel manner.²

Overall, then, the results of the factor analyses support the appropriateness of examining PCR effects within domains.

Cronbach alphas for the four subscales for mothers and for fathers were all above 0.79. The intercorrelations among the maternal scales were moderate, ranging from 0.29 to 0.57 with a mean of 0.46. The intercorrelations among the paternal scales were also moderate, with five of the six correlations ranging from 0.31 to 0.49, and the sixth (between the emotional-control and academic domains) being 0.69. The mean was 0.47. Correlations among the maternal and paternal domain-specific conditional regard scales ranged from 0.21 to 0.62, with a mean of 0.38. Factor analyses performed separately for each domain on maternal and paternal items showed that participants clearly distinguished between maternal and paternal conditional regard within each of the four domains.

2. Because factor analysis of father items showed lack of a clear distinction among the emotion-control and academic domains, we also constructed a conditional regard scale in which emotion and academic items were combined for perceptions of fathers' conditional regard. The results obtained with this scale were very similar to those obtained with the scale assessing fathers' conditional regard only in the emotion-control domain.

Introjection. This was assessed by feelings of internal compulsion to perform the behaviors that had been instrumental for receiving conditional regard. The items were written for the present study based on the description of the experience of introjection in SDT (Deci & Ryan, 1985b). Using factor analysis, four subscales were constructed, one for each domain, with a total of 10 items (three items each for the emotion-control and academic domains and two each for the other domains). The Cronbach alphas for the emotion-control, academic, and sports subscales ranged from 0.83 to 0.87; for prosocial behavior, it was 0.60.

Sample items are “I often feel a strong internal pressure to exert control over my negative emotions, even in situations where such control is not necessary”; “Sometimes I feel that there is something inside me which, in a way, forces or compels me to be overly sensitive to others’ needs or feelings”; “Sometimes I feel that my need to study hard controls me and leads me to give up things I really want to do”; and “I have often felt that attaining superior performance in sports is something I *should* do more than I *want* to do.” Correlations among the four introjection subscales were moderate, ranging from 0.20 to 0.55.

Identification/integration. This variable was assessed by feelings of choice with regard to performance of the relevant behaviors. These items were also developed for this study based on the description of autonomous regulation in SDT. Whereas introjected (i.e., controlled) regulation is characterized by feelings of internal pressure and compulsion, identified and integrated (i.e., autonomous) regulation are characterized by the experience of choice. This variable was assessed by five items per domain (a total of 20 items) indicating that the person enacts behaviors in those domains with the feeling of choice. Alphas of the domain-specific subscales ranged from 0.60 to 0.82. Correlations among the four domain subscales were low, ranging from 0.06 to 0.32. A sample item is “I feel a real sense of choice about my tendency to suppress my anger and not show it.”

Fluctuations in self-esteem. This was measured with seven items that were based, in part, on Rosenberg’s (1965) measure of barometric self-concept (see also Rosenberg, 1986). The items were written to emphasize strong bipolar variations in feelings about oneself resulting, presumably, from the fact that self-esteem is contingent on satisfying introjected standards. We created this measure rather than use the approach developed by Kernis and colleagues (e.g., Kernis & Waschull, 1995) because their approach is not intended to assess strong bipolar fluctuations. The Cronbach alpha for the scale was 0.93. Two sample items are “Some days I have a very good opinion of myself, other days

I have a very poor opinion of myself” and “Some days I am very disappointed with myself, other days I am very satisfied with my self.”

Guilt and shame after failure to enact behaviors. In each domain, participants were presented with two brief instances of failing to enact behaviors representing parentally desired attributes and, for each instance, were asked to indicate how guilty or ashamed they were likely to feel. The instances describe events that respondents are likely to encounter in their daily lives. This assessment method is similar to the one used by Tangney and colleagues (Tangney, Wagner, Barlow, Marschall, & Gramzow, 1996), although the current measure was intended to assess shame or guilt after failure to enact domain-specific behaviors rather than general individual differences in proneness to guilt or shame. An example concerning failure to control emotions is “I disclosed my fear and anxiety to an acquaintance,” and concerning the prosocial domain is “I ignored a request of an acquaintance and did not agree to meet with her/him because I wanted to keep working on a project that was important to me.” The domain-specific Cronbach alphas ranged from 0.68 to 0.78.

Short-lived satisfaction following success. This scale has four domain-specific subscales, with two items per subscale. Cronbach alphas ranged from 0.75 to 0.81. Sample items are “The satisfaction I get from being able to suppress and not show negative feelings is often short lived,” and “Often, the good feelings I experience after I act in a considerate way toward another person are soon followed by feelings of emptiness, dejection, or disappointment.”

Construct validity of the introjection and identification/integration measures. We examined construct validity for the introjection and the identification/integration measures, and for the scales assessing the theorized corollaries of introjection (viz., fluctuations in self-esteem, short-lived satisfaction, and shame following failure) with correlations, which were computed separately for each domain. Good construct validity would be indicated by finding that fluctuations in self-esteem, short-lived satisfaction following success, and shame following failure were related positively to introjected regulation and negatively or less positively to autonomous regulation. The pattern of correlations provided general support for the construct validity of the scales. Fluctuation in self-esteem was more positively related to introjection ($.24 < r_s < .41$) than to autonomy ($-.25 < r_s < .05$), and short-lived satisfaction was more positively related to introjection ($.04 < r_s < .51$) than to autonomy ($-.53 < r_s < -.18$). Finally, in the academic and emotion-control domains, shame following failure was more strongly

related to introjection ($.30 < r_s < .45$) than to autonomy ($-.17 < r_s < .04$). The correlations for shame following failure with introjection and identification/integration were both significantly positive in the prosocial and sport domains ($.26 < r_s < .48$), suggesting that the measure may be less valid in these domains. Still, in general, the pattern of correlations provides construct validity for the introjection and the identification/integration measures.

Frequency of behavioral enactment. This is a 10-item measure (2–3 items per domain) on which participants indicate how often, during the preceding year, they had performed various behaviors from each of the four relevant domains. For each item, participants were presented with 7 response options ranging from *Never* to *Always*. An example is “During the last year I studied hard for exams.” The subscale alphas ranged from 0.71 to 0.85. The correlations among the four measures were low, ranging from -0.06 to 0.45 .

Perceived parental disapproval. This variable was assessed by two items from the rejection subscale of the Children’s Report of Parent Behavior Inventory (Schludermann & Schludermann, 1979, 1983), which is an adaptation of a scale developed by Schaefer (1965). Participants were asked to respond to each item twice, once for their father and once for their mother. Previous research with this scale (Assor, 1995; Schludermann & Schludermann, 1979) has shown that the correlations between the two items and the total rejection scale are very high (above .70). Cronbach alphas for the subscales in this study were 0.67 for mothers and 0.68 for fathers. The items are “My father was always finding fault with me” and “My mother got cross and angry about little things I did.”

Resentment toward parents. The scale contained two items each for mothers and for fathers: “As a child or adolescent, I often felt very angry with my mother (father),” and “As a child or adolescent, I often felt that I really liked my mother (father) and wanted her (him) to be happy” (reversed item). Correlations between the two items were 0.65 for mothers and 0.70 for fathers.

RESULTS

Perceived Parental Conditional Regard as a Predictor of Introjection

Table 2 presents results testing the hypothesis that PCR within domains would be associated with domain-specific introjected

Table 2
Correlations of Domain-specific Perceived Maternal and Paternal Conditional Regard With Types of Internalization, Accompanying Affective Processes, and Frequency of Behavior Enactment

Perceived parental conditional regard within domains	Emotion control	Introjection (Feelings of internal compulsion)	Identification/Integration (Experience of choice)	Short-lived satisfaction after success	Shame & guilt after failure	Fluctuations in self-esteem	Frequency of behavior enactment
Mother	Emotion control	0.51**	-0.25*	0.36**	0.31**	0.24**	0.20*
	Prosocial	0.53**	0.00	0.11	0.05	0.26**	0.16*
	Academic	0.15 ⁺	-0.26**	0.22*	0.09	0.38**	-0.06
	Sport	0.20*	-0.05	0.48**	0.17*	0.13	0.19*
Father	Emotion control	0.32*	-0.29**	0.18*	0.06	0.20*	0.32*
	Prosocial	0.38**	-0.07	0.03	0.01	0.15 ⁺	0.15 ⁺
	Academic	0.35**	-0.03	0.22*	0.11	0.25**	0.05
	Sport	0.21*	0.06	0.22*	0.20*	0.17*	0.21*

⁺ $p < .10$. * $p < .05$. ** $p < .01$.

internalization, evidenced by feelings of internal compulsion to enact the behaviors, and accompanied by short-lived satisfaction following enactment, guilt and shame following failure to enact, and fluctuations in self-esteem. Specifically, the table shows the correlations, within domains, of PCR with introjection (i.e., internal compulsion), identified/integrated regulation (i.e., choice), the three theorized corollaries of introjection, as well as the frequency of behavioral enactment. These correlations are presented separately for perceptions of maternal and paternal conditional regard. The primary hypothesis concerned a positive relation between PCR and introjection.

Correlations presented in Table 2 support the hypothesis by indicating that PCR was associated positively with introjected rather than autonomous regulation. First, the correlations between conditional regard and introjected regulation were all positive, with seven of the eight being significant and the eighth being marginally significant ($p < .08$). Second, the three significant correlations between conditional regard and identification/integration (i.e., feelings of choice) were all negative, indicating that conditional regard did not promote identified or integrated regulation but tended to impair it. Third, for the three theorized corollaries of introjection—short-lived satisfaction, guilt/shame, and self-esteem fluctuations—all 24 correlation coefficients were in the predicted direction, with 15 being significant and one other being marginally significant.

Concerning behavioral enactment, five of the eight correlations were significant, and one other was marginally significant. The two non-significant correlations were both in the academic domain, suggesting that there are factors other than conditional parental regard that explain variability in academic behavior among university students.

This pattern of relations is quite consistent with the hypothesis that parental conditional regard can promote internalization of behavioral regulation, but the internalization will take the form of introjection, rather than identification or integration, and will result in controlled regulation. In fact, the strongest correlations were between perceived conditional regard and feelings of internal compulsion, which was the primary indicator of introjected regulation. In general, the hypothesized relations held in all domains.

To ascertain whether gender of the respondent affected the relations, regression analyses were run in which each of the dependent variables was regressed onto perceived conditional

regard, gender, and a term reflecting the interaction between the two. The gender interaction was not significant in any of the equations, thus suggesting that the relations of PCR to the variables indicative of introjection and behavioral enactment were not moderated by gender of the child. This is important because it suggests that the results of Study 1, which used only female reporters, would likely have applied to males as well, at least with respect to the well-being correlates of PCR.

The large number of correlations calculated in this study can account for some significant relations. With 64 correlations examined, three of the ones found to be significant at the .05 level could be a function of chance. However, 44 of the correlations were significant at the .05 level and 29 of those were significant at the .01 level. Thus, although several of these correlations would not have been significant if we had adjusted the alpha level using the Bonferroni procedure, the pattern of results nonetheless constitutes strong support for the hypotheses.

To examine whether there were unique, within-domain relations between perceived PCR and introjected regulation, we ran a series of eight regressions—four for mothers and four for fathers. In each one, a domain-specific introjected regulation score was simultaneously regressed onto PCR for that same domain as well as for the other three domains. The critical issue was whether PCR in the corresponding domain predicted unique variance in domain-specific introjection beyond that contributed by PCR in the other three domains. Results of the analyses for mothers showed that, in all four domains, domain-specific conditional regard had a significant unique effect on introjection in the relevant domain. For fathers, there were unique domain-specific effects in the prosocial and academic domains, but not in the sport and emotion-control domains. Taken together, the analyses confirm the validity of using domain-specific assessments and indicate that no single domain-specific PCR score is a particularly important determinant of introjection across the various domains.

The correlations in Table 2 are consistent with the notion that, to the extent that PCR promotes enactment of parentally desired behaviors, it does so via a stressful introjection process. However, the direct test of the mediation hypothesis was performed using Structural Equation Modeling (SEM) following the procedure outlined by Kenny, Kashy, and Bolger (1998).

Introjection as a Mediator of the Effects of PCR on Behavioral Enactment

To test the hypothesis that introjection (assessed by feelings of internal compulsion) would mediate the positive relation between PCR and behavioral enactment, separate SEM analyses were done for mother and father data within each domain. SEM analyses were selected over regression analysis because SEM allows evaluation of the overall fit of the theoretical model to the data. Because there was no direct relation between PCR and behavioral enactment in the academic domain, mediation analyses were not performed in that domain. In doing these analyses, we used the individual items from the relevant scales as the manifest indicators of latent variables of domain-specific PCR, introjection, and behavior (see Figures 1–3).

Mediation was assessed via the four-step approach outlined by Baron and Kenny (1986) and Kenny et al. (1998). Specifically, we examined whether the following conditions were met: (a) a

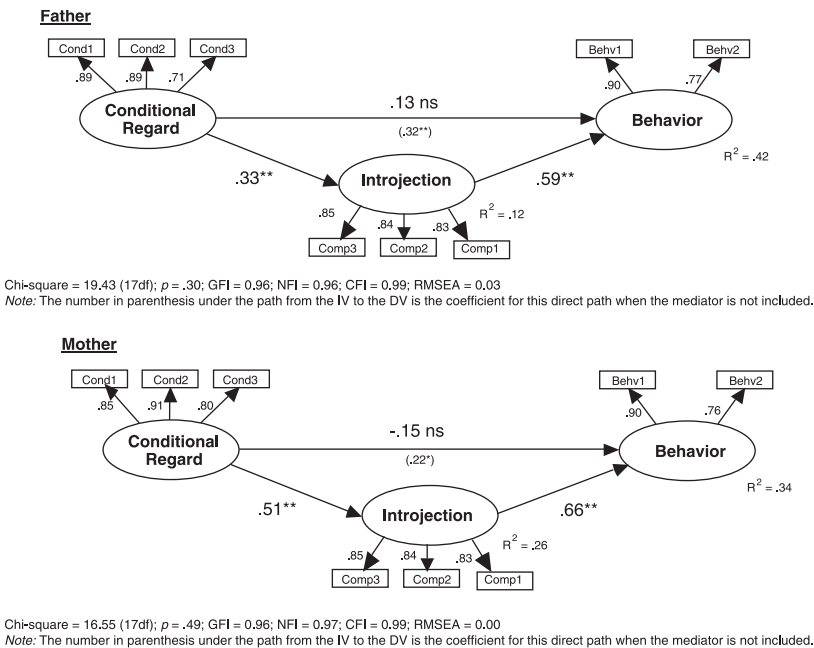


Figure 1
 Introjection as a mediator of the relation between parental conditional regard and behavior enactment: Emotion-control domain.

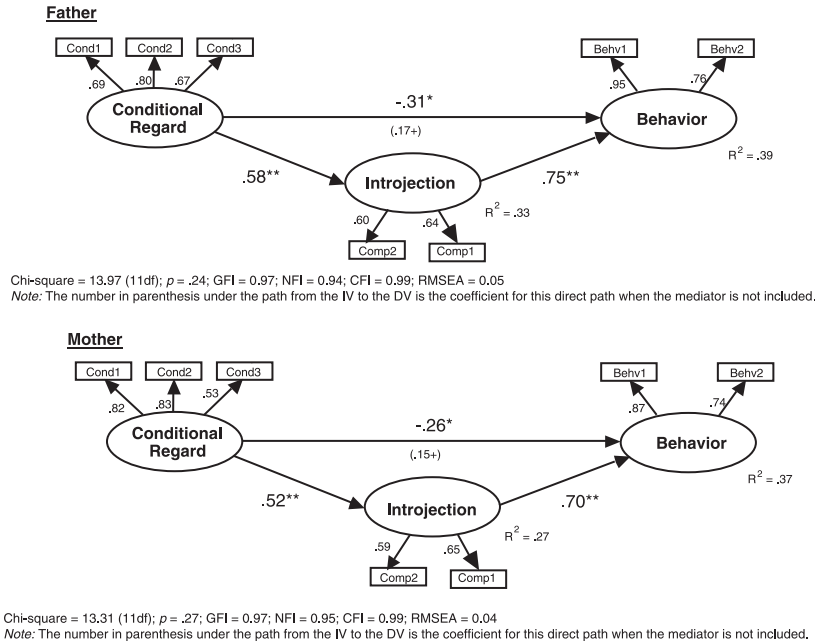
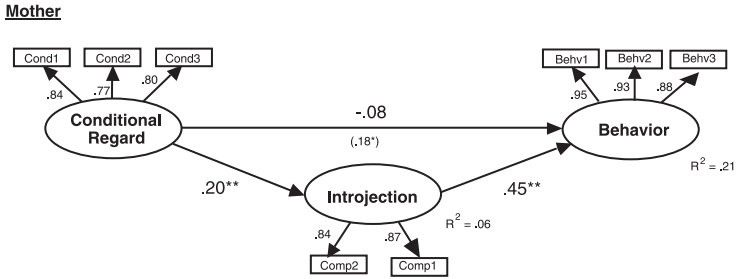


Figure 2

Introjection as a mediator of the relation between parental conditional regard and behavior enactment: Prosocial domain.

significant association between the independent variable (I.V.) and the dependent variable (D.V.); (b) a significant association between the I.V. and the mediator; (c) a significant association between the mediator and the D.V. when the effect of the I.V. on the D.V. is controlled; and (d) the direct association between the I.V. and D.V. disappears or is strongly reduced when the effect of the mediator on the D.V. is controlled for. Each step was performed with SEM. Because we explicitly posited that any positive effect of PCR on behavioral enactment would be mediated by introjection (i.e., feelings of internal compulsion), we expected that PCR would have no significant positive association with behavior when the effects of compulsion were controlled for.

Tests of the mediation hypothesis using SEM with latent variables were done with AMOS 4.0 (Arbuckle & Wothke, 1999). Indices of fit of the model to the data were chi-square, the General Fit Index (GFI), the Normed Fit Index (NFI), the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA). An acceptable fit to the data would be indicated by a nonsignificant chi-



Chi-square = 27.0 (17df); $p = .07$; GFI = 0.94; NFI = 0.95; CFI = 0.98; RMSEA = 0.07
 Note: The number in parenthesis under the path from the IV to the DV is the coefficient for this direct path when the mediator is not included.

Figure 3

Introjection as a mediator of the relation between parental conditional regard and behavior enactment: Sport domain.

square, a RMSEA less than 0.08, and the other fit indices greater than or equal to 0.90 (Browne & Cudeck, 1993; Hoyle, 1995).³

Emotion-control domain. The first step was to evaluate a model that included only a direct path from PCR (the I.V.) to frequency of behavior enactment (the D.V.). The model showed an acceptable fit to the data for both parents. For fathers, $X^2 (4 df) = 2.2, p = .70$; and for mothers, $X^2 (4 df) = 7.96, p = .09$. The GFI, NFI, and CFI indices were greater than 0.90, and the RMSEA indices were less than 0.08. As expected, PCR was positively associated with behavioral enactment for both parents. For fathers, $\beta = 0.32, p < .01$; and for mothers, $\beta = 0.22, p < .05$.

Steps 2 and 3 were performed with a partial-mediation model that included: (a) a direct effect, and (b) an indirect effect in which the impact of PCR on behavior went through introjection. The models for both parents had excellent fits. For fathers: $X^2 (17 df) = 19.43 (p = .30)$, GFI = 0.96, NFI = 0.96, CFI = 0.99, RMSEA = 0.03; for mothers: $X^2 (17 df) = 16.55 (p = .49)$, GFI = 0.96, NFI = 0.97, CFI = 1.00, RMSEA = 0.00. As required by step 2, the path from PCR to introjection was significant for both fathers ($\beta = 0.33, p < .01$) and mothers ($\beta = 0.51, p < .01$). As required by step 3, introjection (the mediator) had a significant effect on behavior when the effect of PCR was controlled for ($\beta = 0.59, p < .01$ for fathers and $\beta = 0.66, p < .01$ for mothers).

3. The means and the correlations for the variables in the SEM analyses can be obtained from the first author.

Step 4 was performed by comparing the coefficients of the path from PCR (the I.V.) to behavioral enactment (the D.V.) in the model that had only the direct effect and the model that had both direct and indirect effects. In this way, we examined the extent to which controlling for the mediating effect of introjection reduced the magnitude of the direct effect of PCR on behavior. In the model that included only a direct effect, the path coefficient between PCR and behavior was 0.32 ($p < .01$) for fathers and 0.22 ($p < .05$) for mothers. In the model that has both direct and indirect effects, the corresponding path coefficient was 0.13 (*ns*) for fathers and -0.15 (*ns*) for mothers. Thus, for fathers, the direct effect was reduced from a significant value of 0.32 to a nonsignificant value of 0.13, and for mothers, the decrease was from a significant positive effect of 0.22 to a nonsignificant negative effect of -0.15 .

The four steps thus suggest that, for both parents, introjection does mediate the effects of perceived conditional regard on behavioral enactment, as the path coefficient fell from significant to nonsignificant for both fathers and mothers when introjection was added to the equation. The models for fathers and mothers are presented separately in Figure 1. The figures show the path coefficient from PCR to behavior both without introjection in the model (shown below the line) and with introjection in the model (shown above the line) As can be seen in the figure, the models for fathers and mothers have acceptable fit indices. Models that had only indirect paths from the I.V. to the D.V. also had good fit indices.

Prosocial domain. At step 1, we examined a model that included only a direct positive effect of conditional parental regard on frequency of behavior enactment. Results showed acceptable fit to the data for both parents. For fathers: X^2 (4 *df*) = 2.44, ($p = .65$); and for mothers: X^2 (4 *df*) = 10 ($p = .18$). The values for the GFI, NFI, and CFI indices were greater than 0.90, and the values of the RMSEA indices were less than 0.07. PCR for both parents was marginally positively associated with behavioral enactment. For fathers, $\beta = 0.17$, $p < .07$; for mothers, $\beta = 0.15$, $p < .08$.

Steps 2 and 3 were examined by means of a partial-mediation model that included the direct and indirect effects. The models for both fathers and mothers had acceptable fits. For fathers: X^2 (11 *df*) = 13.97 ($p = .24$), GFI = 0.97, NFI = 0.94, CFI = 0.99, RMSEA =

0.05; for mothers: X^2 (11 *df*) = 13.31 ($p = .27$), GFI = 0.97, NFI = 0.95, CFI = 0.99, RMSEA = 0.04. As required by step 2, the path from PCR to introjection was significant for both parents (for fathers: $\beta = 0.58$, $p < 0.01$ and for mothers: $\beta = 0.52$, $p < .01$). As specified in step 3, introjection (the mediator) had a significant effect on behavior (the D.V.) when the effect of PCR (the I.V.) was controlled for ($\beta = 0.75$, $p < .01$ for fathers and $\beta = 0.70$, $p < .01$ for mothers).

Step 4 was performed by assessing the extent to which controlling for the mediating effect of introjection reduced the magnitude of the direct path from PCR to behavior. For fathers there was a change from a positive relation ($\beta = 0.17$, $p < .07$) to a negative relation ($\beta = -0.31$, $p < .05$), and for mothers the change was similar (from $\beta = 0.15$, $p < .08$ to $\beta = -0.26$, $p < .05$). Thus, consistent with our hypothesis, the positive relation of PCR to behavior was mediated by introjection. Models that had only indirect paths from the I.V. to the D.V. also had good fit indices.

The reversal of the coefficient from positive to negative for the path from PCR to behavior could represent a suppression effect; however, Tselgov and Henrik (1991) have suggested that this phenomenon could be theoretically meaningful. In fact, the negative relation between the controlling practice of PCR and behavior enactment when introjection is controlled for is entirely consistent with self-determination theory, which suggests that PCR promotes introjection (resulting in greater behavior) but undermines autonomous regulation (resulting in less behavior). Thus, when the contribution to behavior made by introjection is removed, it is quite plausible that the relation between PCR and behavior would change from positive to negative because autonomous (identified/integrated) regulation, which is the other type of motivation that could promote behavior, would have been undermined by the PCR. The fact that the negative relation appeared in three of the five mediational analyses relating PCR to behavior supports the interpretation of this relation having theoretical meaning rather than reflecting a statistical artifact. Furthermore, a similar finding in which the relation between controlling practices and behavior changed from positive to negative when introjection was controlled for, appeared in a study by Kaplan, Roth, and Assor (2002).

Sport domain. As step 1, we examined a model that included only a direct relation of PCR to frequency of behavior enactment. Results

showed an acceptable fit to the data: $X^2 (4 df) = 3.2$, $p = .52$ for fathers, and $X^2 (4 df) = 6.24$, $p = .18$ for mothers. The GFI, NFI, and CFI indices were greater than 0.90; and the values of the RMSEA were less than 0.07. As expected, PCR was positively associated with behavioral enactment for both fathers ($\beta = 0.21$, $p < .05$) and mothers ($\beta = 0.18$, $p < .05$).

Steps 2 and 3 were examined with a partial-mediation model that includes the direct and indirect effects. The fit for mothers was acceptable: $X^2 (17 df) = 27.0$ ($p = .07$), GFI = 0.94, NFI = 0.95, CFI = 0.98, RMSEA = 0.07. For fathers, however, the X^2 and RMSEA values were not acceptable: $X^2 (11 df) = 28.66$ ($p < .01$), GFI = 0.92, NFI = 0.96, CFI = 0.97, RMSEA = 0.10. As required by step 2, the path from PCR to introjection was found to be significant for mothers ($\beta = 0.20$, $p < .05$) and for fathers ($\beta = 0.18$, $p < .05$). As specified in step 3, introjection had a significant relation to behavior when the effect of PCR was controlled for in the analyses for both mothers ($\beta = 0.45$, $p < .01$) and fathers ($\beta = 0.39$, $p < .01$).

Step 4 assessed the extent to which controlling for the mediating effect of introjection reduced the magnitude of the direct positive relation of PCR to behavior. The reduction for mothers was from $\beta = 0.18$ ($p < .05$) to $\beta = -0.08$ (*ns*). Controlling for the mediating effect of introjection essentially eliminated the direct path from PCR to behavior for mothers in this domain, thus suggesting full mediation. For fathers, however, there was no reduction, suggesting that introjection did not mediate the path from fathers' PCR to behavior in the sport domain. For mothers a model that had only an indirect path from the I.V. to the D.V. also had good fit indices.

The mediation model for mothers is presented in Figure 3. As shown in the figure, the model has an acceptable fit. Thus, the data suggest that, in the sport domain, introjection mediated the positive relation of conditional regard to behavior for mothers but not for fathers.

Summary for mediation by introjection. SEM analyses examined whether the positive relations of perceived parental conditional regard to children's enactment of parentally expected behaviors were mediated by introjected regulation (indexed by feelings of internal compulsion). Because there was no direct relation in the academic

domain, that domain was not considered. For the other three domains, five of the six analyses supported the hypothesis that introjected internalization mediates the positive relation of parental conditional regard to behavior.

Parental Conditional Regard and Children's Feelings Toward Parents

We hypothesized that PCR, as experienced by children, would be associated with the children's perceiving their parents as disapproving and feeling resentment toward the parents. It should be noted that the measures of perceived parental disapproval and feeling resentment toward parents were general indicators that did not refer to specific domains. Table 3 presents correlations of domain-specific perceived PCR with these general perceptions and feelings about parents.

Inspection of the table indicates that, overall, the results supported the hypothesis, as 14 of the 16 relevant correlations were statistically significant and one other was marginal. The findings were particularly strong for the emotion-control and academic domains, and only slightly weaker for the sport domain. Results for the prosocial domain were somewhat weaker, especially for fathers. Regression analyses indicated that gender of the child did not

Table 3
Correlations of Domain-Specific Perceived Parental Conditional Regard With Generalized Perceptions of Parental Disapproval and Feelings of Resentment Toward Parents

Perceived parental conditional regard		Perceived parental disapproval	Resentment toward parent
Mother	Emotion control	0.51**	0.44**
	Prosocial	0.31**	0.36**
	Academic	0.38**	0.51**
	Sports	0.38**	0.40**
Father	Emotion control	0.49**	0.46**
	Prosocial	0.19 ⁺	0.13
	Academic	0.53**	0.32**
	Sports	0.34**	0.32**

⁺ $p < .10$. ** $p < .05$. *** $p < .01$.

moderate relations between PCR and children's generalized feelings toward their parents.

Regression analyses were then used to assess the unique contribution of the experience of PCR in specific domains to the prediction of generalized perceived parental disapproval and resentment toward parents. Results of regression analyses performed separately for mothers and fathers indicated that for both parents, although PCR in all domains had positive zero-correlations with children's perceived parental disapproval, only PCR in the emotional-control domain was a significant unique predictor. PCR in the emotion-control domain was also the only significant unique predictor of feeling resentment toward fathers. PCR in the academic domain was the only significant unique predictor of resentment toward mothers. It is interesting to note that regression analyses assessing the contribution of the experience of PCR in specific domains to fluctuations in self esteem, which (like perceived disapproval and resentment) is a general indicator, showed that, for mothers, PCR in the emotion-control domain was the only significant predictor of fluctuations. It appears, then, that the emotion-control domain may be particularly important when it comes to PCR having a unique relation to general affective and well-being indicators.

Felt Disapproval as a Mediator of the Link From PCR to Resentment Toward Parents

Finally, we expected that the resentment children had toward their parents resulting from their perceiving their parents to have used conditional regard would be mediated by the children's perceptions of generalized disapproval from their parents. This mediation hypothesis was tested with the same approach used to examine the hypothesis concerning the mediating role of introjection in the relation of PCR to behavior. The results of the analyses are presented in Figures 4 and 5. To eliminate redundancies, the figures present only SEM analyses in domains in which domain-specific PCR was found to have a significant unique relation to perceived parental disapproval or to resentment toward parents. For mothers there were unique relations of conditional regard in the academic and emotion-control domains with either felt disapproval or resentment toward mothers, whereas for fathers the emotion-control domain had a unique relation with both felt disapproval and

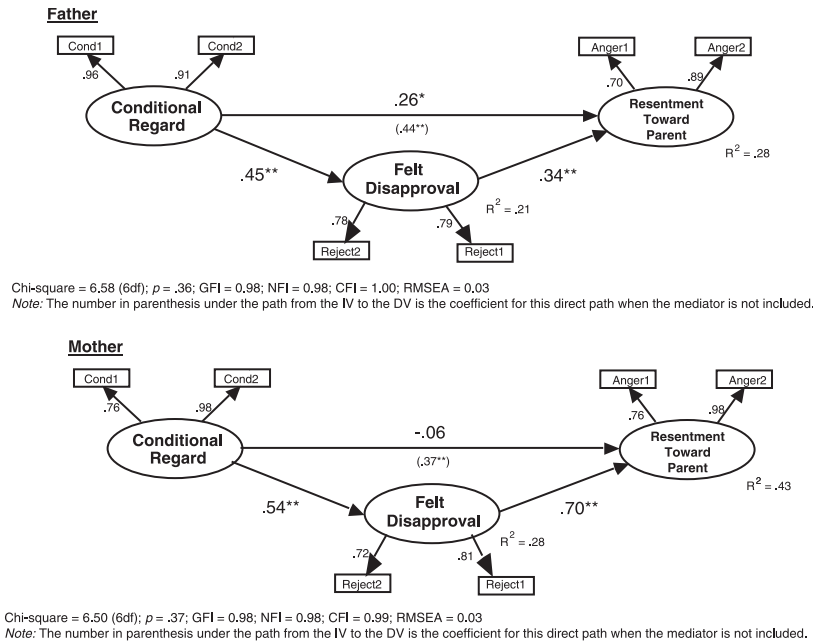


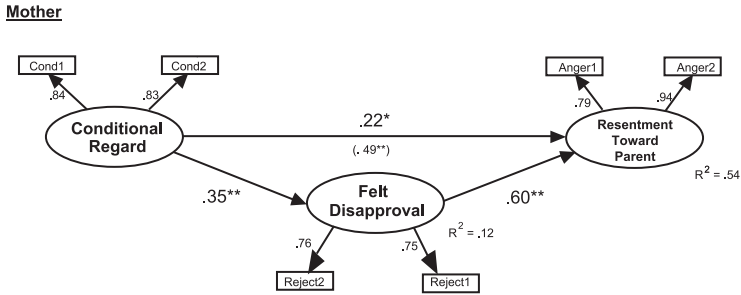
Figure 4

Perceived parental disapproval as a mediator of the relations between parents' conditional regard and the children's resentment toward parents: Emotion-control domain.

resentment toward fathers. As a result, three analyses are presented: two domains for mothers and one domain for fathers. Figure 4 shows the emotional-control domain for both mothers and fathers; Figure 5 focuses on the academic domain for mothers. It is noteworthy that results of analyses in the prosocial and the sports domains were quite consistent with the ones reported.⁴

Using the four-step procedure (Kenny et al., 1998), we first tested a model that included only a direct path from PCR (the I.V.) to resentment of parents (the D.V.). Results showed acceptable fit to the data in the analyses (all the X^2 tests were nonsignificant, the GFI, NFI, and CFI all had values greater than 0.90 and the RMSEA indices were less than 0.04). As expected, CPR was

4. Because there was no direct relation between perceived PCR and resentment toward fathers in the prosocial domain, this was not included in the mediation analyses.



Chi-square = 4.96 (6df); $p = .55$; GFI = 0.99; NFI = 0.98; CFI = 1.00; RMSEA = 0.00

Note: The number in parenthesis under the path from the IV to the DV is the coefficient for this direct path when the mediator is not included.

Figure 5

Perceived parental disapproval as a mediator of the relations between parents' conditional regard and the children's resentment toward parents: Academic domain.

positively and significantly associated with resentment toward fathers and mothers in all three models.

Steps 2 and 3 were examined by means of a partial-mediation model that included both the direct and indirect effects. There was an acceptable fit of the models in all three analyses: no X^2 was significant; all GFI, NFI, and CFI values were greater than or equal to 0.90; and all RMSEA values were less than 0.05. Further, as shown in Figure 4, in all analyses, PCR was significantly associated with perceived parental disapproval (the mediator), and perceived disapproval was significantly associated with negative feelings toward parents when the effect of PCR was held constant.

Step 4 was performed by examining the extent to which the magnitude of the direct relation of PCR and resentment toward parents was reduced by controlling for the mediating effect of perceived disapproval (i.e., the indirect path). In all three models, the procedure of controlling for parental disapproval led to a sizeable reduction in the direct association between PCR and resentment. In the emotion-control domain, for mothers, the direct influence was reduced from $\beta = 0.37$ ($p < .01$) to $\beta = -0.06$ (*ns*), suggesting full mediation. In the other two cases, although the reduction was meaningful, the direct path was still significant, thus suggesting only partial mediation. Specifically, in the emotion-control domain, for fathers, the relation was reduced from $\beta = 0.44$ ($p < .01$) to $\beta = 0.26$ ($p < 0.5$), and in the academic domain, for

mothers, the relation changed from $\beta = 0.49$ ($p < .01$) to $\beta = 0.22$ ($p < .05$). Thus, in one case, the analyses supported a full-mediation model, and in two cases, a partial-mediation model. Figures 4 and 5 show that all three models had satisfactory fit indices.⁵

To summarize, the data provided strong support for the hypothesis that children's experience of their parents as being conditionally accepting results in general feelings of being disapproved of, which, in turn, evoke dislike and resentment toward the parents.

BRIEF DISCUSSION

In general, the results of Study 2 are consistent with the self-determination theory proposition that the use of conditional regard as a socializing technique leads children to introject behavioral regulations and, in turn, to enact the behaviors; however, the cost for this is negative well-being outcomes for the children and poor parent-child relationships. In all four domains, children's perceptions of their parents as being conditionally affectionate were associated with introjection, as evidenced by feelings of internal compulsion to enact the target behaviors. Further, PCR was associated with behavioral enactment in the emotional-control, prosocial, and sports domains, and results of five mediation analyses supported the hypothesis that the positive relations of PCR to behavior were mediated by introjection. In addition, perceived PCR was related to children's reports of short-lived satisfaction following successful enactment, shame and guilt after failures to enact the target behaviors, and fluctuations in self-esteem, as well as feeling disapproved of by and resentful toward parents. Thus, the analyses support the view that the positive behavioral effects of PCR are attained at the significant expense of negative emotional experiences. Additional mediation analyses suggested that the relations of parents' use of conditional regard to their children feeling resentful

5. In the other four models tested, controlling for parental disapproval led to a sizeable reduction in the association between PCR and negative feelings, from a significant positive relation to a nonsignificant relation approximating 0.00. Thus, the results for mothers in the prosocial domain [change from $\beta = 0.33$ ($p < .05$) to $\beta = 0.07$ (*ns*)] and the sport domain [change from $\beta = 0.33$ ($p < .05$) to $\beta = 0.10$ (*ns*)] suggest full mediation. The results for fathers in the academic domain [change from $\beta = 0.26$ ($p < .05$) to $\beta = 0.02$ (*ns*)] and the sport domain [change from $\beta = 0.27$ ($p < .05$) to $\beta = 0.12$ (*ns*)] also suggest full mediation.

toward them was mediated by the children's feeling disapproved of by the parents.

The one domain where behavioral enactment was not related to parents' conditional regard was the academic domain, and it is probable that the extent to which college students engage in academic work is determined primarily by other factors such as variations in assignments and extracurricular demands. It is noteworthy, however, that PCR in the academic domain did relate to negative affective consequences in this study as well as Study 1.

Emotion control was the domain where the relations between PCR and the variables of internal compulsion, low identified/integrated internalization, and other markers of introjection were generally strongest and most consistent. It is interesting that this is the one domain where enactment involves stopping oneself from doing something that is internally prompted, whereas in the other domains, enactment involves merely overcoming inertia in order to do the behaviors. Thus, emotion control may create a strong internal conflict between the desire to express universal emotions (Ekman, 1984) and the demand by parents not to. So it is not surprising that attempts to withhold emotional expression may be accomplished most readily by the rigid structures of introjection and thus result in feelings of resentment toward the socializing agents.

GENERAL DISCUSSION

The results of two studies suggest that experiences of being socialized with parental conditional regard are associated with a variety of negative psychological outcomes. As such, they confirm and extend the pattern of results suggested by the studies reviewed earlier. The studies of parental conditional regard focused primarily on withdrawal of love. The negative relation in Study 1 between PCR and level of self-esteem confirms Coopersmith's (1967) preliminary finding of such a relation. Similarly, the positive association found in Study 2 between PCR and feelings of internal compulsion to behave and the role of introjection as a mediator of the relation between PCR and behavior supports Hoffman's (1970) suggestion that prosocial behavior resulting from love withdrawal tends to be rigid and rule bound. The findings of both current studies are also consistent with Sears, Maccoby, and Levin's (1957) suggestion that the use of love withdrawal for promoting prosocial

behavior might have a negative affective impact, and with Aronfreed's (1968) analysis of anxiety being the mechanism by which conditional regard teaches children to regulate their behavior. Although Aronfreed had not indicated that there might be negative affective consequences associated with the anxiety, we found PCR to be associated with inner conflict and the poor well-being indices that one would expect to be related to anxiety. Further, the results of the two current studies are also consistent with the social psychological studies showing that conditional acceptance among peers was associated with precarious self-esteem and defensiveness (Baldwin & Sinclair, 1996; Schimel et al., 2001).

The present research extends the scope of the earlier investigations in several ways. First, it demonstrates that the experience of conditional parental regard in specific domains other than prosocial or moral behavior is associated with negative psychological and relationship consequences. Second, it provides evidence that the self-regulatory process by which perceived PCR is likely to promote behavioral outcomes is the emotionally stressful, internally controlling process of introjected regulation. Third, the results suggest that the practice of PCR may be self-replicating, leading to long-term negative consequences across generations within families.

The empirical results of past and present studies showing negative consequences of conditional regard can now be readily integrated using two distinctions made within SDT: Controlling versus autonomy-supportive parenting and introjected versus identified/integrated types of internalization. Specifically, controlling parenting practices such as conditional regard are theorized to promote introjected internalization (evidenced as internal compulsion leading to rigid behavior), whereas autonomy-supportive parenting is expected to promote more integrated internalization, which involves greater flexibility and more positive affective accompaniments (Deci et al., 1994; Grolnick & Ryan, 1989).

An autonomy-supportive approach to socializing involves genuine attempts to take the children's perspective, acknowledging their feelings about the target behaviors or attributes, and, when setting limits with respect to expected behaviors, providing a meaningful rationale and minimizing the use of controlling language and pressuring contingencies (Grolnick et al., 1997). The difficulty for parents is most likely to occur when the children behave in ways that are inconsistent with the parents' values and expectations. The

parents will, in all likelihood, feel disappointment, perhaps becoming even angry or distraught. The challenge for parents at those times is to relate to the children without withdrawing love, without conveying that the children are unlovable, without implying that the children's are less worthy for not enacting the desired behaviors or attributes. The parents may convey disappointment, but the important message to convey seems to be that they are disappointed with the children's actions, not with the children as people—that they still love the children, though not the behaviors. In this way, parents can remain autonomy supportive in addressing the problem at hand. As with feedback on other aspects of children's behavior, it is important to focus on the behavior rather than its implications for the children's enduring characteristics and general worth (e.g., Kamins and Dweck, 1999).

Children's failure to perform behaviors their parents desire can also serve the purpose of alerting the parents that the children may not fully comprehend the value of the behavior. At appropriate times, the parents can then demonstrate the value of the behaviors through their own actions, as well as through explanations (Assor, Roth, & Deci, 2000). Throughout all of this, it is important for the parents to try to understand—to take genuine interest in—the child's perspective as the starting point for problem solving. There may well be some reason the child did not respond as the parents would have wanted, including an emotional or relationship problem the child is experiencing. In the best familial relationships, the parents would be able to help the child deal with the problem, but doing so would require understanding and relating to the child's perspective.

Advocates of the use of conditional regard as a socializing strategy can take heart in the fact that the present results show the practice to be fairly reliable in prompting long-term display of the target behaviors. They might then argue that the process of introjection is simply a step toward integration, which would have positive affective correlates, so the negative affective consequences associated with introjection are temporary costs worth paying. The results of the present studies provide no support for that position, however. Specifically, participants in Study 2 were university students who displayed the negative correlates of introjection several years after the parental-conditional-regard experiences they were recalling from their years as children and adolescents. At the time of

the study, PCR was negatively, rather than positively, associated with the experience of choice (the indicator of integration), which suggests that PCR has not promoted integration over the longer term. Moreover, the mediation analyses suggested that when introjection (indexed by internal compulsion) was controlled, PCR typically did not lead to any behavioral enactment, and there was some indication that PCR might be negatively related to behavioral enactment when it is not accompanied by introjection. Finally, the target participants in Study 1 were mothers of college students, thus suggesting that the negative effects of PCR persisted into middle adulthood for those individuals.

There are several limitations to the current studies. First, most of the analyses in the studies were based on correlations among cross-sectional self-reports. This is problematic in that it raises the possibility that the relations are in part a function of method variance. Fortunately, the finding from Study 1 which relates mothers' perceptions of the grandparents' use of conditional regard to the granddaughters' perceptions of the mothers' using conditional regard provides important evidence that the reports of children about their parents using conditional regard does have a real impact on the children that can be seen by observers. Although children's experiences and perceptions of their parents are important antecedents of the children's behavior and well-being, additional studies that use multiple reporters and behavioral observations would be very helpful in confirming the present results. Second, the cross-sectional data do not allow causal interpretations. It is therefore important to test the hypotheses with prospective longitudinal research. Third, the perceptions of PCR were retrospective, referring to the parents' behavior when the respondents were adolescents or children, and there is the possibility that these remembered experiences were influenced by factors that have intervened in recent years. Fourth, the data in Study 1 were all obtained from women. However, the analysis showing no gender differences in Study 2 gives us confidence that the results would have been similar for males if they had been included in the first study. Finally, as already noted, the multiple tests performed in Study 2 increased the likelihood of randomly obtained significant results. Given that the pattern of results is highly consistent with the hypotheses, the findings clearly do not appear to be random. Nonetheless, further replication is desirable.

Overall, the two studies showed that although perceived parental conditional regard was related to behavioral enactment in several domains, it was also associated with negative affective consequences such as feelings of internal compulsion, short-lived satisfaction, shame after failure, fluctuations in self-esteem, poor coping skills, low self-worth, a sense of being disapproved of by parents, and resentment toward parents. Further, it seems that these negative consequences may be passed from generation to generation, as Study 1 indicated that those mothers who perceived their parents as providing conditional attention and acceptance were themselves perceived by their daughters to use the same socializing approach. Together, the results suggest that although the use of conditional regard may be an alluring socialization approach, the negative psychological and family-relations consequences associated with it argue for the use of a more autonomy-supportive approach.

REFERENCES

- Amabile, T. M., DeJong, W., & Lepper, M. (1976). Effects of externally imposed deadlines on subsequent intrinsic motivation. *Journal of Personality and Social Psychology*, *34*, 92–98.
- Arbuckle, J. L., & Wothke, W. (1999). *Amos users' guide version 4.0*. Chicago: Small Waters Co.
- Aronfreed, J. (1968). *Conduct and conscience: The socialization of internalized control over behavior*. New York: Academic Press.
- Assor, A. (1995, October). *Extreme over-rating of academic competence in children: Problem or asset?* Paper presented at the 25th convention of the Israeli Psychological Association, Ben Gurion University, Beer-Sheva, Israel.
- Assor, A., Roth, G., Cohen, S., & Avraham, Y. (1997). *Conditional parental affection and its consequences*. Paper presented at the 26th convention of the Israeli Psychological Association. Tel Aviv, Israel.
- Assor, A., Roth, G., & Deci, E. L. (2000, April). *Self-regulation processes mediating the effects of conditional parental regard and intrinsic value demonstration on academic and prosocial behavior*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.
- Azjen, I. (1987). Attitudes, traits, and actions: Dispositional prediction of behavior in personality and social psychology. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 20, pp. 1–63). New York: Academic Press.
- Baldwin, M. W. (1994). Primed relational schemas as a source of self-evaluative reactions. *Journal of Social and Clinical Psychology*, *13*, 380–403.

- Baldwin, M. W., Carrell, S. E., & Lopez, D. F. (1990). Priming relationship schemas: My advisor and the Pope are watching me from the back of my mind. *Journal of Experimental Social Psychology*, **26**, 435–454.
- Baldwin, M. W., & Sinclair, L. (1996). Self-esteem and “If... Then” contingencies of interpersonal acceptance. *Journal of Personality and Social Psychology*, **71**, 1130–1141.
- Barber, K. B. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development*, **67**, 3296–3319.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, **51**, 1173–1182.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136–162). Thousand Oaks, CA: Sage.
- Chapman, M., & Zahn-Waxler, C. (1982). Young children’s compliance and noncompliance to parental discipline in a natural setting. *International Journal of Behavioral Development*, **5**, 81–94.
- Coopersmith, J. (1967). *The antecedents of self-esteem*. San Francisco: W. H. Freeman.
- Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review*, **108**, 593–623.
- Deci, E. L., & Cascio, W. F. (1972, April). *Changes in intrinsic motivation as a function of negative feedback and threats*. Presented at the Eastern Psychological Association, Boston.
- Deci, E. L., Eghrari, H., Patrick, B. C., & Leone, D. R. (1994). Facilitating internalization: The self-determination theory perspective. *Journal of Personality*, **62**, 119–142.
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, **125**, 627–668.
- Deci, E. L., & Ryan, R. M. (1985a). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality*, **19**, 109–134.
- Deci, E. L., & Ryan, R. M. (1985b). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (1991). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), *Nebraska symposium on motivation: Vol. 38. Perspectives on motivation* (pp. 237–288). Lincoln, NE: University of Nebraska Press.
- Deci, E. L., & Ryan, R. M. (1995). Human autonomy: The basis for true self-esteem. In M. Kernis (Ed.), *Efficacy, agency, and self-esteem* (pp. 31–49). New York: Plenum.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, **11**, 227–268.
- Ekman, P. (1984). Expression and the nature of emotion. In K. Scherer & P. Ekman (Eds.), *Approaches to emotion* (pp. 329–343). Hillsdale, NJ: Erlbaum.

- Gewirtz, J. L., & Pelaez-Nogueras, M. (1991). Proximal mechanisms underlying the acquisition of moral behavior patterns. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development: Vol. 1, Theory* (pp. 153–182). Hillsdale, NJ: Erlbaum.
- Grolnick, W. S., Deci, E. L., & Ryan, R. M. (1997). Internalization within the family: The self-determination theory perspective. In J. E. Grusec & L. Kuczynski (Eds.), *Parenting and children's internalization of values: A handbook of contemporary theory* (pp. 135–161). New York: Wiley.
- Grolnick, W. S., & Ryan, R. M. (1989). Parent styles associated with children's self-regulation and competence in school. *Journal of Educational Psychology*, **81**, 143–154.
- Harter, S. (1993). Causes and consequences of low self-esteem in children and adolescents. In R. G. Baumeister (Ed.), *Self esteem: The puzzle of low self-regard* (pp. 87–116). New York: Plenum.
- Hoffman, M. L. (1970). Moral development. In P. H. Mussen (Ed.), *Carmichael's manual of child psychology* (Vol. 2, pp. 261–360). New York: Wiley.
- Hoyle, R. H. (1995). The structural equation modeling approach: Basic concepts and fundamental issues. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues and applications* (pp. 1–15). Thousand Oaks, CA: Sage.
- Kamins, M. L., & Dweck, C. S. (1999). Person versus process praise and criticism: Implications for contingent self-worth and coping. *Developmental Psychology*, **35**, 835–847.
- Kaplan, H., Roth, G., & Assor, A. (2002, June). Is autonomy really important for students? Paper presented at the 8th international workshop on achievement and task motivation, Moscow, Russia.
- Kenny, D. A., Kashy, D. A., & Bolger, N. (1998). Data analysis in social psychology. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., Vol. 1, pp. 233–265). Boston, MA: McGraw-Hill.
- Kernis, M. H., Brown, A. C., & Brody, G. H. (1998). Fragile self-esteem in children and its associations with perceived patterns of parent-child communication. *Journal of Personality*, **68**, 225–252.
- Kernis, M. H., Paradise, A. W., Whitaker, D., Wheatman, S., & Goldman, B. (2000). Master of one's psychological domain?: Not likely if one's self-esteem is unstable. *Personality and Social Psychology Bulletin*, **26**, 1297–1305.
- Kernis, M. H., & Waschull, S. B. (1995). The interactive roles of stability and level of self-esteem: Research and theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 27, pp. 93–141). San Diego, CA: Academic Press.
- Koestner, R., Losier, G. F., Vallerand, R. J., & Carducci, D. (1996). Identified and introjected forms of political internalization: Extending self-determination theory. *Journal of Personality and Social Psychology*, **70**, 1025–1036.
- Koestner, R., Ryan, R. M., Bernieri, F., & Holt, K. (1984). Setting limits on children's behavior: The differential effects of controlling versus informational styles on intrinsic motivation and creativity. *Journal of Personality*, **52**, 233–248.

- Leary, M. R., & Downs, D. L. (1995). Interpersonal functions of of the self-esteem motive: The self-esteem system as a sociometer. In M. Kernis (Ed.), *Efficacy, agency, and self-esteem* (pp. 123–144). New York: Plenum.
- Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self esteem: Sociometer theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 32, pp. 1–62). San Diego: CA: Academic Press.
- Mead, G. H. (1934). *Mind, self and society*. Chicago: University of Chicago Press.
- McDowell, J. J. (1988). Matching theory in natural environments. *The Behavior Analyst*, **11**, 95–109.
- Miller, A. (1981). *Prisoners of childhood*. New York: Basic Books.
- Orr, E., Assor, A., & Priel, B. (1989). Maternal attitudes and children's self perception in three Israeli social contexts. *Genetic and Social Psychology Monographs*, **115**, 5–24.
- Rogers, C. (1951). *Client centered therapy*. Boston: Houghton-Mifflin.
- Rosenbaum, M. (1980). A schedule for assessing self-control behaviors: Preliminary findings. *Behavior Therapy*, **11**, 109–121.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rosenberg, M. (1979). *Conceiving the self*. New York: Basic Books.
- Rosenberg, M. (1986). Self-concept from middle childhood through adolescence. In J. Suls & A. G. Greenwald (Eds.), *Psychological perspectives on the self* (Vol. 3, pp. 107–135). Hillsdale, NJ: Erlbaum.
- Roth, G., & Assor, A. (2002, June). *Autonomy supporting and suppressing parental practices as predictors of flexible versus rigid emotion-regulation styles in children*. Paper presented at the 8th international workshop on achievement and task motivation, Moscow, Russia.
- Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. *Journal of Personality and Social Psychology*, **43**, 450–461.
- Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, **57**, 749–761.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, **55**, 68–78.
- Ryan, R. M., Rigby, S., & King, K. (1993). Two types of religious internalization and their relations to religious orientations and mental health. *Journal of Personality and Social Psychology*, **65**, 586–596.
- Schaefer, E. S. (1965). Children's reports of parental behavior: An inventory. *Child Development*, **36**, 413–424.
- Schaefer, E. S., & Bell, R. Q. (1958). Development of a Parental Attitude Research Instrument. *Child Development*, **29**, 339–361.
- Schimmel, J., Arndt, J., Pyzczynski, T., & Greenberg, J. (2001). Being accepted for who we are: Evidence that social validation of the intrinsic self reduces general defensiveness. *Journal of Personality and Social Psychology*, **80**, 35–52.
- Schludermann, S. M., & Schluderman, E. H. (1979). *Preliminary notes on the methodological properties of "Children's Report of Parent Behavior*

- Inventory'' (CRPBI)*. Unpublished manuscript, University of Manitoba, Canada.
- Schludermann, S. M., & Schludermann, E. H. (1983). Sociocultural change and adolescents' perceptions of parent behavior. *Developmental Psychology*, **19**, 674–685.
- Sears, R. R., Maccoby, E., & Levin, H. (1957). *Patterns of child rearing*. Evanston, IL: Row, Peterson.
- Tangney, J. P., Wagner, P. E., Barlow, D. H., Marschall, D. E., & Gramzow, R. (1996). The relation of shame and guilt to constructive vs. destructive responses to anger across the life span. *Journal of Personality and Social Psychology*, **70**, 797–809.
- Tselgov, J., & Henik, A. (1991). Suppression situations in psychological research: Definitions, implications, and applications. *Psychological Bulletin*, **109**, 524–536.
- Williams, G. C., & Deci, E. L. (1996). Internalization of biopsychosocial values by medical students: A test of self-determination theory. *Journal of Personality and Social Psychology*, **70**, 767–779.
- Williams, G. C., Grow, V. M., Freedman, Z., Ryan, R. M., & Deci, E. L. (1996). Motivational predictors of weight loss and weight-loss maintenance. *Journal of Personality and Social Psychology*, **70**, 115–126.