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# Perceived Maternal Control and Responsiveness to Distress as Predictors of Young Adults' Empathic Responses

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## Abstract

Two studies examined the relations between young adults' empathic responding and their perceptions of two maternal behaviors. As predicted from self-determination theory, perceived maternal control had unique negative associations with empathic support of one's romantic partner (indicated by both self-reports and partner reports) and with empathic concern for others in general, and a unique positive association with personal distress in response to others in need. Perceived maternal responsiveness to distress was a unique positive predictor of empathic concern. The findings suggest that the experience of one's mother as controlling is likely to interfere with one's empathic responding and that high levels of perceived maternal responsiveness do not cancel the negative effects of the experience of controlling parenting. Furthermore, the findings suggest that high levels of perceived maternal responsiveness might exacerbate the negative relations between perceived maternal control and personal distress in response to others in need.

## Keywords

empathy, self-determination theory, parental control, parental responsiveness to child distress, romantic relationships

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Empathic responding to others' needs has long been considered an important aspect of optimal psychosocial development (Eisenberg, Fabes, & Spinrad, 2006; Hoffman, 2000). The aim of the present research was to examine young adults' perceptions of two maternal attributes—controlling behavior and responsiveness to distress—as predictors of empathic responses. Theorists such as Batson (1991), Hoffman (2000), and Eisenberg (Eisenberg et al., 2006) have assumed that prosocial and moral behaviors are rooted in the capacity to respond emotionally to another person's distress (which Eisenberg, 2000, defined as “empathy”). An emotional response to another person's negative emotional state may take the form of *empathic concern*: other-oriented feelings of compassion and concern (Davis, 1996; also defined as “sympathy” by Eisenberg, 2000), as well as the aversive form of *personal distress*: self-oriented feelings of discomfort, anxiety, and unease as a result of sharing the other's negative emotional experience (e.g., Davis, 1996).

## Parental Attributes Predicting Empathic Responding

Given the importance of empathic responding for psychosocial development, there has been a long-standing interest in the origins of individual differences in emotional and behavioral responses to others in need (e.g., Zahn-Waxler & Radke-Yarrow, 1990). The quality of care that a person

receives from his or her parents has been recognized as a primary environmental influence on children's development of empathic tendencies (e.g., Eisenberg et al., 2006; Zahn-Waxler & Radke-Yarrow, 1990).

A central dimension of parenting that was shown to influence emotional and behavioral empathic responding is *maternal relational support*, defined as an affectionate, nurturing, responsive, and accepting maternal rearing style (Eisenberg, 2000; S. Kim & Rohner, 2003; Soenens, Duriez, Vansteenkiste, & Goossens, 2007). Although the general construct of maternal relational support was found to be useful in predicting prosocial outcomes, various authors have suggested that it is important to distinguish between different aspects of relational support (e.g., Bugental, 2000; Davidov & Grusec, 2006). Specifically, these researchers have suggested that distinct aspects of parental relational support, such as parental responsiveness to distress and parental warmth, may serve different functions and therefore have different outcomes in terms of socioemotional development.

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In line with this view, a recent study by Davidov and Grusec (2006) showed that one aspect of maternal relational support that is particularly predictive of empathic tendencies and prosocial behaviors in young children is *mothers' responsiveness to their children's distress*. The researchers demonstrated that it is the mothers' capacity to respond to their children's distress in a sensitive, tolerant, and distress-reducing way that most contributes to the children's empathic and prosocial responding. In contrast, maternal warmth (defined as expression of positive affect, affection, and admiration toward the child) was not found to be a significant predictor of empathic and prosocial responding. Importantly, Davidov and Grusec also demonstrated that mothers' responsiveness to children's distress promoted children's tendency to experience compassion for others in distress without becoming overly distressed themselves. Similarly, Roberts (1999) found that mothers' responsiveness to children's distress predicted boys' prosocial behavior at preschool (Roberts, 1999), and these effects were detected also when the effect of maternal warmth was controlled for.

In sum, although many studies on empathy development addressed the role of the broader construct of maternal relational support, only a few studies addressed the specific role of responsiveness to distress. The present research, therefore, focused on this aspect of parenting but unlike the former studies explored these associations in relation to young adults' empathic responding.

Another central dimension of parenting that did not receive much attention in research on the antecedents of empathic responding is *parental autonomy support versus parental control* (Assor, Cohen-Malayev, Kaplan, & Friedman, 2005; Grolnick & Ryan, 1989). Self-determination theory (SDT; Deci & Ryan, 1985; Ryan & Deci, 2000) proposes that aside from the need for relational support, human beings have a basic need to feel autonomous—that is, to be free from coercion and be able to determine and organize one's goals and actions. In the context of parenting, autonomy support involves the tendency to take the child's perspective, to provide choice and encourage self-initiation, and to provide rationale for expected child behaviors.

Conversely, controlling parenting involves behaviors aimed at controlling children's actions, thoughts, and feelings (Assor, Kaplan, & Roth, 2002; Assor, Kaplan, Kanat-Maymon, & Roth, 2005; Ryan & Deci, 2000). These include direct attempts to change the child's behaviors or opinions by continually giving directives, imposing one's will on the child, or not allowing the child to voice his or her opinions (Assor et al., 2002; Assor, Kaplan, et al., 2005), as well as more implicit forms of control such as using conditional parental regard to promote the child's compliance (Assor & Roth, 2005; Assor, Roth, & Deci, 2004; Roth, 2008). The construct of parental control is somewhat similar to the notion of psychological control (e.g., Barber, Stolz, & Olsen, 2005) but includes a wider range of behaviors<sup>1</sup> as well

as a direct theoretical link to the notion of autonomy as a need.

Based on SDT, we propose that the capacity and inclination to respond empathically to others in need can be enhanced by parental autonomy support and undermined by parental control. Autonomy support is posited to promote empathic responses because the satisfaction of the need for autonomy is likely to promote positive feelings and sense of well being, as well as make people less preoccupied with their own difficulties, hence enabling people to be more open and responsive to others' needs (Gagne, 2003; Ryan & Deci, 2000). In contrast, frustration of one's need for autonomy, particularly by one's parents, is likely to increase feelings of anxiety and anger as well as promote preoccupation with one's own frustrations and poor coping abilities (e.g., Assor et al., 2004; Deci & Ryan, 2000). This in turn may lead to feelings of personal distress when faced with others' distress and perhaps reduce the inclination to respond empathically to others.

Consistent with this view, studies have shown that prosocial behaviors are enhanced by feelings of volition and undermined by feelings of control or obligation (Sobus, 1995; Stukas, Snyder & Clary, 1999). Moreover, at least one form of parental control—psychological control—was found to be associated with antisocial adolescent behavior and externalizing behavior problems in youth (e.g., Barber et al., 2005; Soucy & Larose, 2000). In addition, studies of specific types of parental control—namely, psychological control, conditional regard, and directly controlling behaviors—have shown that these constructs were related to negative affect, low and unstable self esteem, poor coping skills, anxiety, anger, depression, maladaptive perfectionism, and withdrawn behavior (e.g., Assor et al., 2004; Assor, Kaplan, et al., 2005; Barber, 1996; Barber et al., 2005; Soenens, Vansteenkiste, Duriez, Luytten, & Goossens, 2005; Soucy & Larose, 2000), all of which may enhance personal distress and impede the ability and inclination to respond empathically to others.

However, presently, only few studies have conducted a direct examination of the link between parental autonomy support or parental control and empathy related responding. Specifically, studies by Gagne (2003) and by Roth (2008) have confirmed the hypothesis that parental autonomy support is associated with empathic concern toward needy others and prosocial behaviors. However, regarding parental control, the picture is less clear. Roth (2008) found that parental conditional regard was negatively related to self-reported empathic concern. Yet, Soenens et al. (2007) did not find an association between psychological control and self-reported empathic concern. Importantly, none of these studies examined the hypothesis that controlling parenting would be associated with personal distress when faced with others' difficulties. Indirect support for this later prediction was found by Assor et al. (2004), who reported that perceived conditional regard was associated with stressful feelings of internal compulsion and pressure in relation to helping.

Given these inconsistent findings, one major objective of the present study was to examine the relations between perceived control by mothers and offspring's empathy-related responses. The proposed study differs from the previous three studies examining these relations in two ways. First, in our research we focused on personal distress in addition to empathic concern as two possible emotional outcomes of parental control. Second, we used measures of empathic responses that are based not only on self-reports but also on the reports of the recipients of empathy.

### **The Interactive Effect of Parental Control and Parental Responsiveness**

Unlike previous studies, the present research also examined the possibility that the negative association between maternal control and empathic responding would depend on the level of perceived maternal responsiveness to distress. Consistent with this view, Gray and Steinberg (1999) found that high levels of parental involvement appeared to reduce the negative effect of low levels of autonomy granting on adolescents' anxiety and depression. Although this finding was not replicated in a study by Petit and Laird (2002), the latter researchers did find that parental psychological control was associated with adolescent delinquent behavior only when parental involvement was low. The results of the preceding two studies indicate that it is possible that maternal control would show a less negative association or no association with offspring's empathic responding when accompanied by relatively high levels of perceived maternal responsiveness.

In contrast, SDT suggests that maternal responsiveness to distress would not cancel, perhaps not even reduce, the negative effects of maternal control because the need for autonomy is fundamental, and the frustration of this basic need would always have negative effects on human growth, socioemotional functioning, and well-being (Ryan, 1995). As a result, controlling maternal behavior was expected to be negatively associated with empathic responding and positively associated with personal distress when mothers are perceived to be highly responsive to offspring's distress.

Furthermore, recent research and theorizing within SDT pertaining to need supports within families (Assor, Cohen-Melayev, et al., 2005; Assor et al., 2004; Deci, 2006, 2007; Roth, Assor, Niemiec, Ryan & Deci, 2009) suggests that parental control might have more negative associations with optimal socioemotional outcomes in offspring when it is accompanied by high (rather than low) levels of parental responsiveness and warmth. This is because when parental control is accompanied by parental responsiveness, it is experienced as particularly difficult to resist, and this experience in turn is likely to create feelings of anger, anxiety, and entrapment, as well as preoccupation with one's self-worth

(Assor & Tal, 2006) and a sense of internal compulsion to accept parents' demands because the parent is so responsive (e.g., Assor et al., 2004). In contrast, when parents are not responsive, children feel more free to resist their control because they have less to lose (in terms of parental emotional support) and perhaps because they feel less indebted to parents.

Consequently, increased parental control is likely to be more strongly associated with negative emotionality, self-preoccupation, and internal conflict in offspring when parents are experienced as more responsive to the child distress. The heightened negative emotionality is likely to enhance personal distress in response to others in need and together with the preoccupation with one's self-worth might cause offspring to pay less attention to others in need and respond less empathically to them. Accordingly, we expected that perceived maternal control would have a more positive association with personal distress in response to others in need among people who perceive their parents to be more responsive to distress. Similarly, increased parental control was expected to show stronger negative associations with empathic responding at higher levels of parental responsiveness.<sup>2</sup>

Indirect evidence consistent with the preceding view was obtained in several studies. Thus, Aunola and Nurmi (2005) and Barber et al. (2005) found that high levels of maternal psychological control have a particularly detrimental effect on children's and adolescents' behavior problems when combined with high levels of maternal affection and support. Similarly, Aunola and Nurmi (2004) found that high levels of these two parenting dimensions predicted poor math performance in young children. Darling and Steinberg (1993) found that seemingly positive parental behaviors such as involvement in school activities were related to poorer academic performance in the context of an authoritarian parenting style.<sup>3</sup> Finally, Assor et al. (2007) found that parental warmth enhanced the effect of the controlling practice of parental conditional regard on children's tendency to suppress negative emotions and to experience feelings of internal compulsion.

### **Gender Effects**

Overall, studies on empathy have indicated that females are generally more empathic, caring, and prosocial than males (see Eisenberg et al., 2006, for a review). As for the phenomenon examined in the present research, SDT posits that because all children regardless of gender have a basic need for autonomy and relatedness (e.g., Deci, La Guardia, Moller, Scheiner, & Ryan, 2006; Ryan & Deci, 2000), the predicted relations between the two parenting dimensions examined and empathic responding would be observed across gender.

## The Current Studies

To address the preceding questions, we conducted two studies that examined the associations of perceptions of maternal responsiveness to distress and maternal control with empathic responding to others. We examined two samples of young adults. In Study 1 we conducted a preliminary examination of the unique and joint effects of perceptions of maternal responsiveness and maternal control as predictors of self-reported empathic concern and personal distress when exposed to others in need. Study 2 replicated the findings of Study 1 and explored the implications of perceived parenting in an area in which empathic responding is of an utmost importance, namely, romantic relationships (e.g., Reis & Shaver, 1988). Studying couples' relations also enabled us to assess empathic responding using assessment methods that do not rely solely on self-reports. Specifically, in this more comprehensive study, we assessed empathic support of one's romantic partner using both self-reports and partner reports.

We hypothesized that perceived maternal control would be negatively associated with empathic concern toward others in general and empathic support for a romantic partner, but would be positively related to personal distress in response to others in need; perceived maternal responsiveness to distress was expected to show the reverse pattern. In addition to the hypotheses concerning the main effects of perceived maternal control and responsiveness, we also expected that perceived maternal control would have a more positive association with personal distress when maternal responsiveness to distress is perceived as high rather than low. Similarly, increased parental control was expected to show a stronger negative association with empathic responding at higher levels of maternal responsiveness.

## Study 1

Study 1 examined the relations of perceived maternal responsiveness to distress and perceived maternal control with young adults' tendency to display empathic concern and personal distress in response to others in need.

## Method

**Participants.** Participants were 249 undergraduate students from one university and two colleges in southern Israel (175 women and 74 men; ages 21 to 34 years,  $M = 23.5$ ,  $SD = 2.62$ ). Students participated in the study in exchange for credits in one of their psychology courses.

**Procedure.** Participants completed questionnaires as part of a larger study that was presented to them as focusing on emotions. The instruments were administered in small groups (up to 7 participants) within a 90-min session. The order of the scales was randomized across participants. An experimenter was present at all times to answer questions

and make clarifications. The study was approved by the university's ethics committee, and students had the option of withdrawing from the study at any moment without any consequences in terms of grade. All participants gave their informed written consent to use their responses in a way that would not reveal their identities.

## Measures

**Empathy-related responses.** These responses were assessed via the two affective subscales of Davis's (1983) Interpersonal Reactivity Index, a commonly used self-report measure of dispositional empathy. The empathic concern subscale was used to assess the tendency to experience "other-oriented" feelings of warmth, compassion, and concern for others in need (e.g., "I often have tender, concerned feelings for people less fortunate than me"). The personal distress subscale was used to assess the tendency to experience "self-oriented" feelings of anxiety and unease in difficult interpersonal settings (e.g., "In emergency situations, I feel apprehensive and ill-at-ease"). Each scale included seven items that were rated on a 5-point Likert scale ranging from 1 (*does not describe me*) to 5 (*describes me very well*). The items were translated into Hebrew using the back-translation technique. Items were summed to create the scales, with higher scores indicating higher empathic concern and personal distress. Cronbach's alpha (reliability) in this sample was .73 for empathic concern and .76 for personal distress.

**Perceptions of Maternal Responsiveness to Distress.** This five-item scale was based on Davidov and Grusec's (2006) five-item measure of maternal responsiveness to distress derived from Block's (1981) Child-Rearing Practices Report Q-sort measure. The items were adapted to reflect young adults' perceptions of responsiveness to distress. A sample item is: "As a child or adolescent, I felt that my mother was sensitive to my pains and supported me when I felt distressed." Responses were made on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Cronbach's alpha was .85.

**Perceptions of Maternal Control.** This five-item scale was based on previous scales used by Assor, Kaplan, et al. (2005) and Assor et al. (2004). The scale is designed to assess directly controlling behaviors, as well as the use of the more indirect and subtle practice of conditional parental regard. An example of an item tapping direct control is: "As a child or adolescent, I felt that my mother controlled me and pressured me to behave in certain ways." An example of an item capturing conditional regard 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 attained high achievements in some domain." Cronbach's alpha was .74.

Exploratory factor analysis using maximum likelihood extraction with oblique rotation, in which all the items of the maternal control and responsiveness scales were entered together, yielded two factors, corresponding to the two dimensions of interest. The two extracted factors accounted

for 56.4% of the variance. The first factor (eigenvalue = 4.03) included the five items referring to responsiveness to distress. The second factor (eigenvalue = 1.61) consisted of the five items pertaining to maternal control. Items had a loading higher than .51 on the relevant factor, and less than .18 on the irrelevant factor. This pattern indicates that the two types of maternal behavior were perceived as fairly distinct. Scales were calculated as mean scores, with higher scores indicating higher maternal control and responsiveness to distress.

## Results

The hypotheses were examined first by Pearson correlations and then by more comprehensive regression analyses. Table 1 provides means, standard deviations, and the correlations between the variables. The correlational analysis provided full support for the predictions concerning maternal control. Perceived maternal control was negatively correlated with empathic concern and positively correlated with personal distress. The hypotheses concerning maternal responsiveness to distress were partially supported. Perceived maternal responsiveness to distress was positively and significantly correlated with empathic concern but uncorrelated with personal distress. Importantly, empathic concern and personal distress were not significantly correlated.

Next, two multiple regression analyses were conducted to test whether perceived maternal control and perceived maternal responsiveness to distress uniquely predicted individual differences in empathic concern and personal distress tendencies. In addition, we also assessed the effects of the interaction between perceived maternal control and perceived maternal responsiveness to distress to test whether perceived maternal responsiveness to distress moderated the association between perceived maternal control and empathic responding. In accordance with Aiken and West (1991), before conducting the regression analyses both perceived maternal control and perceived maternal responsiveness to distress scores were centered. Finally, we assessed the effect of gender and the effects of the interactions between gender and maternal parenting dimensions. All variables and interactions were entered simultaneously into the regression.

Table 2 provides standardized regression coefficients for gender, perceived maternal control, perceived maternal responsiveness to distress, and the effects of the interactions between these variables. The regression results pertaining to the main effects of maternal control and maternal responsiveness to distress replicated the findings obtained in the correlational analysis. Thus, perceived maternal control was found to have a unique negative association with empathic concern ( $\beta = -.11, p < .05$ ) and a unique positive association with personal distress ( $\beta = .29, p < .01$ ). Maternal responsiveness to distress had a unique positive association with empathic concern ( $\beta = .33, p < .01$ ) and no association with personal distress.

**Table 1.** Study 1: Means, Standard Deviations, and Correlations Among Perceived MC, Perceived MRD, and Emotional Responses to Others' Distress

	1a	1b	2a	2b
1. Perceived maternal practices				
1a. Perceived MC	—			
1b. Perceived MRD	-.40**	—		
2. Emotional responses to others' distress				
2a. Empathic concern	-.25**	.39**	—	
2b. Personal distress	.14*	.03	.06	—
<i>M</i>	2.22	4.03	21.83	12.28
<i>SD</i>	0.85	0.87	3.84	4.57

Note: MC = maternal control; MRD = maternal responsiveness to distress. \* $p < .05$ . \*\* $p < .01$ .

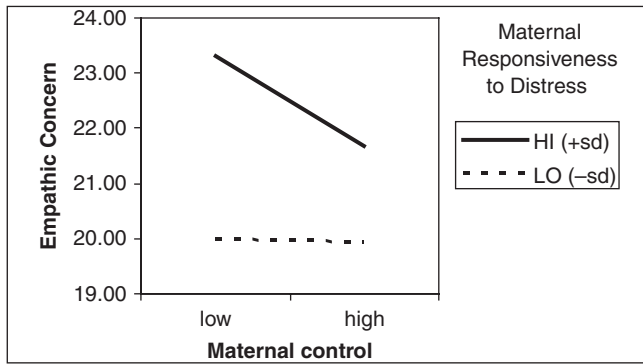
**Table 2.** Study 1: Regression Standardized Coefficients Predicting Empathic Concern and Personal Distress From Perceived MC, Perceived MRD, Interaction, and Gender Effects

Predictors	Empathic Concern	Personal Distress
Perceived MC	-.11*	.29**
Perceived MRD	.33**	.02
MC $\times$ MRD	-.12*	.12*
Gender	.28**	.35**
Gender $\times$ MC	.06	-.04
Gender $\times$ MRD	.07	.10
Gender $\times$ MC $\times$ MRD	.02	.02
	$R^2 = .25,$	$R^2 = .15,$
	$F(7, 241) = 11.6^{**}$	$F(7, 241) = 6.03^{**}$

Note: Gender was calculated  $-1 = male, 1 = female$ . MC = maternal control; MRD = maternal responsiveness to distress. \* $p < .05$ . \*\* $p < .01$ .

Tests of the effect of the interaction between perceived maternal control and perceived maternal responsiveness to distress revealed a significant effect on both empathic concern ( $\beta = -.12, p < .05$ ) and personal distress ( $\beta = .12, p < .05$ ). To investigate these interactions in more detail, we followed the Aiken and West (1991) procedure and thus estimated two regression lines of empathic concern or personal distress on maternal control at two levels of maternal responsiveness to distress. Specifically, one regression line was estimated for a relatively high level of maternal responsiveness (1 *SD* above the mean), whereas a second regression line was estimated for a relatively low level of maternal responsiveness (1 *SD* below the mean).

Tests of simple slopes indicated that perceived maternal control had a significant negative association with empathic concern when perceived maternal responsiveness to distress was high ( $\beta = -.41, p < .05$ ) but not when perceived maternal responsiveness to distress was low ( $\beta = -.03, ns$ ). Thus, the negative relations between perceived maternal control and offspring's empathic concern were observed only when perceived maternal responsiveness was high. This interaction effect is displayed in Figure 1.



**Figure 1.** Study 1: Relations between perceived maternal control and empathic concern as a function of level of perceived maternal responsiveness to distress

Similarly, it was found that the positive association between perceived maternal control and personal distress was stronger when perceived maternal responsiveness to distress was high ( $\beta = .63, p < .01$ ) than when perceived maternal responsiveness to distress was low ( $\beta = .42, p < .05$ ). This pattern of results is consistent with our SDT-based hypothesis, according to which the maladaptive effects of maternal control are more pronounced when they are coupled with high levels of maternal responsiveness to distress.

As expected, gender had main effects on both empathic responses, with women reporting more empathic concern ( $\beta = .28, p < .01$ ) and personal distress ( $\beta = .35, p < .01$ ) than men, in response to others in need. However, as shown in Table 2, gender did not moderate the associations between perceived maternal practices and empathic responding.

## Discussion

Study 1 provided evidence for the existence of an association between young adults' perceptions of their mothers' parenting practices during childhood and adolescence and their current empathic emotional responses toward others in need. Consistent with the SDT proposition that the use of control as a socializing technique has a detrimental effect on children's inclination to respond empathically to others, perceived maternal control was found to be associated with a low level of empathic concern as well as a high level of personal distress in reaction to others in need.

These findings extend results obtained in previous research (Roth, 2008) by linking perceived maternal control with personal distress in addition to empathic concern. The findings from Study 1 lend further support to the documented association between maternal responsiveness to distress and empathic concern toward others (Davidov & Grusec, 2006; Roberts, 1999). Contrary to expectations, maternal responsiveness was not associated with personal distress.

The findings of Study 1 were consistent with the hypothesis that the associations of perceived maternal control with

poor empathic responding would be more pronounced when perceived maternal responsiveness is high rather than low. Thus, we found that when mothers were perceived as highly responsive to child distress, their controlling behavior (as perceived by their offspring) was a unique negative predictor of their offspring's empathic concern toward others. In contrast, when mothers were perceived as unresponsive to child distress, their controlling behavior did not predict their offspring's empathic concern. Moreover, the positive association between perceived maternal control and personal distress was enhanced when maternal responsiveness was high.

In congruence with previous findings pertaining to gender and empathic responding (Eisenberg et al., 2006), women reported stronger other- and self-oriented emotional responses toward others in distress. However, importantly, the associations between perceived maternal behaviors and empathic responding were not moderated by gender.

The results of Study 1 showed that perceived maternal control and perceived maternal responsiveness to distress are associated with self-reported emotional empathic responding. However, a person may feel personally distressed or compassionate toward others in need without necessarily lending actual support (Batson, 1991). Therefore, the purpose of Study 2 was to examine the extent to which participants not only feel empathic concern but also actually behave in a supportive and empathic way toward others in need. Specifically, we focused on empathic support of one's romantic partner as perceived by both self and partner. The reliance on partners' reports allowed us to ascertain that the associations could not be ascribed to self-report bias.

## Study 2

Study 2 was designed to replicate and extend the findings of Study 1 in a sample of romantic partners, focusing on both emotional and behavioral empathic responding and support. Providing one's partner with empathic and responsive support has been found to be one of the major predictors of partners' relational satisfaction and marital well-being (e.g., Davis & Oathout, 1987; Reis & Gable, 2003). Empathic support (also referred to as "responsive caregiving"; Collins, Guichard, Ford, & Feeney, 2006; Reis & Patrick, 1996) refers to the tendency to offer support in a manner that is sensitive to the partner's signals and attuned to his or her needs, as well as to refrain from insensitive responding and/or unsolicited helping, both of which might be experienced as intrusive, controlling, power assertive, or belittling (e.g., Assor & Alfi, 1996; Collins et al., 2006; Reis & Shaver, 1988; Winter, 1973).

We hypothesized that, as in Study 1, young adults' perceptions of maternal control would be negatively related to their empathic concern and positively related to their personal distress in response to others in need. In addition, perceptions of maternal control would be negatively related to empathic support of their romantic partners. We further

hypothesized that young adults' perceptions of maternal responsiveness to distress would show the reverse pattern. Finally, we examined whether the results of Study 2 would replicate the findings of Study 1 concerning the role of maternal responsiveness to distress in moderating the relations between maternal control and poor empathic responding. Specifically, we predicted that perceived maternal control would have a stronger positive association with personal distress and a stronger negative association with high-quality empathic responses at higher levels of maternal responsiveness.

## Method

**Participants.** Participants included 56 heterosexual, dating couples. At least one member of each couple was an undergraduate university student, who participated with his or her partner in the study. The participants who were students received credits in one of their psychology courses in exchange for their (and their partner's) participation. The range in age for the participants was 19 to 34 years ( $M = 23.92$ ,  $SD = 1.15$ ). All couples were unmarried, 23% dated less than 1 year, 34% dated for 1-2 years, and 43% dated more than 2 years.

**Procedure.** The Study 2 procedure was similar to Study 1. The instruments were administered at the university in small groups consisting of romantic couples. An experimenter was present at all times to ensure that the participants answered the questions independently from their romantic partner.

**Measures.** All measures from the first study were also included in Study 2. Cronbach's alphas in this sample were .70 for both male and female partners' empathic concern, .62 for male partners' personal distress, and .66 for female partners' personal distress. Cronbach's alphas for both male and female participants' perceived maternal responsiveness to distress and perceived maternal control ranged from .80 to .83. Factor analysis on the 10 maternal control and responsiveness items closely replicated the results found in Study 1.

The extent to which participants engaged in empathic supportive behavior toward their partners was assessed via self-reports and partner reports on a scale entitled *Empathic Support of Romantic Partner*. Self- and partner-reported empathic support scales were identical. The scale includes nine items that were adopted from Assor and Alfi (1996; see also Levi-Tossman, Kaplan, & Assor, 2007), focusing on empathic support and caring as conceptualized by Reis and Shaver (1988) and Reis and Patrick (1996). Specifically, items are aimed at capturing the tendency to offer support and show interest in a manner that is sensitive to the partner's signals and needs; refraining from intrusive responding and/or unsolicited helping. The items are shown in the appendix.

Responses were given on 7-point Likert scales ranging from 1 (*does not describe me/partner*) to 7 (*describes me/partner very well*). Self-reports and partner reports of empathic support scales were calculated as mean scores, with higher

**Table 3.** Study 2: Means, Standard Deviations, and Correlations Among Perceived Maternal Practices and Empathic Responses

	1a	1b	2a	2b	3a	3b
1. Perceived maternal practices						
1a. Perceived MC	.07	-.30**	-.14	.25*	-.26*	-.13
1b. Perceived MRD	-.26*	.03	.23*	-.01	.01	.04
2. Emotional responses to others' distress						
2a. Empathic concern	-.19†	.28*	.24*	-.13	.06	.11
2b. Personal distress	.21†	.05	-.18†	.22*	-.20†	.00
3. Empathic support of one's partner						
3a. Participant's self-reported support	-.26*	.15	.04	-.14	.26*	.39**
3b. Partner's report on the participant's support	-.18†	.06	.07	-.01	.34**	.28*
M	2.41	3.99	20.38	11.30	5.25	5.11
SD	1.04	0.83	4.69	4.52	0.84	0.93

Note: Values along the diagonal represent within-couple correlations. Values above the diagonal are correlations for men; values below the diagonal are correlations for women. Variable 3b refers to the participants' empathic supportive behavior as perceived by their partners (female partners' reports on male partners' behavior and vice versa). MC = maternal control; MRD = maternal responsiveness to distress. † $p < .10$ . \* $p < .05$ . \*\* $p < .01$ .

scores indicating greater empathic behavioral support. Cronbach's alphas ranged from .68 to .71 for both males and female participants' self- and partner-reported empathic support.

## Results

**Preliminary analysis.** Table 3 provides means, standard deviations, and the correlations between the key variables. Within-couple correlations are presented along the diagonal, correlations between variables for men are presented above the diagonal, and correlations for women are presented below the diagonal.

As shown in Table 3, the associations between perceived maternal control and the dependent measures were all in the predicted directions, and in six out of eight cases, these associations were significant or marginally significant. As in Study 1, perceived maternal responsiveness predicted empathic concern but not personal distress. In addition, maternal responsiveness was unrelated to empathic support of partner. As in Study 1, empathic concern and personal distress were not significantly correlated.

**Primary analysis.** The effects of perceived maternal control, perceived maternal responsiveness, gender, and the interactions



**Table 4.** Study 2: HLM Standardized Coefficients Predicting Emotional and Behavioral Empathic Responding From Perceived MC, Perceived MRD, Interaction, and Gender Effects

Predictors	Emotional Empathic Responding		Behavioral Empathic Responding	
	Empathic Concern	Personal Distress	Self-Report	Partner Report
Perceived MC	-.18*	.21*	-.16*	-.29**
Perceived MRD	.23**	.07	.09	.11
MC × MRD	-.14†	.16*	-.16*	-.19*
Gender	.19*	.21*	.07	.04
Gender × MC	.01	.05	.02	.04
Gender × MRD	.10	.04	.12	-.14†
Gender × MC × MRD	.10	.05	.10	.03

Note: Gender was calculated -1 = male, 1 = female. HLM = hierarchical linear modeling; MC = maternal control; MRD = maternal responsiveness to distress.

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

between these variables on the various indicators of empathic responding were tested using the actor-partner interdependence model (APIM) procedure (Campbell & Kashy, 2002; Kashy & Kenny, 2000). This procedure was used because it enables modeling of the nonindependence of the dyadic data collected in Study 2 while testing the effects of interest. Hierarchical linear modeling was conducted using the MIXED model routine in SPSS with restricted likelihood estimation to estimate the coefficients (Campbell & Kashy, 2002). As in Study 1, perceived maternal control and perceived maternal responsiveness scores were centered before analysis (Aiken & West, 1991). Table 4 provides standardized coefficients for gender, maternal control, maternal responsiveness, and the effects of the interaction between these variables.

The results pertaining to the effects on empathic concern and personal distress closely replicated the findings of Study 1. Thus, in full support of our hypothesis, perceived maternal control had a significant unique negative association with empathic concern ( $\beta = -.18, p < .05$ ) and a significant unique positive association with personal distress ( $\beta = .21, p < .05$ ). In addition, perceived maternal responsiveness to distress had a significant and unique positive association with empathic concern ( $\beta = .23, p < .01$ ) but was unrelated to personal distress. The results pertaining to the effects on empathic support of one's partner showed that perceived maternal control also had a negative effect on empathic supportive behavior, as assessed via partner reports ( $\beta = -.16, p < .05$ ) and self-reports ( $\beta = -.29, p < .01$ ). Perceived maternal responsiveness to distress did not have significant effects on empathic support of one's partner.

The interaction between perceived maternal control and responsiveness was significant for self- and partner-reported empathic support of one's partner ( $\beta = -.16, p < .05$  and

$\beta = -.19, p < .05$ , respectively) and for personal distress ( $\beta = .16, p < .05$ ), and was marginally significant for empathic concern ( $\beta = -.14, p = .08$ ). Analyses of these interactions using the Aiken and West (1991) procedure, estimating regression lines of empathic responding on maternal control at two levels of maternal responsiveness to distress (mean  $\pm 1$  SD), yielded patterns similar to those found in study 1.

As shown in Figure 2, tests of simple slopes indicated that the positive association between perceived maternal control and personal distress was stronger when perceived maternal responsiveness to distress was high ( $\beta = .55, p < .01$ ) rather than low ( $\beta = .22, p < .05$ ). This pattern of results replicates the results of Study 1 and lends further support to the notion that maternal control promotes the tendency to feel personal distress when faced with others' distress, especially when it is coupled with high levels of maternal responsiveness.

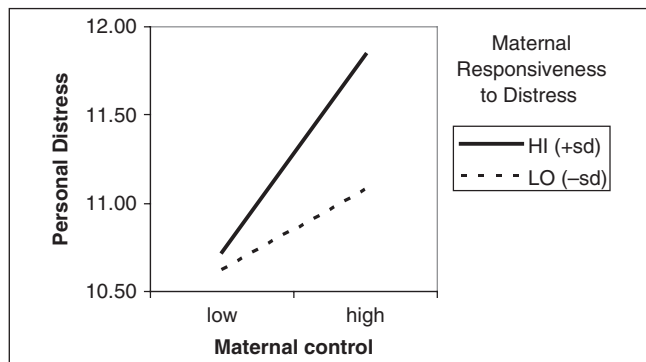
Similarly, the negative association between self's perceived maternal control and partner's report of self's empathic support was stronger when self's perceived maternal responsiveness to distress was high ( $\beta = -.54, p < .01$ ) rather than low ( $\beta = -.36, p < .05$ ). This interaction effect is displayed in Figure 3.

A similar pattern of results emerged for self-reported empathic support of one's partner so that perceived maternal control had a significant negative association with self-reported empathic support of partner when perceived maternal responsiveness to distress was high ( $\beta = -.40, p < .05$ ) but not when perceived maternal responsiveness to distress was low ( $\beta = -.11, ns$ ). As for empathic concern, it should be noted that although the interaction did not reach statistical significance, analysis of the relations between perceived maternal control and empathic concern at high versus low levels of maternal responsiveness yielded a pattern similar to the one found in Study 1.

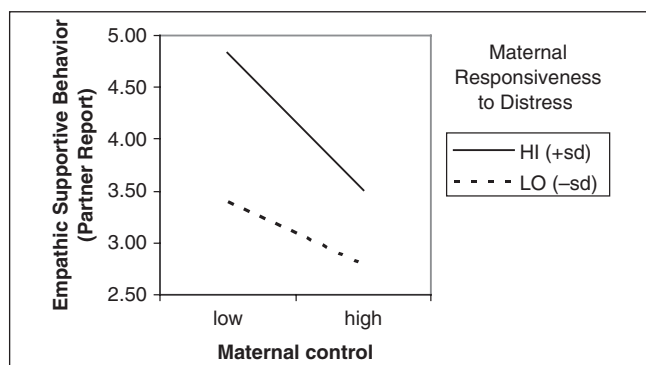
With regard to gender, the results replicated the findings of Study 1 for the variables of empathic concern ( $\beta = .19, p < .05$ ) and personal distress ( $\beta = .21, p < .05$ ), with women reporting more empathic concern and more personal distress toward needy others than men. However, no gender effects emerged for self- and partner-reported empathic supportive behavior. Also, in line with predictions and previous findings, gender did not significantly moderate the associations between perceived maternal behavior and empathy related responses.

## Discussion

Study 2 replicated the major findings of Study 1. Perceived maternal control was again positively associated with personal distress and negatively associated with empathic concern toward others, although in Study 2 this association was significant only in the more rigorous regression analyses. As in Study 1, perceived maternal responsiveness was only associated with empathic concern. Results pertaining to



**Figure 2.** Study 2: Relations between perceived maternal control and personal distress as a function of level of perceived maternal responsiveness to distress



**Figure 3.** Study 2: Relations between participant's perceived maternal control and partner's report of participant's empathic supportive behavior as a function of level of participants' perception of maternal responsiveness to distress

empathic support of partner essentially replicated the patterns obtained with regard to general empathic concern. Thus, empathic support of partner (both self-reported and partner reported) was negatively related to perceived maternal control but was unrelated to perceived maternal responsiveness.

As in Study 1, females reported higher levels of empathic concern and personal distress. However, no gender differences emerged when assessing behavioral responses toward current romantic partner using both self-reports and partner reports. This finding is in line with previous research showing that gender differences are more prominent when the targets of the empathic response are unspecified or unknown individuals (Eisenberg et al., 2006). Importantly, as predicted and in concurrence with Study 1, gender did not moderate the associations between perceived maternal behaviors and empathic responding.

Another important objective of Study 2 was to examine whether perceived maternal responsiveness to distress would again moderate the positive relations between maternal control and poor empathic responding. Results consistently supported our prediction that the associations

between perceived maternal control and poor empathic responding would be more pronounced when maternal responsiveness to distress is perceived as high. The general discussion examines possible mechanisms that might account for this moderation phenomenon.

## General Discussion

Results of the two studies consistently showed that, as predicted, perceived maternal control was positively associated with personal distress in response to others in need and negatively associated with general empathic concern and empathic support of partner. Perceived maternal responsiveness to distress was positively associated with empathic concern but was unrelated to personal distress and empathic support of partner. As expected, perceived maternal responsiveness moderated the relations between perceived maternal control and the various empathy-related responses. The following sections discuss these findings.

### *Perceived Maternal Control and Responsiveness as Predictors of Empathic Responses*

The present research extends previous research on perceived parental control and empathy-related responses (Roth, 2008; Soenens et al., 2007) by linking perceived maternal control with personal distress in response to others' distress and with poor empathic support of one's romantic partner. The findings concerning the negative association between perceived maternal control and empathic concern are in line with the results obtained by Roth (2008) but not by Soenens et al. (2007). However, the finding that perceived maternal control was negatively associated with empathic concern in two studies, as well as with empathic support of one's partner, suggests that the negative relation between perceived maternal control and empathic responding might be a reliable one. This finding is consistent with previous results showing that parental psychological control predicts antisocial behavior (Barber et al., 2005).

The findings of Studies 1 and 2 lend further support to the documented association between maternal responsiveness to distress and empathic concern toward others (Davidov & Grusec, 2006; Roberts, 1999). However, unexpectedly, maternal responsiveness to distress was not found to be associated with empathic support of one's romantic partner. One possible reason for this finding is that, in contrast to the general emotional response assessed by the Davis (1983) empathic concern scale, empathic supportive behavior in relation to one's partner is influenced by specific attributes of the partner and the dynamic history of past interactions between the partners around seeking and providing support. This difference may also account for the lack of association between general empathic concern and empathic support of partner.

### Implications for the Domain of Romantic Relations

The results of Study 2 showed that perceived maternal control was a unique and significant negative predictor of empathic support of one's partner. The importance of experiences of control and autonomy for satisfactory marital relationships was demonstrated in the last decade by several comprehensive studies guided by SDT (see La Guardia & Patrick, 2008), as well as by studies based on other perspectives (e.g., Ehrensaft, Langhinrichsen-Rohling, Heyman, O'Leary, & Lawrence, 1999). The present research further underscores the importance of interpersonal experiences of control by indicating that it is not only perceptions of a controlling partner that undermine romantic relations but perhaps also the experience of one's mother as controlling.

Another contribution of the present research is the focus on empathic support of partner as a relational outcome. Thus, most extant research on the importance of the experience of interpersonal control or coercion examined global outcomes such as relational satisfaction, well-being, and attachment (e.g., Deci et al., 2006; Ehrensaft et al., 1999; La Guardia, Ryan, Couchman, & Deci, 2000), and only two recent studies also focused on specific outcomes involving conflict resolution (Knee, Lonsbary, Canevello, & Patrick, 2005; Patrick, Knee, Canevello, & Lonsbary, 2007). In these studies, feeling interpersonally controlled predicted a less adaptive mode of conflict resolution. However, unlike conflict situations, situations that call for empathy do not necessarily pose a power or a control threat. In fact, by offering support to another person in need, one can feel more in control and more powerful (e.g., Winter, 1973). Thus, the findings pertaining to empathic support appear to extend the scope of the specific relational processes affected by control experiences to domains that are not directly related to issues of control and power.

The finding that perceived maternal control is a negative predictor of empathic support of partner is consistent with studies showing that hostile and highly coercive family interaction patterns during adolescence predict hostile communication with romantic partner (Andrews, Foster, Capaldi, & Hops, 2000; K. J. Kim, Conger, Lorenz, & Elder, 2001; Whitton et al., 2008). However, these studies focused on extremely offensive and coercive behaviors (e.g., emotional invalidation, devaluing remarks). The present research widens the scope of family-of-origin attributes that might exert a negative impact on relations with romantic partners by pointing to the possibility that frustrating experiences in the family of origin would have a negative impact on romantic relationships also in the case of less extreme autonomy-suppressing experiences (e.g., mother shows more affection if child attains high achievements).

One advantage of the present research was the use of both self-report and partner report in the assessment of participants' empathic support of each other. The use of

multiple informants might help compensate for biases that might occur if only one informant is used. Moreover, the use of the APIM procedure (Campbell & Kashy, 2002; Kashy & Kenny, 2000) enabled us to model and control for the nonindependence of the dyadic data collected in Study 2.

### The Moderating Role of Maternal Responsiveness to Distress

SDT posits that the striving to be autonomous and avoid coercion is a basic need. Consequently, it assumes that the negative effect of parental control on optimal socioemotional functioning cannot be completely canceled by other more positive parental behaviors. In line with this proposition, it was found that perceived maternal responsiveness to distress did not cancel the negative relations between perceived maternal control and empathic responding. Specifically, higher levels of perceived maternal control were found to be negatively associated with empathic concern and empathic support of partner also among participants who perceived their mothers as being highly responsive to their distress. This finding is of special importance because it highlights the harmful nature of controlling parenting as a *general* phenomenon that occurs even when parents possess positive attributes such as responsiveness to distress.

The findings pertaining to personal distress in response to others in need were particularly intriguing. Thus, in both of our studies, perceived maternal responsiveness not only did not reduce the positive relations between maternal control and personal distress but in fact appears to have exacerbated it. High levels of both maternal control and maternal responsiveness were associated with the highest levels of personal distress in response to others in need. As was already noted in the Introduction, similar findings were obtained by Aunola and Nurmi (2004, 2005) and Assor et al. (2007).

What might be the psychological dynamics underlying the exacerbation effect obtained with regard to personal distress? We will describe two mechanisms, which can then be examined in future research. According to the first mechanism, the coupling of high maternal control with high maternal responsiveness is likely to create feelings of anger, anxiety, entrapment, and internal compulsion (Assor et al., 2004), and this heightened negative emotionality may enhance personal distress in response to others in need. A second mechanism (see Aunola & Nurmi, 2005) assumes that the simultaneous exposure to the positive parental attribute of responsiveness to distress and the negative parental attribute of coercive control results in confusion and anxiety. These negative feelings then enhance offspring's personal distress in response to others in need.

### Research Limitations and Ways of Addressing Them in Future Research

The present research has several limitations. First, the correlational nature of the data does not allow us to draw conclusions regarding causality. Second, the observed effects of perceived maternal behaviors on personal distress and empathic concern (but not on empathic support of partner) might be inflated by common method variance, as the relevant data were provided by the same informant. These limitations might be corrected via prospective longitudinal research using measures that do not rely exclusively on participants' self-reports.

Third, the measures pertaining to parenting were based on retrospective offsprings' reports, which might not reflect mothers' behavior as perceived by observers or by the mothers themselves. Although this is clearly a serious limitation, it is important to note that previous studies have demonstrated significant and positive associations between: (a) parents' and children's perceptions of current parenting behaviors (e.g., Schwartz, Barton-Henry, & Pruzinsky, 1985; Simons, Whitbeck, Conger, & Chyi-In, 1991; Soenens et al., 2007) and (b) parents' and children's retrospective recollections of parenting behaviors (Schumacher, Hinz, & Brahler, 2002). Furthermore, adolescents' retrospective recollections of maternal behaviors were found to be correlated with their childhood reports on the same behaviors (Cournoyer & Rohner, 1996). Together, these findings suggest that offsprings' retrospective reports are at least partially grounded in actual maternal behaviors.

Yet, it should be acknowledged that offsprings' retrospective reports might not accurately represent mothers' actual behavior. Thus, it is possible that these perceptions are also shaped by participants' current personal dispositions. For example, our participants' retrospective reports concerning maternal responsiveness might be affected by their present attachment working models, which affect both their retrospective perceptions of their mothers and their current empathic behaviors (Collins et al., 2006). Further research might examine the possible role of attachment models in accounting for the relations detected in the present research.

### Conclusion

The findings of the present research are consistent with the view that young adults' experience of their mother as controlling is likely to interfere with their capacity to respond empathically to others. Importantly, our results suggest that the negative effects of perceived maternal control are not likely to be canceled by positive maternal attributes such as perceived responsiveness to distress. Moreover, our research also indicates that the coupling of maternal control with high levels of maternal responsiveness to distress might actually exacerbate the effects of maternal control on personal distress in response to others in need.

## Appendix

### Empathic Support of Romantic Partner Scale (Partner Report)

1. When I want to talk to my partner about a problem, he/she stops what he/she is doing and listens to me.
2. My partner may get agitated or angry when I try to share my concerns with him/her (reverse scoring).
3. My partner supports me even when I act in ways that are opposed to his/her advice.
4. My partner gets annoyed if I tell others about my experiences before I tell him/her (reverse scoring).
5. My partner listens very carefully when I talk to him/her about my relationships with other people.
6. My partner needs to know everything I am thinking or feeling (reverse scoring).
7. When I want to talk to my partner about difficult feelings that bother me, he/she reacts impatiently (reverse scoring).
8. I can count on my partner's support even if I oppose his/her opinion on the matter.
9. My partner frequently gives me advice even when I am not interested in receiving advice (reverse scoring).

Note: Self-reported empathic support of romantic partner items were changed to reflect self ("I") as the perpetrator of the behaviors.

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### Notes

1. Psychological control is often assessed by a measure refined by Barber (1996) that captures parental behaviors involving parents' coercing their children into complying with their expectations by intruding on their children's psychological world using means such as guilt induction and love withdrawal. From an SDT perspective, although the construct of psychological control refers to important aspects of parental control, it leaves out other important forms of autonomy suppression such as conditional positive regard (see Assor & Roth, 2005; Roth et al., 2009) and direct attempts to pressure children to comply (e.g., Assor, Kaplan, et al., 2005).
2. It is important to note that our predictions concerning the more problematic pattern of correlates of parental control at higher levels of parental responsiveness do not necessarily imply that offspring reporting high levels of both parental control and parental responsiveness would be less empathic and more personally distressed than offspring reporting high control but low responsiveness. This is because in addition to an interactive effect,

we also predicted a main effect of parental responsiveness (and, of course, a main effect of parental control).

3. Baumrind (1971) defined the authoritarian parenting style as involving parents' valuing strict obedience and compliance, attempting to shape and control their child in accordance with their standards, and discouraging give and take. From an SDT perspective, the authoritarian style clearly involves high levels of parental control and autonomy suppression (Grolnick, Deci, & Ryan, 1997).

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