

# Controlled by Love: The Harmful Relational Consequences of Perceived Conditional Positive Regard

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## Abstract

Research on conditional positive regard (CPR) has shown that this seemingly benign practice has maladaptive correlates when used by parents. However, there is no research on the correlates of this practice in romantic relationships or on the processes mediating its effects. Building on self-determination theory (Deci & Ryan, 2000), three studies tested the hypothesis that perceived CPR impairs relationship quality, partly because it undermines the fulfillment of the basic psychological needs for autonomy and relatedness. Study 1 ( $N = 125$ ) examined perceived CPR and relationship quality across four relationship targets: mother, father, romantic partner, and best friend. Study 2, involving romantic partners ( $N = 142$ ), examined whether needs fulfillment mediated the association between perceived CPR and relationship quality. Study 3, involving romantic dyads ( $N = 85$ ), also included partner reports on CPR. Across the three studies, CPR was linked with poor relationship quality between relationships, between people, and between dyadic partners. Moreover, results of Study 2 and Study 3 revealed that the inverse association between perceived CPR and relationship quality was mediated by dissatisfaction of autonomy but not relatedness. Despite its seemingly benign nature, CPR is detrimental to relationship quality, partly because it thwarts the basic need for autonomy.

In the course of close relationships, partners are required to adjust to one another. They negotiate the division of roles and responsibilities; redefine their ties, both as individuals and as a couple, with each member's family and peers; and engage in conflicting interactions. Throughout these processes, partners continually try to influence each other to get things done "their way." One of the most powerful means people use to influence their partners is to offer their acceptance and affection contingently, so that the provision of affection to partners depends on their compliance with one's expectations. This strategy has been studied in the last decade mostly in the parenting domain, using the term *conditional regard* (e.g., Assor, Roth, & Deci, 2004).

While the practice of conditional regard was found to have considerable maladaptive correlates when used by parents (see Assor, Kanat-Maymon, & Roth, 2014), there is presently no research on the correlates of this practice in romantic relationships. The present research aims to start filling this gap, focusing on one type of conditional regard that may be more subtle and controversial, as well as trying to uncover the psychological

processes accounting for the negative relational effects of this type of conditional regard.

Conditional regard was defined as the belief that the regard of another person depends on whether one complies with the other person's expectations (e.g., Assor et al., 2004). Compared to control strategies such as imposing physical punishment, denying privileges, yelling, and public humiliation (e.g., Assor, Kaplan, Kanat-Maymon, & Roth, 2005), conditional regard can be viewed as a more indirect strategy (Falbo & Peplau, 1980), involving subtler and less painful tactics, yet just as effective. Recently, the concept of conditional regard was further differentiated into conditional positive regard (CPR) and conditional negative regard (CNR; Assor & Tal, 2012; Roth, Assor, Niemiec, Ryan, & Deci, 2009). CPR involves offering more acceptance and warmth when another person fulfills a particular expectation. It conveys the message that "I will approve of, like,

or favor you much more only if you do or act in a specific way.” CNR, on the other hand, involves withholding affection when others do not behave according to a specific expectation.

Although conditional regard may be viewed as a contextual practice that the providers can turn on or off in order to direct another’s behavior, across time and interpersonal interactions, these interpersonal experiences may stabilize and shape individual differences in conditional regard. Indeed, previous research has found that parental conditional regard characterizes some parents more than others (Assor et al., 2004; Roth, 2008).

The practice of CNR or love withdrawal was examined by a number of studies, which have demonstrated that it has serious psychological costs (Assor & Tal, 2012; Roth et al., 2009; Swanson & Mallinckrodt, 2001). In contrast, research on CPR is scant. Moreover, CPR is frequently used and widely endorsed as a socialization practice. Thus, many parenting and relationship guidance books suggest that people may benefit from receiving more attention and affection when they meet another’s (e.g., parent, teacher, partner) standards (e.g., Latham, 1994; Sears, MacCoby, & Levin, 1957; Steinberg, 2004). However, research grounded in self-determination theory (SDT; Deci & Ryan, 2000) has questioned the benefits that CPR confers and documented some detrimental effects of parental CPR on children’s motivational regulation, performance quality, and well-being (e.g., Assor et al., 2014; Kanat-Maymon, Roth, Assor, & Reizer, 2012). Given the lack of agreement concerning the desirability of CPR as an interpersonal power strategy, there appears to be a clear need for research on CPR. Thus, understanding CPR’s ramifications for relationship quality may shed light on the extent to which tying one’s regard to the partner’s enactment of desired behaviors is indeed benign. In an attempt to address this issue, the investigations reported herein expand the scope of CPR research to romantic relationships and test the possible mechanisms by which CPR may be associated with relationship quality.

## SDT Perspective on Conditional Regard

Self-determination theory posits that people have innate psychological needs for relatedness, autonomy, and competence that must be satisfied in order to achieve optimal psychological growth and health (Deci & Ryan, 2000). *Relatedness* refers to the “need to belong,” the need to feel connected and loved (Baumeister & Leary, 1995; Deci & Ryan, 2000). The lack of a sense of relatedness may lead one to seek admiration and a sense of worth through superficial means, such as the accumulation of monetary possessions (Kasser, Ryan, Zax, & Sameroff, 1995). *Autonomy* refers to the need for self-direction and organization, as expressed in striving to form authentic, self-directed values and goals, and freedom from coercion (e.g., deCharms, 1968; Deci & Ryan, 2000). Thwarting the need for autonomy leads to heteronomy and feeling coerced or controlled. *Competence* refers to one’s need to feel efficacious and capable (Deci &

Ryan, 2000). Frustrating one’s sense of competence results in a decline in self-esteem and reduced confidence in one’s abilities.

According to the SDT, the satisfaction of all three basic psychological needs is essential for one’s health (Ryan, Patrick, Deci, & Williams, 2008), functioning (Baard, Deci, & Ryan, 2004), well-being (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000), and, particularly, the quality of close relationships (La Guardia & Patrick, 2008).

When any of these needs is thwarted or neglected, negative psychological outcomes ensue (see Deci & Ryan, 2000, for review). For instance, in one of the first studies to examine the role of need satisfaction in relationships, La Guardia, Ryan, Couchman, and Deci (2000) found that within-person variation in attachment was predicted by need satisfaction. In other words, participants were more securely attached to those who met their basic needs. In a more recent study, Patrick, Knee, Canevello, and Lonsbary (2007) found that fulfillment of each need predicted relationship well-being and that both partners’ need fulfillment uniquely predicted relationship functioning. Moreover, a diary study also revealed that those who experienced greater need fulfillment enjoyed better post-disagreement relationship quality (Patrick et al., 2007).

From the SDT perspective, CPR is likely to thwart or at least not support the need for autonomy and perhaps also the need for relatedness. CPR is likely to thwart the need for autonomy because it involves pressure to behave in ways that one may not fully accept. Indeed, past research has shown that when children feel that their parents are using CPR to influence them to comply with parental expectations, they react with resentment and resistance toward the parent (Roth et al., 2009). Consistent with this view, the thwarting of the need for autonomy also interferes with the maintenance of satisfying relationships with peers (Deci, La Guardia, Moller, Scheiner, & Ryan, 2006) and romantic partners (Patrick et al., 2007).

CPR holds out the promise of receiving more love and acceptance, which would seem to support relatedness. However, from the SDT perspective, CPR cannot contribute to the deep satisfaction of the need for relatedness because those who are the objects of CPR feel that they are accepted only to the extent that they meet specific expectations and not for who they really are. Thus, the love and esteem of the provider may disappear if they do not comply with that person’s wishes (e.g., Assor et al., 2004; Assor & Tal, 2012). Hence, the experience of CPR may lead to the feeling that the other’s love and acceptance might be temporary and far from guaranteed. Such conditional love does not necessarily frustrate the fulfillment of the need for relatedness like rejection does, but it certainly does not support or satisfy that need in a deep and reliable way.

Based on SDT, it appears then that CPR is likely to thwart the need for autonomy and cannot truly satisfy the need for relatedness. Given that autonomy and relatedness are essential for creating satisfying relationships (Deci et al., 2006; LaGuardia et al., 2000), we argue that perceived CPR undermines relationship quality. Moreover, if CPR is prolonged, the uncertainty of the partner’s love may also bolster doubt and insecurities

regarding the relationship, which may eventually erode commitment (Simpson, Rholes, & Phillips, 1996).

Like CPR, CNR also constitutes a threat to the need for autonomy. However, given that CNR involves withholding affection when others do not behave according to a specific expectation, it is also likely to thwart the need for relatedness, rather than merely not supporting it. In other words, the recipients of CNR are likely to feel that the use of this strategy undermines their ability to choose and direct their behavior autonomously and also risks potential rejection.

A number of studies that explored the consequences of CPR and CNR substantiated the SDT's perspective on conditional regard (Assor et al., 2014; Kanat-Maymon et al., 2012). With regard to parent-child relationships, Assor et al. (2004) demonstrated that perceptions of parental conditional regard among American college students in four different domains were related to their perception of their parents as disapproving and led to resentment toward their parents. However, in this study, the measures of conditional regard did not distinguish between CPR and CNR, thus making it impossible to assess the unique role of each form of conditional regard. In a subsequent study, Roth et al. (2009) developed a distinctive measure for CPR and CNR. In that study, high school students' perceptions of parental CPR and CNR in the domains of academic achievement and emotion regulation were each associated with resentment toward the parent. However, when CPR and CNR were simultaneously regressed on resentment, only CNR emerged as significant.

Recent evidence suggests that the experience of conditional regard also undermines the quality of relationships with romantic partners. Specifically, Roth and Assor (2012) found that college students' perceptions of parental conditional regard toward suppression or expression of negative emotions (a combined measure of CPR and CNR) were associated with difficulties in establishing intimacy with others. Yet none of these conditional regard studies examined the relationship quality pattern associated with the use of CPR in romantic relations, nor did they study the need satisfaction processes allegedly mediating these associations. These were the goals of the present set of studies.

## The Current Research

The current research set out to achieve two goals. First, we examined the potential costs of CPR in relationships, an important question that, until recently, has received little attention in empirical research. Although authors of past research have indirectly tapped these associations, their studies focused mainly on parent-child relationships (Roth et al., 2009), did not always differentiate between CPR and CNR (Assor et al., 2004), and relied on a single reporter (Roth & Assor, 2012).

Second, we investigated whether the lack of fulfillment of the need for autonomy and relatedness mediates the association between CPR and relationship quality. Investigating the mechanisms by which CPR is associated with relationship quality can help us determine the exact ingredients in CPR that affect rela-

tionship quality. Interestingly, despite the deep roots of CPR in the self-determination perspective, to the best of our knowledge, there is no published work directly investigating needs dissatisfaction as a potential mediator.

We examined these issues in three studies. In Study 1, we assessed the association between CPR and the quality of the participants' relationships with their mother, father, romantic partner, and best friend. This research design allowed us to test the research question in egalitarian relationships such as romantic and peer relationships as well as in hierarchical relationships (i.e., parents), which have already been tested. More importantly, this design enabled us to investigate the association between perceived CPR and relationship quality on both the within-person level (i.e., between relationships) and the between-person level (i.e., individual differences) simultaneously. In other words, we were able to examine to what extent relationships that are characterized by high levels of CPR are more likely to be experienced as less satisfying and to what extent individual differences in CPR are associated with overall satisfaction in relationships with close others.

Study 2 utilized a cross-sectional survey and measured CPR, CNR, and needs fulfillment in a sample of married and cohabiting romantic partners. In this study, we explored the hypothesis that the association between CPR and relationship quality is mediated by dissatisfaction of the need for autonomy and relatedness. Moreover, in this study, we expected to distinguish between CPR and CNR, as well as to demonstrate the unique inverse association between CPR and various indicators of relationship quality while controlling for CNR and the partners' warmth.

In Study 3, we conducted a more rigorous test of the effect of CPR on relationship quality utilizing a sample of dyads. In this study, we assessed the extent to which one person's use of CPR was associated with his or her partner's needs fulfillment, which, in turn, predicted relationship quality.

## STUDY 1

The purpose of Study 1 was to examine how perceived CPR in one's relationships is associated with relationship quality. Consistent with previous research on perceived CPR (Assor & Tal, 2012; Roth et al., 2009) and the role of conditional regard in close relationships (Roth & Assor, 2012), we hypothesized that CPR would be negatively associated with relationship quality.

In this study, CPR and relationship quality were measured in relation to the participants' mother, father, romantic partner, and best friend. Relationship quality was assessed by measures of relationship satisfaction and perceived closeness. The data from this study were hierarchically nested because the participants rated multiple relationship partners on various measures. This multilevel design allowed the research question to be investigated simultaneously at the within-person level (i.e., relationship level) and the between-person level (i.e., individual differences). The within-person level addresses the question of whether

**Table 1** Descriptive Statistics and Correlations Among the Research Variables

| Relationship Target | Conditional Positive Regard |       |       | Relationship Satisfaction |             | Perceived Closeness    |             |                        |
|---------------------|-----------------------------|-------|-------|---------------------------|-------------|------------------------|-------------|------------------------|
|                     | Mean (SD)                   | 1     | 2     | 3                         | Mean (SD)   | <i>r</i><br>(With CPR) | Mean (SD)   | <i>r</i><br>(With CPR) |
| 1. Mother           | 2.79 (1.33)                 |       |       |                           | 5.52 (1.55) | -.42**                 | 4.65 (1.61) | -.31**                 |
| 2. Father           | 2.90 (1.40)                 | .42** |       |                           | 4.96 (1.60) | -.35**                 | 3.77 (1.64) | -.28**                 |
| 3. Romantic partner | 2.82 (1.29)                 | .42** | .43** |                           | 6.08 (0.96) | -.28**                 | 5.94 (1.25) | -.19*                  |
| 4. Friend           | 2.58 (1.19)                 | .35** | .33** | .66**                     | 5.86 (1.01) | -.45**                 | 4.59 (1.71) | -.21*                  |

Note. *N* = 125. CPR = conditional positive regard.

\**p* < .05. \*\**p* < .01.

differences in CPR across relationships covary negatively with relationship quality across relationships. In other words, is the satisfaction with the relationship and degree of closeness lower for relationships in which the level of CPR is high? At the individual differences level, we explored whether participants who scored high on overall perceived CPR experience less overall satisfaction and closeness in their relationships.

## Method

**Participants and Procedure.** Participants were 125 undergraduate students (90 women and 35 men;  $M_{\text{age}} = 25.7$  years) who received extra course credit for participating. Participants were asked to fill out four questionnaires, one for each relationship figure (i.e., mother, father, romantic partner, and best friend). Questionnaires were handed out in a random order. Participants were instructed not to respond to questions regarding nonexistent relationships (e.g., if they did not have a romantic partner or a parent was deceased). The response rate was high (98%). One response was missing for the relationship with a mother, five responses were missing for the relationship with a father, one response was missing for the relationship with a romantic partner, and five responses were missing for the relationship with a best friend.

**Measures. Conditional Positive Regard.** The perceived CPR of each relationship figure was measured by a modified version of the five-item Academic Parental Conditional Positive Regard scale (APCPR; Roth et al., 2009). The APCPR assesses the extent to which participants perceive that increased parental warmth and attention are contingent upon their fulfillment of parental expectations regarding academic performance and engagement (e.g., “I feel that when I’m studying hard, my mother appreciates me much more than usual”). Similarly, we modified the items to assess whether the relationship partner’s affection and attention were contingent on fulfilling that person’s expectations. A sample item for CPR by a romantic partner is “I feel that when I’m meeting my partner’s expectations, my partner appreciates me much more than usual.” Assor and Tal (2012) and Roth et al. (2009) clearly showed that CPR and CNR are two different constructs. Moreover, this scale was previously modified successfully to fit conditional regard in other

domains, such as the expression of negative emotions (Roth et al., 2009) or pro-social behavior (Roth, 2008). In the current study, responses ranged from 1 (*not at all*) to 7 (*very much*). Cronbach’s alphas for the items in each relationship were .83 (mother), .88 (father), .80 (romantic partner), and .81 (best friend).

**Relationship Satisfaction.** A five-item scale (Rusbult, Martz, & Agnew, 1998) was used to measure the extent to which individuals were satisfied and happy with their relationships (e.g., “My relationship with my partner makes me happy”). This scale predicted relationship breakups (i.e., criterion validity) and had good structural validity (Rusbult et al., 1998). Responses ranged from 1 (*not at all*) to 7 (*very much*). Cronbach’s alphas for the items for each relationship were .94 (mother), .95 (father), .82 (romantic partner), and .85 (best friend).

**Perceived Closeness.** Perceived closeness was assessed with the pictorial instrument of the Inclusion of Other in the Self (IOS) Scale (Aron, Aron, & Smollan, 1992). The IOS taps cognitive closeness and interdependence in the relationship. The measure consists of seven series of images with two circles (labeled *self* and *other*) that overlap in equally increasing degrees in seven stages. Participants selected one of the seven pictures that best represented their relationship, with a higher score reflecting more IOS.

## Results and Brief Discussion

Our results are presented in two parts. In the first part, we provide the descriptive statistics and correlations for CPR and relationship quality measures for all four relationship targets. In the second part, using multilevel modeling, we determine whether the within-person variance (i.e., the variance across relationships) and the between-person variance (i.e., the variance across participants) in relationship satisfaction and perceived closeness can be explained by perceived CPR between relationships and participants, respectively.

Table 1 presents the descriptive statistics and correlations among the research variables. An examination of Table 1 reveals that perceptions of CPR among the four relationship targets

were positively associated, suggesting a stable tendency to experience CPR in relationships. As expected, CPR was inversely related to relationship satisfaction and perceived closeness across the four relationship figures. This preliminary finding may suggest that at least across participants, CPR is negatively associated with relationship quality. Regarding differences between relationship targets, repeated-measures analyses of variance (ANOVAs) showed no significant difference in perceived CPR across the four relationship targets,  $F(3, 339) = 1.70, ns$ . However, significant differences across relationship targets were found for relationship satisfaction,  $F(3, 339) = 18.78, p < .001$ , and perceived closeness,  $F(3, 342) = 56.93, p < .001$ , indicating that relationship quality was best with one's romantic partner, followed by relationships with one's mother and best friend, which were not statistically different, and finally with one's father.

In the current study, the data are hierarchically nested. Therefore, for both statistical and conceptualization reasons, it was necessary to analyze the data accounting for both the between- and within-person variances (see La Guardia et al., 2000, and Lynch, 2012, for similar designs). We used the Hierarchical Linear Model (HLM) software version 7 (Raudenbush, Bryk, Cheong, Congdon, & Du Toit, 2011) with restricted maximum-likelihood estimation to analyze the data.

First, we estimated the degree of within-person variance in relationship satisfaction, perceived closeness, and perceived CPR relative to the between-person variance. Results indicated that a substantial amount of the variance—85% in relationship satisfaction and 84% in perceived closeness—was embedded in the within-person level (i.e., relationship level). Similarly, 55% of the variance in perceived CPR was observed at the within-person level. These results suggest that a larger portion of the variance was embedded at the relationship level, which justified conducting the multilevel analysis.

To examine whether perceived CPR within each relationship could predict the quality of the relationship, we constructed a within-person-level HLM equation. Analyses were performed once for each dependent variable. The predictor,  $CPR_{ij}$ , was mean-centered within each person across relationships to account for between-person variance and to ensure that the results reflected the proposed within-person process. Given our finding of significant differences in relationship quality between relationship targets, we controlled for the effect of relationship type by entering three relationship-target dummy variables into the equation. Thus, the generic within-person (Level 1) equation was as follows:

$$\text{OUTCOME}_{ij} = \beta_{0j} + \beta_{1j}(CPR_{ij}) + \beta_{2j}(D1_{ij}) + \beta_{3j}(D2_{ij}) + \beta_{4j}(D3_{ij}) + r_{ij}$$

To examine whether perceived CPR between participants also predicts relationship quality, we entered CPR as a predictor in the person-level equation. The predictor,  $CPR_j$ , was aggregated across relationships and was mean-centered between partici-

pants (i.e., grand mean center). The corresponding person-level equations were as follows:

$$\beta_{0j} = \gamma_{00} + \gamma_{01}(CPR_j) + u_{0j}; \beta_{1j} = \gamma_{10} + u_{1j}; \beta_{2j} = \gamma_{20}; \beta_{3j} = \gamma_{30}; \beta_{4j} = \gamma_{40}$$

Results of the HLM relationship-level model analyses (i.e., within person) indicated a significant effect of CPR for relationship satisfaction ( $\gamma_{10} = -.50, se = 0.07, t = 7.20, p < .001, \gamma_{10} \text{ standardized} = -.47$ ) and perceived closeness ( $\gamma_{10} = -.41, se = 0.08, t = 4.93, p < .001, \gamma_{10} \text{ standardized} = -.31$ ). Thus, among relationship targets, those relationships characterized by greater perceived CPR were predicted to have poorer relationship quality. Across the four relationships, CPR explained 40% of the between-relationship variation in relationship satisfaction and 43% of the between-relationship variation in perceived closeness.

Between-person-level results indicated a significant negative association between CPR (across relationships), relationship satisfaction ( $\gamma_{01} = -.23, se = 0.07, t = 3.18, p < .01, \gamma_{01} \text{ standardized} = -.37$ ) and perceived closeness ( $\gamma_{01} = -.17, se = 0.07, t = 2.43, p < .05, \gamma_{01} \text{ standardized} = -.28$ ). Thus, across participants, CPR explained 11% of the between-person variance in relationship satisfaction and 4% of the between-person variance in perceived closeness.

To summarize, as hypothesized, Study 1 provided preliminary evidence that CPR was negatively associated with relationship quality at both the relationship level and individual differences level. At the relationship level, the extent to which participants experienced CPR in these relationships strongly predicted the variability among those relationships in perceived relationship satisfaction and closeness. Relationships that were characterized by greater CPR were also characterized by less relationship satisfaction and closeness. Furthermore, at the between-person level, individual differences in overall experienced CPR negatively predicted experiences of overall satisfaction and closeness in close relationships.

Interestingly, the variance in CPR was split almost equally between the relationship level (55%) and the individual differences level (45%). These findings suggest that the tendency to see one's partner as engaging in conditional regard is, in part, stable. Early experiences of conditional regard by primary caregivers (e.g., parents), dimensions of personality, the selection of friends and partners, or even attribution biases might be potential causes for these stable individual differences. However, at the same time, there is enough room in each relationship to regulate CPR differently.

## STUDY 2

Study 2 was designed to examine (a) whether CPR would uniquely predict relationship quality above CNR and partner's warmth, and (b) whether this association is mediated by the fulfillment of the needs for autonomy and relatedness. Previous

**Table 2** Factor Analysis Distinguishing Between Conditional Positive and Negative Regard

| Conditional Regard Items  | Conditional Negative Regard | Conditional Positive Regard |
|---|-----------------------------|-----------------------------|
| When I do not meet my partner's expectations, my partner stays away from me for a while.  | .90                         |                             |
| When I failed in areas that are important to my partner, my partner became very cold and distant toward me.   | .89                         |                             |
| I feel that if I do not meet my partner's expectations, I will lose my partner's appreciation.  | .81                         |                             |
| In times when I did not meet my partner's expectations, my partner was less caring and affectionate than usual.   | .73                         |                             |
| When I fail in areas that are important to my partner, I feel that my partner cannot stand me because of that.  | .62                         |                             |
| When I succeeded in areas that are important to my partner, I felt that my partner loved me more.   |                             | .90                         |
| I feel that when I'm meeting my partner's expectations, my partner appreciates me much more than usual.   |                             | .63                         |
| I feel that my partner cares for me much more only when I satisfy my partner's expectations and wishes.   |                             | .60                         |
| My partner is prouder of me only when I meet my partner's expectations.   |                             | .58                         |
| When I succeed in tasks that are important to my partner, my partner lets me understand that he/she is more affectionate and loving only because of that. |                             | .51                         |
| Eigenvalue  | 3.55                        | 2.0                         |
| Percent of variance accounted for   | 35.5%                       | 20.0%                       |

Note.  $N = 142$ . Loadings below .30 were omitted. All item responses ranged from 1 to 7.

studies on parent-child relationships showed that CPR and CNR were positively but moderately correlated (Assor & Tal, 2012; Roth et al., 2009; Roth, 2008).

It is therefore important to demonstrate that CPR makes a unique contribution to relationship quality, above and beyond the effect of CNR. Moreover, to date, only one study has directly examined the effects of perceived CPR and CNR simultaneously on aspects of relationship quality. Specifically, Roth et al. (2009) found that although parental CPR in the domain of emotion regulation was correlated with overall resentment toward the parent, it did not predict resentment toward the parent above and beyond parental CNR. However, in that study, CPR was limited to the domain of emotional regulation.

In light of the very promising results of Study 1, the goal of Study 2 was to replicate and extend Study 1's results in several ways. First, we focused on romantic relationships, a realm in which CPR has rarely been examined. Second, we measured several facets of relationship quality to demonstrate that the effects of CPR are not limited to satisfaction and closeness. After all, having a partner who uses conditional regard might also lead to serious doubts about whether that partner truly loves the other individual. Such doubts might increase the other partner's ambivalence and undermine his or her commitment to the partner. Third, we wanted to further establish the unique effects of CPR on relationship quality above and beyond those of CNR. Fourth, comparing perceived CPR and CNR may involve a comparison between different levels of warmth because CPR implies receiving more affection and warmth, whereas CNR

refers to receiving less affection and warmth. A large body of research has validated the importance of affection and warmth for the development and maintenance of relationship quality (e.g., Klohnen & Bera, 1998; Simpson et al., 1996). Therefore, the current analyses were conducted while controlling for the respondents' perceptions about their partners' warmth. Thus, we hypothesized that perceived CPR would negatively predict relationship quality, over and above CNR and the partner's warmth.

The second goal of Study 2 was to test whether need fulfillment mediates the association between CPR and relationship quality. As noted earlier, based on the SDT, it is reasonable to hypothesize that CPR undermines the satisfaction of the need for autonomy and to some extent may also undermine the need for relatedness. Therefore, we expected that CPR would be negatively associated with the fulfillment of the need for autonomy. As the need for autonomy is essential to maintaining satisfying close relationships (Deci et al., 2006; LaGuardia et al., 2000), we also posited that fulfillment of the need for autonomy would mediate the association between CPR and relationship quality. To the best of our knowledge, there is no published work showing that the dissatisfaction of the need for autonomy may be the mechanism by which CPR undermines relationship quality.

Positing a hypothesis about the need for relatedness proved more difficult. On one hand, CPR provides the opportunity to receive more affection, and affection is most likely to contribute to felt relatedness. On the other hand, CPR implies that the person is not accepted for who he or she really is, but is loved only under very specific conditions, a situation that is likely to

undermine relatedness. Therefore, we included the need for relatedness as a potential mediator, although we did not develop a specific hypothesis about its role.

## Method

**Participants and Procedure.** The study consisted of 142 participants (74 females) involved in marital or cohabiting relationships; 65 participants were married, and 42 participants had one child. The participants' mean age was 24.8 years ( $SD = 2.72$ ), and the average duration of their relationship was 2.5 years ( $SD = 1.66$ ). Participants were recruited through advertisements on social networking Web sites and on the campus of an Israeli university, and they received course credit ( $n = 38$ ) or a \$5 payment for filling out the questionnaires. Participants were informed that the study involved completing questionnaires about their romantic relationship and that their responses would be kept completely confidential. Four trained research assistants administered the questionnaires in the lab, assessing the variables of interest.

**Measures. Conditional Positive and Negative Regard.** Perceived CPR was assessed by the same measure used in Study 1 to assess CPR by a romantic partner. CNR was measured with a modified five-item academic CNR scale (Assor & Tal, 2012; Roth et al., 2009), which was adjusted to pertain to romantic relationships (e.g., "I feel that if I do not meet my partner's expectations, I will lose my partner's appreciation"). Items were rated on a scale ranging from 1 (*not at all*) to 7 (*very much*). To support the distinction between CPR and CNR, the 10 items were subjected to an exploratory factor analysis with Promax rotation. According to the criterion of eigenvalue  $> 1$  and scree plot (Hair, Black, Babin, Anderson, & Tatham, 2006), our results replicated the factorial structure of previous studies (e.g., Assor & Tal, 2012; Roth et al., 2009), yielding the expected two factors accounting for 55.5% of the variance. Table 2 presents the results of the factor analysis. All items met acceptable criteria of minimal loading and cross loading (Hair et al., 2006). Specifically, items loaded above .51 on their primary factor, and none of the secondary loadings exceeded .30. The CPR scale had a Cronbach's alpha coefficient of .70, and the CNR scale had a Cronbach's alpha coefficient of .81. The correlation between the scales was .46, which is in line with previous studies indicating that CPR-CNR associations ranged from .36 to .66 (Assor & Tal, 2012; Roth et al., 2009).

Importantly, the scales of CPR and CNR were distinguished from the partner's attributional style and attachment dimensions. CPR and CNR were weakly correlated with the partner's positive attributional styles ( $r = -.18, p < .05$ ;  $r = -.10, ns$ ; respectively), which we assessed with a questionnaire based on Murray, Holmes, and Griffin's (1996) interpersonal qualities scale. In addition, in another sample of  $n = 198$ , the perceived partner's CPR was positively associated with attachment anxiety ( $r = .32, p < .01$ ) but not with avoidance ( $r = .05, ns$ ), as measured by the Experiences in Close Relationships Scale (Brennan,

Clark, & Shaver, 1998). In contrast, perceived CNR was positively associated with anxiety ( $r = .35, p < .01$ ) and avoidance ( $r = .28, p < .01$ ). Overall, these findings suggest that conditional regard may not merely reflect the partner's attribution style or dimensions of attachment.

**Satisfaction.** Fulfillment of the needs for autonomy and relatedness was measured using the Basic Need Satisfaction in Relationships Scale (La Guardia et al., 2000). This nine-item scale measured the fulfillment of the needs for autonomy, relatedness, and competence. For the purpose of the current study, we used only the three items for autonomy and the three items for relatedness. Participants rated how well their romantic partner supported their needs for autonomy and relatedness on a 7-point Likert scale. Sample items are "When I am with my partner, I feel free to be who I am" (autonomy) and "When I am with my partner, I feel loved and cared about" (relatedness). Cronbach's alphas were .74 for autonomy and .75 for relatedness.

**Perceived Partner's Warmth.** This variable was assessed with two items referring to the partner's warmth. A sample item is "My partner is warm and affectionate." Items were rated from 1 (*not at all*) to 9 (*very much*), and Cronbach's alpha was .66.

**Relationship Quality.** This construct was indicated by measures of relationship satisfaction, closeness, commitment, and ambivalence. Relationship satisfaction was assessed using the satisfaction facet as described in Study 1 (Rusbult et al., 1998). Internal reliability, computed with Cronbach's alpha, was .72. Perceived closeness was measured with the IOS Scale (Aron et al., 1992), as described in Study 1. Commitment was assessed using five items (Rusbult et al., 1998) that measured the conative (i.e., intent to persist), cognitive (i.e., long-term orientation), and affective (i.e., psychological attachment) components of commitment (e.g., "How likely is it that you will date someone other than your partner in the next year?"). Items were rated from 1 (*not at all*) to 7 (*very much*) and were averaged such that higher scores reflect greater commitment to the relationship. Cronbach's alpha was .79. Ambivalence was measured with the 5-item ambivalence scale (Braiker & Kelley, 1979), which captured individuals' experiences of conflicted or confused feelings about their relationships (e.g., "I feel somewhat confused about my feelings toward my partner"). Items were rated from 1 (*not at all*) to 7 (*very much*) and were averaged such that higher scores reflect greater ambivalence. Cronbach's alpha was .80. Factor analysis revealed that the four measures converged and loaded highly on a single factor (.71 to .85). Therefore, we retained the factor scores as an indicator of relationship quality.

## Results and Brief Discussion

Table 3 displays the descriptive statistics for the variables studied as well as the correlations among them. Consistent with the

**Table 3** Intercorrelations, Means, and Standard Deviations for the Research Variables

|                         | Mean | SD   | Min.  | Max. | 1     | 2     | 3    | 4    |
|-------------------------|------|------|-------|------|-------|-------|------|------|
| 1. CPR                  | 2.80 | 1.09 | 1.00  | 7.00 |       |       |      |      |
| 2. CNR                  | 2.40 | 1.15 | 1.00  | 7.00 | .46*  |       |      |      |
| 3. Need for autonomy    | 5.56 | 1.00 | 1.00  | 7.00 | -.49* | -.45* |      |      |
| 4. Need for relatedness | 6.15 | 0.91 | 1.00  | 7.00 | -.31* | -.41* | .44* |      |
| 5. Relationship quality | 0.00 | 1.00 | -4.00 | 4.00 | -.50* | -.49* | .63* | .74* |
| 6. Partner's warmth     | 7.27 | 1.39 | 1.00  | 9.00 | -.24* | -.35* | .43* | .64* |

Note.  $N = 142$ . CPR = conditional positive regard; CNR = conditional negative regard.

\* $p < .001$ .

first hypothesis, CPR and CNR were inversely related to relationship quality. The correlations also provide preliminary support for the mediation hypothesis. CPR was negatively associated with fulfillment of the needs for autonomy and relatedness, which were significantly associated with relationship quality. CNR was also negatively associated with the fulfillment of both needs.

In addition, the partner's warmth was inversely associated with CPR and CNR and positively associated with fulfillment of the needs and relationship quality, which justified the decision to control for it. Moreover, some of the demographic variables were found to covary with the research variables. Gender was significantly associated with CPR ( $r = -.21, p < .05$ ) and autonomy ( $r = .19, p < .05$ ). Men reported that, compared to women, they experienced more CPR and less autonomy in their romantic relationships. Furthermore, autonomy was significantly associated with age ( $r = -.19, p < .05$ ) and relationship duration ( $r = -.20, p < .05$ ). Thus, in all of the following analyses, we controlled for CNR, partner's warmth, gender, age, and relationship duration.

To determine whether CPR is uniquely associated with relationship quality and needs fulfillment when accounting for CNR, partner's warmth, and demographic variables (age, gender, and relationship duration), we conducted three separate multiple regression analyses, one for each outcome variable. Table 4 presents the standardized regression coefficients. Results support our first hypothesis, indicating that participants who viewed their partners as using more CPR were likely to

experience less relationship quality. Notably, the unique effects of perceived CPR were evident above and beyond the effects of perceived CNR and partner's warmth. A post hoc power analysis found that the power to detect a medium effect size at the .05 level was .94 of the overall regressions, indicating more than adequate power (i.e., power = .80). CNR was not significantly associated with relationship quality.

Regarding needs, our results accorded with the SDT. CPR was inversely and significantly associated with autonomy but not with relatedness, whereas CNR was inversely and significantly associated with autonomy and relatedness. The partner's warmth emerged as a significant predictor of relationship quality, which justified its inclusion.

A mediation analysis was then conducted to test the second hypothesis that the relationship between CPR and relationship quality would be mediated by the need for autonomy. Given that CPR did not significantly predict the need for relatedness, we omitted the latter from the model as a mediator. Thus, the predictor was CPR, the mediator was the fulfillment of the need for autonomy, and the outcome was relationship quality. CNR, partner's warmth, and the demographic variables (age, gender, and relationship duration) were included as control variables. We also controlled for relatedness because we wanted to examine the unique role of autonomy, which is not shared with relatedness.

We tested the mediational hypothesis by using the PROCESS macro in IBM SPSS (Hayes, 2012). This macro assesses the significance of the cross product of the coefficients for the predictor to mediator relation (the  $a$  path) and the mediator to outcome relation, controlling for the predictor (the  $b$  path). An  $ab$  cross-product test is recognized as perhaps the best all-around available method to test mediation (Hayes, 2013). Results are presented in Figure 1, which indicates that CPR was negatively associated with fulfillment of the need for autonomy, which in turn was positively associated with relationship quality.

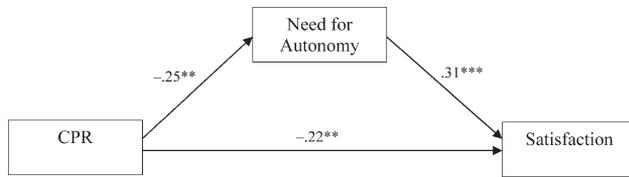
To test for the significance of the mediation effects, we used Hayes's (2013) method and calculated 5,000 bootstrapped samples to estimate the 95% bias-corrected and accelerated confidence intervals (CIs) of the indirect effects of CPR on relationship quality through autonomy. For convenience, we also report the traditional mediation significance test (i.e., Sobel test). Results of these analyses indicate the confidence intervals of the indirect effect did not contain zero (mediated  $b = -.05$ ,

**Table 4** CPR and CNR as Predictors of Romantic Relationship Quality

|                       | Need for Autonomy | Need for Relatedness | Relationship Quality |
|-----------------------|-------------------|----------------------|----------------------|
| CPR                   | -.25** (-.34**)   | -.02 (-.06)          | -.28** (-.32**)      |
| CNR                   | -.18* (-.23*)     | -.19* (-.37**)       | -.15 (-.29**)        |
| Partner's warmth      | .34***            | .58***               | .50***               |
| Gender                | .13               | .10                  | -.03                 |
| Age                   | -.12              | .01                  | -.06                 |
| Relationship duration | -.21**            | -.11                 | -.17**               |

Note.  $N = 142$ . CPR = conditional positive regard; CNR = conditional negative regard. Gender: 0 = male; 1 = female. Values in parentheses represent the statistical effects of CPR and CNR in a model without the control variables.

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



**Figure 1** CPR predicting relationship quality with the need for autonomy as the mediator. CPR = conditional positive regard. For reasons of parsimonious presentation, conditional negative regard, partner's warmth, relatedness, relationship duration, gender, and age are not presented in the path diagram but were included in the model as covariates for both the mediator and the outcome variables.  $N = 142$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

$SE = .02$ , 95% CI  $[-.14, -.01]$ , Sobel's  $z = 2.01$ ,  $p < .05$ ); therefore, we can conclude that CPR had a significant indirect effect on relationship quality through the need for autonomy. Moreover, CPR was also directly linked with relationship quality, suggesting that the need for autonomy partially mediated the association between CPR and relationship quality.

Overall, the results of the present study support the uniquely negative contribution of CPR to relationship quality, an effect that is not accounted for by CNR. The results also indicate that CPR alone accounts for variances in relationship quality that are not accounted for by the partner's warmth. This finding is important because it implies that CPR is not merely an overall heightened level of perceived warmth. Rather, the systematic use of heightened warmth as a means of controlling one's partner is probably the key factor associated with a reduction in relationship quality.

The statistical effects of CPR and CNR on the needs for autonomy and relatedness also support the SDT perspective. As expected, both CPR and CNR were inversely related to the experience of autonomy. However, CPR was not associated with relatedness. A possible explanation is that CPR is associated with relatedness in opposing ways. On the one hand, CPR holds out the promise of increased love and acceptance, but on the other hand, the love is granted only if the individual behaves in a particular way. These two processes might cancel one another out. In contrast, CNR, theoretically, involves thwarting the need for relatedness, as the findings demonstrated.

These results also offer initial support for the hypothesis that fulfillment of the need for autonomy is the mechanism by which CPR might affect relationship quality. This finding supports the SDT because conditional regard is conceptually defined as a practice that thwarts autonomy.

### STUDY 3

Study 3 was designed to replicate and extend the findings of Study 2 in a sample of romantic dyads. In Studies 1 and 2, we assessed the participants' perceived CPR via their reports of being subjected to CPR from their romantic partners. In contrast, in Study 3, we assessed CPR by asking the partners about the extent to which they indeed used that strategy. Relying on the partner's report of using CPR toward the participants has several advantages.

Dyadic processes, by definition, involve two people: the person or "actor" and his or her interaction "partner." The actor effect is evident when one's score on a predictor affects that person's score on an outcome variable. A partner effect occurs when a person's score on a predictor variable (e.g., using CPR) affects his or her partner's score on an outcome variable (e.g., the partner's relationship quality). Thus, in contrast to an actor effect, a partner effect represents the behavior that an individual elicits from others (e.g., the degree of a wife's relationship quality that results from her husband's use of CPR), making partner effects highly important.

Moreover, when the same person reports on both perceived CPR from the partner as well as his or her feelings in the relationship with the partner, as was the case in Studies 1 and 2, we might attribute any associations found to common rater, social desirability, and implicit theory biases (e.g., Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The use of different informants in Study 3 might help compensate for the biases that might occur if only one rater is used.

As in Studies 1 and 2, we hypothesized that the partners' CPR would be negatively associated with relationship quality. In this study, we used a global measure of relationship quality that captures its multidimensionality. Taking advantage of the dyadic sample, we predicted that the partners' report of using CPR would be inversely associated with the actors' relationship quality. Furthermore, we predicted that dissatisfaction of the need for autonomy, but not for relatedness, would mediate the association between the partners' reports of using CPR and the actors' reports of poor relationship quality.

## Method

**Participants and Procedure.** Participants were 183 individuals in exclusive, cohabiting, romantic relationships. Of them, 85 were couples ( $n = 170$ ). We were unable to collect valid data from the partners of the remaining 13 participants. Of these 13 participants, seven were males and six were females. *T*-test analyses with adjustments for unequal variances conducted for each gender indicated that the 13 participants did not differ statistically from the 85-dyad sample in any of the research variables. Nevertheless, given that the main concern of this study was to assess the relationships between partners, we omitted the 13 individuals from our analyses.

Participants ranged from 21 to 50 years of age ( $M = 27.75$ ,  $SD = 5.56$ ) and had been involved in their relationship from 6 months to 35 years ( $M = 5.16$ ,  $SD = 5.43$ ). Of the sample, 31% were married. Participants were recruited through advertisements on social networking sites. They were informed that the study involved completing questionnaires about their romantic relationship and that their responses would be kept completely confidential. All of the information was collected using Qualtrics.

## Measures.

**Conditional Positive Regard.** We assessed the tendency to use CPR with an adjusted version of the five-item perceived

**Table 5** Descriptive Statistics and Correlations Between the Research Variables

|                                 | M    | SD     | Min. | Max. | 1                 | 2                 | 3                 | 4                 | 5                 | 6                 | 7                 | 8 |
|---------------------------------|------|--------|------|------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---|
| 1. Women's CPR                  | 4.10 | (1.17) | 1.00 | 7.00 | —                 |                   |                   |                   |                   |                   |                   |   |
| 2. Men's CPR                    | 3.40 | (1.16) | 1.00 | 7.00 | .21*              | —                 |                   |                   |                   |                   |                   |   |
| 3. Women's autonomy             | 6.05 | (0.90) | 1.00 | 7.00 | -.17              | -.31 <sup>†</sup> | —                 |                   |                   |                   |                   |   |
| 4. Men's autonomy               | 5.78 | (1.02) | 1.00 | 7.00 | -.32 <sup>†</sup> | -.12              | .35 <sup>†</sup>  | —                 |                   |                   |                   |   |
| 5. Women's relatedness          | 6.29 | (0.89) | 1.00 | 7.00 | -.05              | -.22**            | .66 <sup>††</sup> | .41 <sup>††</sup> | —                 |                   |                   |   |
| 6. Men's relatedness            | 6.15 | (0.97) | 1.00 | 7.00 | -.14              | -.22**            | .41 <sup>††</sup> | .65 <sup>††</sup> | .59 <sup>††</sup> | —                 |                   |   |
| 7. Women's relationship quality | 6.22 | (0.73) | 1.00 | 7.00 | -.12              | -.27**            | .64 <sup>††</sup> | .50 <sup>††</sup> | .81 <sup>††</sup> | .62 <sup>††</sup> | —                 |   |
| 8. Men's relationship quality   | 6.07 | (0.76) | 1.00 | 7.00 | -.24**            | -.21*             | .43 <sup>††</sup> | .70 <sup>††</sup> | .44 <sup>††</sup> | .83 <sup>††</sup> | .60 <sup>††</sup> | — |

Note.  $N = 85$ . CPR = conditional positive regard.

\* $p < .06$ . \*\* $p < .05$ . <sup>†</sup> $p < .01$ . <sup>††</sup> $p < .001$ .

CPR scale used in Study 2. Specifically, items measuring *perceived* CPR (e.g., “I feel that my partner cares for me much more only when I satisfy my partner’s expectations and wishes”) were altered to assess *the use of* CPR: “Only when my partner satisfies my expectations and wishes do I let my partner feel that I care for her/him much more.” Items were rated on a scale ranging from 1 (*not at all*) to 7 (*very much*). Cronbach’s alpha was .81.

**Need Satisfaction.** We measured the fulfillment of the needs for autonomy and relatedness using the Basic Need Satisfaction in Relationships Scale (La Guardia et al., 2000) as described in Study 2. Cronbach’s alphas were .67 for autonomy and .75 for relatedness.

**Relationship Quality.** We used the 18-item Perceived Relationship Quality Components Scale (PRQC; Fletcher, Simpson, & Thomas, 2000) to measure relationship quality. This scale assessed six components of relationship quality (three items per component): relationship satisfaction, commitment, intimacy, trust, passion, and love. Participants rated their current partner and relationship on each item on a scale ranging from 1 (*not at all*) to 7 (*extremely*). Cronbach’s alpha was .93, and an overall score was computed.

## Analytical Strategy

The structure of the current data was nested because the participants were grouped within dyads. Ignoring such dyadic dependencies may bias significance tests, increase Type I errors, and undermine statistical power (Kenny, 1996).

Therefore, we tested our hypotheses using the actor-partner interdependence model (APIM; Kenny, Kashy, & Cook, 2006). The APIM is a rigorous dyadic analysis designed to control for dyadic data dependency. In these analyses, an *actor effect* occurs when one’s own independent variable predicts one’s own outcome variable, and a *partner effect* is noted when the partner’s independent variable (e.g., use of CPR) predicts the actor’s outcome variable (e.g., relationship quality). Gender and the interactions between gender and the independent and mediating

variables were included to examine whether the indirect effects varied across men and women. We used the MIXED procedure in SPSS (Kenny, Kashy, & Cook, 2006) to conduct the APIM analysis. Prior to doing so, we effect-coded gender (women =  $-1$ , men =  $1$ ), and the predictor and mediators were grand mean centered.

To test for mediation effects within the framework of the dyadic analysis, we took the following steps (Baron & Kenny, 1986; Hayes, 2013; MacKinnon, 2008).

First, we tested for a *total effect*, indicating whether the initial variable (i.e., the partner’s CPR) significantly predicted the outcome variable (i.e., the actor’s relationship quality). Although establishing a total effect in a mediational analysis is not essential (Hayes, 2013), it is valuable for determining whether the effect of the initial variable on the outcome variable is partially, completely, or inconsistently mediated (Ledermann, Macho, & Kenny, 2011). Next, we conducted two analyses aimed at testing the paths between the partner’s CPR and the two mediators. The third step involved an examination of the paths from the mediators to the outcome variable in the presence of the initial variable. In the fourth and last step, we tested the significance of the *indirect effects* by calculating the 95% CI based on 5,000 bootstrapped samples and the traditional Sobel test. Given that the MIXED procedure cannot estimate indirect effects, and available macros for estimating indirect effects are not suitable for nested data (e.g., PROCESS; Hayes, 2013), we created the dyadic model in AMOS (Arbuckle, 2009) and used its bootstrapping and indirect estimation capabilities. Dyadic analysis conducted using the MIXED procedure or AMOS yielded similar results (see Kenny et al., 2006).

## Results and Discussion

Table 5 displays the means, standard deviations, and correlations among all of the research variables. Consistent with Study 2, for both women and men, the use of CPR was inversely related to their partners’ experience of autonomy, relatedness, and relationship quality. Furthermore, for both sexes, the

**Table 6** Total, Direct, and Indirect Effects of CPR on Relationship Quality Through Need Satisfaction: Dyadic Analysis

| Dependent Variable Model (DV = Actor's Relationship Quality)    |       |     |         |        |        |  |
|---|-------|-----|---------|--------|--------|--|
| Predictors  | B     | SE  | $\beta$ | t      | p      |  |
| Intercept   | 6.14  | .07 | —       | 86.04  | < .001 |  |
| Partner's CPR   | -0.11 | .04 | -.19    | 2.74   | .007   |  |
| Gender  | 0.04  | .04 | .05     | 0.94   | .349   |  |
| Partner's CPR $\times$ Gender                                   | 0.01  | .04 | .02     | 0.32   | .753   |  |
| Mediator Variable Model (DV = Actor's Autonomy Satisfaction)    |       |     |         |        |        |  |
|   | B     | SE  | $\beta$ | t      | p      |  |
| Intercept   | 5.92  | .08 | —       | 71.45  | < .001 |  |
| Partner's CPR   | -0.24 | .06 | -.30    | 3.97   | < .001 |  |
| Gender  | 0.05  | .06 | .05     | 0.77   | .442   |  |
| Partner's CPR $\times$ Gender                                   | 0.01  | .06 | .02     | 0.32   | .753   |  |
| Mediator variable model (DV = actor's relatedness satisfaction) |       |     |         |        |        |  |
|   | B     | SE  | $\beta$ | t      | p      |  |
| Intercept   | 6.22  | .09 | —       | 68.80  | < .001 |  |
| Partner's CPR   | -0.09 | .05 | -.12    | 1.65   | .102   |  |
| Gender  | 0.04  | .05 | .04     | 0.75   | .457   |  |
| Partner's CPR $\times$ Gender                                   | 0.01  | .05 | .02     | 0.27   | .788   |  |
| Dependent variable model (DV = actor's relationship quality)    |       |     |         |        |        |  |
|   | B     | SE  | $\beta$ | t      | p      |  |
| Intercept   | 6.14  | .02 | —       | 171.32 | < .001 |  |
| Partner's CPR   | -0.05 | .03 | -.07    | 1.61   | .109   |  |
| Actor's autonomy  | 0.14  | .04 | .17     | 3.06   | .003   |  |
| Actor's relatedness   | 0.54  | .05 | .67     | 11.91  | < .001 |  |
| Gender  | 0.01  | .03 | .01     | 0.22   | .823   |  |
| Actor's Autonomy $\times$ Gender                                | -0.00 | .04 | -.00    | 0.11   | .915   |  |

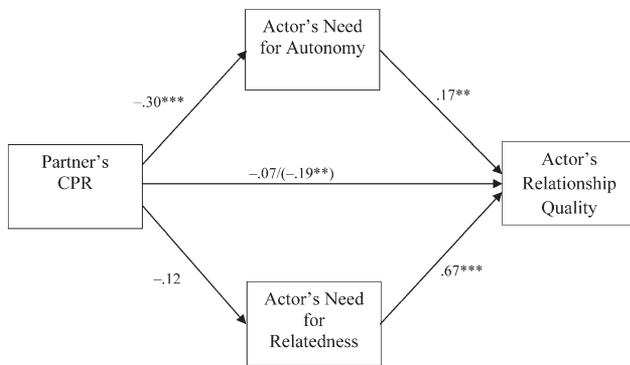
Note.  $N = 170$ . CPR = conditional positive regard.

experiences of autonomy and relatedness were positively associated with relationship quality. These correlations provide preliminary support for the mediation hypothesis.

*T*-tests of dependent samples revealed that women reported using CPR more than their male partners,  $t(84) = 4.41$ ,  $p < .001$ , and estimated their relationship quality as higher,  $t(84) = 2.13$ ,  $p = .036$ . Women also reported experiencing more autonomy in their relationships,  $t(84) = 2.21$ ,  $p = .030$ , but were not statistically different from their male partners in felt relatedness,  $t(84) = 1.49$ ,  $p = .141$ . Moreover, positive associations were found between romantic partners for all of the research variables. The mean differences and correlations between the romantic partners indicated participant nonindependence, thus justifying the use of dyadic analysis and the controlling for gender effects.

Table 6 displays the results of the dyadic analyses testing whether the partner's CPR was linked with the actor's relationship quality through the satisfaction of the latter's needs for autonomy and relatedness. In the first dyadic analysis, we entered the partner's CPR, gender, and CPR  $\times$  Gender interaction as predictors of the actor's relationship quality. The results in the upper part of Table 6 indicate that the more a partner used CPR, the more his or her counterpart reported reduced levels of relationship quality. Importantly, the effect was not moderated by gender. In the second step of the dyadic analy-

ses, we tested how the partner's use of CPR affects the actor's need fulfillment. Consistent with Study 2, the results indicated that when one's partner used CPR, one's counterpart was more likely to report feeling less autonomous. Moreover, CPR was not significantly associated with relatedness, thus ruling out relatedness as a possible mediator. Again, gender did not moderate the effect of CPR on needs fulfillment. Next, we tested whether the satisfaction of these needs predicted relationship quality when introducing CPR. The results indicated that one's autonomy and relatedness significantly predicted one's relationship quality. Notably, the partner's CPR was no longer a significant predictor of one's relationship quality, suggesting that autonomy may fully mediate the association between CPR and relationship quality. However, this effect should be interpreted with caution, as the sample size was not large and thus nonsignificant direct paths are more likely. The last step of the dyadic analyses involved testing the significance of the indirect effect linking CPR to relationship quality through autonomy. The 95% confidence interval calculated on the 5,000 bias-accelerated bootstraps ranged between  $-.054$  and  $-.008$ . Given that zero was not included in that range, these findings suggest a significant indirect effect. A Sobel test yielded significant results as well ( $z = 2.63$ ,  $p = .008$ ), supporting this contention. A summary of the mediation analyses is presented in Figure 2.



**Figure 2** Partner's CPR predicting actor's relationship quality with the needs for autonomy and relatedness as the mediators. CPR = conditional positive regard. All paths represent standardized actor-partner interdependence model coefficients. For reasons of parsimonious presentation, the main and moderation effects of gender are not presented.  $N = 170$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## GENERAL DISCUSSION

To the best of our knowledge, the current series of studies is the first to explore correlates of conditional regard between partners. Overall, two important findings emerged from these studies. First, despite its seemingly benign nature, CPR is negatively associated with relationship quality. In Study 1, CPR was inversely associated with relationship quality on both the individual level and the relationship level. On the individual level, participants' overall experience of CPR was inversely related to the quality of their relationships. On the relationship level, across the four relationship targets (i.e., mother, father, romantic partner, and best friend), the participants experienced less relationship satisfaction and less closeness in relationships characterized by higher levels of perceived CPR in the specific relationship.

Study 2 expanded the assessment of relationship quality to include measures of commitment and ambivalence in addition to satisfaction and closeness. In this study, CPR significantly predicted relationship quality above and beyond the effect of CNR and the partner's warmth. Study 3 extended the findings from the individual level to the dyadic level, suggesting that individuals' use of CPR to shape their romantic partner's behavior was associated with the partner's experiencing a poorer relationship quality.

The second important finding concerns the mechanism through which CPR is associated with relationship quality. Study 2 revealed that fulfillment of the need for autonomy, but not relatedness, mediated the association between CPR and relationship quality. In line with this finding, Study 3, which consisted of a sample of dyads, revealed that the use of CPR toward one's partner was related to the partner's experience of autonomy frustration, which, in turn, was associated with poor relationship quality.

The present set of studies makes several contributions to the literature. First, it provides the first rigorous empirical evidence for the link between CPR and indicators of relationship quality.

Although past research has shown that conditional regard was inversely associated with aspects of relationship quality, these studies focused mainly on parent-child relationships (Roth et al., 2009), did not always differentiate between CPR and CNR (Assor et al., 2004; Roth & Assor 2012), and relied on a single informant. The current research provides consistent results suggesting that CPR undermines relationship quality at the individual level, at the relationship level, and across partners. The significant partner CPR effect in Study 3 is of special importance because it indicates the effect of one member of the dyad on his or her partner cannot be attributed to common-rater biases.

A second contribution is the examination of the mechanism through which CPR is associated with relationship quality. Studies 2 and 3 suggest that CPR may be inversely associated with relationship quality because it undermines the satisfaction of the basic psychological need for autonomy. According to the SDT, conditional regard involves a conflict between the satisfaction of the need for autonomy and the satisfaction of the need for relatedness. The recipient of CPR is forced to choose between receiving more affection or maintaining his or her autonomy and self-determination. The pressure to give up one's sense of autonomy in order to receive more affection therefore is likely to interfere with the fulfillment of that need. The results of the current research support this notion, as CPR is negatively associated with the fulfillment of the need for autonomy.

Importantly, the findings also indicate that the promise of more affection in exchange for complying with external demands does not result in the fulfillment of the need for relatedness. In other words, communicating to the partner that more love and affection will be provided when he or she meets specific exaction does not make the partner feel more related, connected, or cared for. These findings accord with those of previous studies highlighting that care for one's partner should be communicated in a manner that also supports his or her need for autonomy (Deci et al., 2006; La Guardia et al., 2000; Patrick et al., 2007).

Third, the present work supports the distinction between CPR and CNR. As Study 2 showed, the items composing CPR and CNR loaded on distinct but not independent factors. These findings replicate previous studies focused on parent-child relationships (Assor & Tal, 2012; Roth et al., 2009). Moreover, the results of Study 2 demonstrate that CPR and CNR are associated differently with the basic psychological needs postulated by SDT. Perceived use of CPR and CNR by a close other is inversely related to the need for autonomy. However, only CNR is negatively associated with relatedness. This pattern may occur because CNR clearly involves the potential loss of a great deal of affection and caring and the experience that the other person's affection may only be transitory. Thus, the overall findings from the current research, along with previous findings (Assor & Tal, 2012; Roth et al., 2009), provide further support for the distinction between CPR and CNR as two forms of a controlling practice.

A number of caveats to our studies should be mentioned. One limitation is the correlational nature of the studies. Clearly,

our findings do not show that CPR causes poor-quality relationships or impedes the satisfaction of needs. Moreover, reverse causality is also possible. In other words, the quality of the relationship may shape the perception of conditional regard. Indeed, a substantial body of research has shown that the attributions that spouses make for events that occur in their relationship are produced by changes in their relationship satisfaction (e.g., Bradbury & Fincham, 1990). Causality can be demonstrated, to some extent, in longitudinal research design or by experiments that manipulate conditional regard and then measure relationship quality.

Second, as in many studies, we relied heavily on the Null Hypothesis Significance Test (NHST) for examining the research questions. The NHST is known to be sensitive to Type I errors that could result from the multiple analyses. Moreover, while the mediation bootstrapping was significant, some of the 95% CI limits were close to zero.

Third, a stronger and more comprehensive construct validation of CPR is desirable. Although factor analysis distinguished between CPR and CNR in the present samples as well as in past research (e.g., Assor & Tal, 2012; Roth et al., 2009), not all of the items had high loadings. Moreover, an examination of the CPR nomological network beyond attachment and the partner's attributions would have helped validate the constructs. Likewise, further research may distinguish between conditional regard and perceived autonomy, as the wording of the scales suggests that they might be measuring opposite ends of the same continuum.

Fourth, measuring perceived conditional regard using self-report measures assumes that people are aware that their partner's regard is contingent upon their compliance with their demands. Although reasonable, this assumption does not preclude the possibility that the partners' contingencies operate at subconscious levels or that people are merely projecting their own regard contingencies on their partners. In addition, in Studies 1 and 2, the participants reported on both their perceived CPR and relationship quality. Using a single rater may inflate the associations by common variance (Podsakoff et al., 2003). The procedure we used in Study 3, in which one partner reported on using CPR and the other partner reported about relationship quality, might help mitigate this bias.

A fifth limitation of the present research concerns its generalizability. The participants were heterosexual Israelis who varied in age (21 to 50) and relationship duration (6 months to 35 years). Despite the fact that the majority of participants were in their late twenties, we had nearly equal numbers of men and women (57% women), nearly a third were married, and more than half were not college students. Thus, overall, these studies might be representative of heterosexual romantic partners in the early years of their relationships. Further research is needed to explore the effects of CPR in later stages of the relationship, in same-sex relationships, and in different cultures.

Despite these limitations, the present research has several practical implications and opens up new research possibilities. One major implication is that although conditional regard may

be an effective and relatively convenient practice in shaping close other behaviors, it bears its cost for relationship quality. While it might be impossible for two individuals to adjust to one another and create a stable, long-term relationship without using some conditional regard, our findings caution against the endorsement of this practice. This is especially so because there is research suggesting that supporting autonomy may be a preferable and workable alternative to conditional regard (e.g., Roth et al., 2009). The strategy of autonomy support includes the provision of a meaningful rationale for one's expectations, trying to understand the other person's perspective and feelings, and allowing choice in the manner in which these expectations are to be met. However, providing such support requires considerable psychological effort and trust in oneself and in one's partner, which may lead partners to rely on a less demanding and more controlling method such as conditional regard.

Given that this research is grounded in SDT, future studies might look at the dynamics between the fulfillment or frustration of needs under the conditions of compliance or noncompliance to CPR. For instance, when complying with external demands, one might favor the partial fulfillment of the need for relatedness over some dissatisfaction of the need for autonomy. On the other hand, refusing to comply with CPR pressures would imply that one is willing to give up partial fulfillment of the need for relatedness in order to feel autonomous. An intriguing line of research might be to explore the factors that may affect this choice. For example, Swanson and Mallinckrodt (2001) found that the withholding of love predicts avoidance attachment, suggesting that perhaps individuals who avoid closeness prefer to fulfill their need for autonomy rather than their need for relatedness.

The current studies focused on relationship quality among romantic couples. Future studies might test the hypotheses in other contexts, such as among teachers and students, between managers and employees, and within friendships. Another future line of research might be the exploration of the antecedents of conditional regard. For instance, a promising avenue might be to study whether perceived parental conditional regard serves as a predictor of conditional regard in romantic relationships.

In conclusion, the findings suggest that despite its seemingly benign nature and its endorsed use by some professionals, CPR is detrimental to relationship quality. The results also imply that CPR undermines the quality of relationships because it thwarts the basic need for autonomy. Moreover, the negative associations between CPR and relationship quality emerge regardless of the relationship's target, gender, CNR, and partner's warmth. Thus, gaining the love and esteem of a close other in exchange for compliance with that person's demands appears to be a rather rocky and ultimately disappointing road to a satisfying close relationship.

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