Regulatory Focus and Social Support: A Dyadic Perspective

A DISSERTATION
SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL
OF THE UNIVERSITY OF MINNESOTA
BY

Heike A. Winterheld

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

Jeffry A. Simpson, Advisor

December 2008

Acknowledgements

I would first like to thank my advisor, Jeff Simpson, who has been my role model as an outstanding researcher, teacher, and mentor from the day I set foot in his office in Texas. Jeff's flexibility, patience, and unwavering support enabled me to juggle all the unexpected and difficult challenges that arose during my time in graduate school. Among many things, I learned from him how to walk the fine line between attending closely to details and becoming hopelessly lost in them. Nikos Kazantzakis, the Cretan writer and philosopher, said "teachers are those who use themselves as bridges, over which they invite their students to cross; then, having facilitated their crossing, they joyfully collapse, encouraging them to create bridges of their own." This so very well describes Jeff. Thanks for everything, and I hope that the collaborations will continue for many years to come.

There are few things that I hate as much as cold weather, so Jeff's move to Minnesota did not exactly make me happy. Still, what a fortunate destination it turned out to be: I met Marti Hope Gonzales, one of my committee members, whose clear approach to complex research questions, attention to detail, creativity, and "language artistry" led me to barge into her office more times than I care to recall. Every single time, with skill, warmth, and wit, Marti took the time to help me tackle any research- or teaching-related matter (or any other) that needed to be resolved. Thank you! I feel fortunate to have Marti as a mentor, and so privileged to have her as a friend.

I also want to thank the other members of my committee: Alex Rothman, Gene Borgida, and Dean Hewes. In addition to serving on my committee, each has contributed to my education in other ways: Alex has encouraged me to think more divergently, and has prompted me to become more mindful of methodological aspects to which I had previously failed to attend. Gene has provided valuable "big picture" insights when I was too close to the details of my work. Dean has shared important and thought-provoking observations that will undoubtedly shape my work in positive ways in the future. I thank all three of them for the kind and generous encouragement that they offered throughout my time at the University of Minnesota.

Special thanks go to the friends (you know who you are) who were so very patient with my withdrawal during these past years. You have been there with unconditional acceptance and generous support when I emerged from my dissertation dungeon, and never once made me feel guilty for my absence!

Finally, I want to acknowledge my mother, my greatest role model of resilience, who encouraged me to go on this journey in the first place. She died in 2003, when I was far from the finish line, but she knew I was well on my way. For the rest of my journey, I was left to imagine her advice and support when I needed it, and even that was helpful, and always will be.

Dedication

To my mother, and to all those with a rough start in life.

Abstract

I used a regulatory focus theoretical framework to investigate social support exchanges as they unfolded between romantic partners in ongoing relationships. Regulatory focus theory proposes two fundamental motivational orientations: a prevention focus (which is concerned with safety and security), and a promotion focus (which is concerned with hopes and aspirations). The theory lends itself to understanding how different motivations of support providers and recipients might shape the quality of support transactions in different support-relevant domains (i.e., provision and perceptions of support in response to problems/distress versus support in response to goal achievement). I tested a series of theoretically-derived predictions regarding regulatory focus, support provision, and perceptions of support from romantic partners. Although the results revealed that certain situational factors appear to elicit or to facilitate the expression of people's chronic regulatory orientations during support transactions with their partners, these chronic regulatory tendencies typically transcended or outweighed the situational context. Importantly, chronic regulatory focus had both actor and partner effects when predicting support provision and support perceptions. Thus, this work highlights the intrinsically interpersonal, *dyadic* nature of social support processes and the importance of studying perceptions and behaviors of *both* partners. The degree to which people provide effective support, or respond favorably to enacted support, appears to depend on both the motivational orientations and related skills of both support providers and partners, and on how both partners relate to and interact with one another. The implications for furthering our understanding of the social support and the regulatory focus literatures will be discussed.

Table of Contents

Acknowledgments……..i

Dedication…….ii

Abstract……iii

Table of Contents…….iv

List of Tables……v

List of Figures……..…….vi

Introduction……...1

The Present Research……..25

Method……28

Results…….49

General Discussion…….....94

Footnotes……...106

Tables……108

References.……113

Appendices...…….131

List of Tables

Table 1. Means of the Predictor Variables……108

Table 2. Means and Standard Deviations for the Dependent Measures in the Problem and Goal Conditions for Women and Men……...109

Table 3. Correlations Among the Predictor Variables……..110

Table 4. Correlations Among the Predictor Variables and Dependent Measures in the Goal and Problem Conditions for Men……...111

Table 5. Correlations Among the Predictor Variables and Dependent Measures in the Goal and Problem Conditions for Women …….112

List of Figures

Figure 1. Association between actors' promotion focus and actors' self-reported motivation for actors whose partners were high or low in promotion focus…..……..55

Figure 2. Association between actors' promotion focus and actors' self-reported motivation for actors whose partners were high or low in prevention focus……..56

Figure 3. Association between actors' promotion focus and actors' partner-rated motivation for actors whose partners were high or low in promotion focus……..57

Figure 4. Association between observer-rated actors' motivation and partners' promotion focus for problem and goal conditions……..58

Figure 5. Association between actors' promotion focus and observer-rated actors' motivation for actors whose partners were high or low in prevention focus……..59

Figure 6. Association between actors' prevention focus and actors' self-reported motivation for actors whose partners were high or low in promotion focus……..60

Figure 7. Association between actors' prevention focus and actors' self-reported motivation for actors whose partners were high or low in promotion focus……...61

Figure 8. Association between actors' prevention focus and actors' partner-rated motivation in the problem and goal conditions……...62

Figure 9. Association between actors' prevention focus and actors' partner-rated motivation for actors whose partners were high or low in promotion focus……..63

Figure 10. Association between actors' promotion focus and actors' self-reported positive support for actors whose partners were high or low in promotion focus……..66

Figure 11. Association between actors' promotion focus and observer-rated positive (actor) support for actors whose partners were high or low in prevention focus.……...67

Figure 12. Association between actors' prevention focus and actors' self-reported positive support for actors whose partners were high or low in promotion focus……..69

Figure 13. Association between actors' prevention focus and actors' self-reported negative support for actors whose partners were high or low in promotion focus……..70

Figure 14. Association between actors' promotion focus and actors' perceived partner responsiveness for actors whose partners were high or low in promotion focus……73

Figure 15. Association between actors' promotion focus and actors' perceived partner responsiveness for actors whose partners were high or low in prevention focus……74

Figure 16. Associations between actors' prevention focus, partners' prevention focus, and condition (problem vs. goal) predicting actors' perceived partner responsiveness…….75

Figure 17. Associations between actors' promotion focus, partners' promotion focus, and condition (problem vs. goal) predicting actors' change in self-efficacy…….…….77

Figure 18. Association between actors' promotion focus and actors' change in self-efficacy for actors whose partners were high or low in promotion focus……...78

Figure 19. Association between actors' promotion focus and actors' change in relationship mood for problem and goal conditions……....79

Figure 20. Association between actors' promotion focus and actors' change in relationship mood for actors whose partners were high or low in promotion focus…...80

Figure 21. Association between actors' promotion focus and actors' change in positive emotions for actors whose partners who high or low in promotion focus…….81

Figure 22. Association between actors' promotion focus and actors' change in positive emotions for actors whose partners were high or low in prevention focus…...82

Figure 23. Association between actors' prevention focus and actors' change in self-efficacy for actors in the goal and problem conditions……...83

Figure 24. Associations between actors' prevention focus, partners' prevention focus, and condition (problem vs. goal) predicting actors' change in self-efficacy…...……..84

Figure 25. Associations between actors' prevention focus, partners' prevention focus, and condition (problem vs. goal) predicting actors' change in relationship mood…... 85

Figure 26. Association between actors' prevention focus and actors' change in negative emotions for actors whose partners were high or low in prevention focus…..86

Figure 27. Association between actors' promotion focus and actors' perceived positive partner support for actors whose partners were high or low in promotion focus……89

Figure 28. Association between actors' promotion focus and actors' perceived negative partner support for actors whose partners were high or low in promotion focus……90

Figure 29. Association between actors' prevention focus and actors' perceived positive partner support for actors whose partners were high or low in promotion focus……91

Figure 30. Association between actors' prevention focus and actors' perceived negative partner support for actors whose partners' were high or low in promotion focus……..92

INTRODUCTION

A sizeable literature highlights the benefits of social support not only for individuals' health and well-being, but also for the development and maintenance of satisfying relationships. Although the links between social support and vital outcomes are well documented, researchers still know little about the mechanisms that underlie these associations. To shed light on these mechanisms, this research applied regulatory focus theory (Higgins, 1997; 1998) to test how motivations affect different social support transactions as they unfolded between romantic partners. In so doing, social support was conceptualized as an interpersonal process because understanding the effects of social support involves considering characteristics of both partners, how they interact with one another in support-relevant situations, and how these interactions are related to both partners' perceptions and their personal and relationship well-being. Romantic relationships were targeted for this research because they provide the context for a dyadic investigation of the social support process and because for many adults, their romantic partners are the primary wellspring of support.

Empirical work on the role of social support in explaining individual and relational well-being has examined how partners help each other deal with difficulties or stressful events. As a consequence, little is known about other domains of social support (e.g., social support related to the pursuit of one's goals and aspirations) in which individuals who receive support from their partners might reap benefits. Effective support in response to a partner's goals might be related to different motivations and skills than effective support in response to a partner's distress. Regulatory focus theory proposes two fundamental motivational orientations: a prevention focus (which is

concerned with safety and security), and a promotion focus (which is concerned with hopes and aspirations). Thus, regulatory focus theory is one framework that lends itself to understanding how different motivations of support providers and recipients might shape the quality of support transactions in different support-relevant contexts.

To date, no research has applied regulatory focus theory to the investigation of social support processes. I will, therefore, begin by reviewing the literature on social support and some of its inconsistencies to situate the current study within this body of work. Next, I will describe regulatory focus theory, including its relevance to the study of close relationship processes. I will then describe the study and its results, and will conclude with a discussion of the findings and their implications for furthering our understanding of the social support and the regulatory focus literatures.

Social Support

The Essential Role of Social Support. More than three decades ago, epidemiological studies indicated that the presence of others is associated with better health and lower mortality rates (Cassel, 1976). Whereas early work in this realm focused on the more objective, structural aspects of social support such as the size and density of one's social network (e.g., Berkman & Syme, 1979), subsequent studies elaborated the more subjective, functional features such as the amount of instrumental or emotional support that relationships provide (Tardy, 1985), and perceptions of general support availability (Cohen & Willis, 1985).

Since then, researchers have found that people who have larger social networks and those who perceive that support is available if needed have better personal and interpersonal outcomes. In a comprehensive review of 81 studies, Uchino, Cacioppo,

and Kiecolt-Glaser (1996) concluded that social support is reliably linked to enhanced cardiovascular, endocrine, and immune functioning (see also House, Landis, & Umberson 1988; Sarason, Sarason, & Gurung, 1997; Taylor, 2007). Studies examining links to mental health have found that social support buffers people from the harmful effects of psychological stress associated with aversive life events, depression, and anxiety (Collins, Dunkel-Schetter, Lobel, & Scrimshaw, 1993; Costanza, Derlega, & Winstead, 1988; Dunkel-Schetter & Bennett, 1990; Kawachi & Berkman, 2001; Wethington & Kessler, 1986; Winstead, Derlega, Lewis, Sanchez-Hucles, & Clarke, 1992). Aside from its essential role for physical and mental health, social support also contributes greatly to the development and maintenance of satisfying close relationships (Acitelli, 1996; Cutrona, 1996). Numerous studies have established that individuals who report higher levels of support from their significant others are more satisfied with their relationships than those reporting less support (e.g., Acitelli & Antonucci, 1994; Julien & Markman, 1991; Pasch, Bradbury, & Davila, 1997; Reis & Franks, 1994; Suitor & Pillemer, 1994).

***How does Social Support Influence Well-Being*?** Traditionally, social support researchers have assumed that enacted support (i.e., specific support behaviors such as concrete help or reassurance) is the mechanism linking perceived support (i.e., global impressions that support is available if needed) to mental and/or physical health. More specifically, when people receive assistance from their social network members, they are likely to perceive high support, which in turn enhances their ability to cope more effectively with stressors they are facing, thereby decreasing psychological stress (Cutrona & Russell, 1990; B. R. Sarason, Sarason, & Pierce, 1990; Thoits, 1986).

However, studies that have tested whether specific support transactions influence support recipients' well-being have generated less consistent results (Kahn, 1994). These inconsistencies center on two key issues: First, recipients of support do not *always* benefit or are sometimes even worse off for having received it; second, perceived and enacted (received) support are not strongly correlated.

Regarding the first issue, a study by Newsom and Schulz (1998), for example, found that nearly 40% of physically disabled spouses reported some emotional distress in response to help they received from their partners. Helping-related distress also predicted depression as much as one year later, suggesting that there may be long-term consequences of negative responses to support (see also Brown & Vinokur, 2003).

Several explanations for these negative effects have been proposed. For instance, Barrera (1986) has suggested that unmeasured severity of stressors, acting as a third variable, may account for both poorer adjustment and increased receipt of support. This may explain why some studies have found that more distressed participants report more enacted support than less distressed participants (Barrera, 1986). However, studies that have investigated these possible sources of spuriousness have concluded that they do not fully explain the negative relation between support and distress (Bolger & Eckenrode, 1991; Seidman, Shrout, & Bolger, 2006).

Others have suggested that support providers may be unskilled or that their ability to provide effective support might be diminished by severe stress (Coyne, Wortman, & Lehman, 1988). Bolger, Foster, Vinokur, and Ng (1996), for example, have found that although husbands provided support in response to their wives' physical impairments associated with breast cancer, husbands withdrew support in response to

their wives' *emotional* distress. Moreover, support did *not* attenuate wives' distress or promote their physical recovery.

Receiving social support may also cause guilt and anxiety in some people (Lu & Argyle, 1992) or it may undermine recipients' self-worth or self-esteem (Fisher, Nadler, & Whitcher-Alagna, 1982) by communicating to the recipient that he or she is not capable of coping with a stressor (Bolger & Amarel, 2007). Bolger, Zuckerman, and Kessler (2000) conducted a diary study on couples living together during a period when one partner, a law student, was preparing to take the bar exam. Results indicated that support reported by the support provider and acknowledged by the recipient did not alleviate the examinees' stress. In contrast, support reported to have been provided, but not reported to have been received, was more effective in reducing stress and depressed mood. Bolger et al. (2000) have concluded that receiving support may undermine self-esteem or make the recipient feel indebted to the provider.

Others have argued that enacted support is associated with improved outcomes for the recipient only if the type of support matches the demands of the stressful event the recipient is facing (Cohen & Willis, 1985; Cutrona & Russell, 1990). Helgeson (1993) examined the effects of social support on adjustment to a first heart attack and found that *perceived* support was associated with greater adjustment than were specific (enacted) support behaviors, even when enacted support was appropriate to the situational demands.

As the reviewed studies show, enacted support has not been consistently linked to improved outcomes for support recipients. Complicating matters further, studies have shown that individuals' global perceptions of support are only weakly linked to the

support they actually receive. Both self-report and behavioral observation studies have revealed weak correlations between perceived and enacted support, with many estimates approaching zero (Barrera, 1986; Belsher & Costello, 1991; Dunkel-Schetter & Bennett, 1990; Lakey & Heller, 1988; B. R. Sarason, Sarason, & Pierce, 1990). Consistent with Mischel's (1968) premise that global measures of psychological constructs typically are poor predictors of behavior in specific situations, laboratory studies that have examined support perceptions in *specific* interactions have found stronger relations between perceived support and support enacted during the interaction (Cutrona & Suhr, 1994), but the correlations still do not exceed .30. In a review of a wide range of studies on social support, Lakey, McCabe, Fisicaro, and Drew (1996) concluded that approximately 10% of perceived support can be accounted for by actual enacted support, an amount far too small for perceived support to be based primarily on received support.

How then do people come to perceive support? In the absence of a well-documented connection between specific support interactions and perceived support, what explains the link between perceived support and well-being? The answer to these questions is critical, as perceived support appears to be a stronger predictor of personal and interpersonal well-being than received (enacted) support (Dunkel-Schetter & Bennett, 1990; Lakey & Heller, 1988; Wethington Kessler, 1986). Several lines of research have addressed these questions by focusing on different personality processes.

Perceived Support as a Chronic Individual-Level Factor. Some researchers have suggested that subjective perceptions of support are more closely tied to personality characteristics than to objective social experiences (Dunkel-Schetter &

Bennet, 1990; B. R. Sarason, Pierce, & Sarason, 1990; I. G. Sarason, Sarason, & Shearin, 1986). This line of work has conceptualized perceived support as reflecting a global sense of acceptance rooted in early childhood experiences (B. R. Sarason, Pierce, & Sarason, 1990). Sarason, Sarason, and Shearin (1986), for example, have shown that people high in perceived general support (i.e., those who perceive more support in different situations with different people) report having received more parental care (affection, interest, empathy) than did those low in perceived support. The authors argue that the generalized perception that one is valued and that others can be counted on when needed does not need to be tied to specific support interactions or to particular relationships.

Research informed by attachment theory (Bowlby, 1969, 1973, 1980) suggests that infants' early experiences with caregivers might be important determinants of support perceptions later in life (Henderson, 1977). Within the context of early infant-caregiver interactions, individuals develop working models that contain both implicit and explicit expectations about others' availability in times of need. Similar to other schemas, these working models, once activated, should play an important role in the interpretation of support-relevant behaviors and events in relationships across the life span (Collins & Feeney, 2000; Kobak & Sceery, 1988). Numerous self-report studies have found that adults who have more secure working models have higher perceptions of support availability and are generally more satisfied with the support they receive from their partners. More insecure adults, in contrast, report less available support and tend to be less satisfied with the support they receive (Davis, Morris, & Kraus, 1998; Florian, Mikulincer, & Bucholtz, 1995; Ognibene & Collins, 1998). In a behavioral

observation study in which one partner was distressed and needed support, Collins and Feeney (2004) found that people who had more insecure working models were more likely to appraise an ambiguously supportive note ostensibly written by their dating partners more negatively, and rated a prior behavioral interaction with their partner as having been less supportive. More insecure individuals also perceived actual supportive messages written by their partners as less supportive, even after controlling for independent observer ratings of the messages.

These studies suggest that perceived support is associated with certain individual-difference variables and that support experiences are, at least in part, due to biased construal processes. However, it is unlikely that differences in perceptual bias associated with any personality characteristic are completely separate from the objective properties of the social environment. Given that people differ in their motivation and ability to successfully negotiate social support processes, differences in perceived support should also be rooted in objective features of support transactions (Collins & Feeney, 2000; Cutrona, Hessling, & Suhr, 1997; Lakey et al., 1996). To understand how perceptions of support relate to actual supportive interactions, the *interpersonal* nature of social support needs to be considered (Barbee & Cunningham, 1995; Cutrona, 1996).

Social Support as an Interpersonal Process. Despite convincing evidence that personality characteristics color perceptions of support, some researchers have recognized the need for a more integrative perspective on social support. Lakey and colleagues (1996), for example, have suggested that perceived support should result from person-by-environment interactions. This interactional view takes into account both top-down, theory-driven processes in which people's goals, schemas, and

expectations shape the way they view interactions (Baldwin, 1992), and bottom-up, data driven processes (i.e., objective features of the support transaction). In three studies, Lakey et al. (1996) found evidence that support perceptions were significantly influenced by (1) biases of the support recipient, (2) personality characteristics of the support provider, and (3) their statistical interactions. Indeed, recipient-by-provider interactions were the most important determinants of support perceptions across the three studies, with the size of the effect varying in different social contexts. Similarly, Newcomb (1990) maintains that perceived social support is not a static construct, but that it changes in response to ongoing experience (see also Bradbury & Fincham, 1989; Collins & Feeney, 2004).

Despite the existence of social support models that highlight the interpersonal nature of social support, most empirical work on social support has focused on individuals rather than on relationships. Research has typically attended to the support recipient and his/her subjective support perceptions and individual outcomes (e.g., health, adjustment to stress), with considerably less attention directed to the psychological and interpersonal processes that might facilitate or undermine the expression and receipt of support. Moreover, a great deal of social support research has focused on the total amount of support available to an individual (i.e., support at the aggregate level) and not on transactions in *specific, ongoing* relationships.

Support recipients, however, are embedded in intimate relationships in which individuals affect and are affected by their partners, many of whom serve as their primary or even sole source of support. The extent to which social support is likely to be effective and to generate beneficial outcomes for individuals' well-being should

depend not only on support recipients' perceptions of support, but also on who their *partners* are (i.e., the partner's motivation, skills, and abilities to provide effective support) and on how their partners relate to and interact with them in different support-relevant domains. Either person in a dyad can easily thwart or facilitate the social support process at any of several points during the interaction, either through his/her perceptions or behaviors. Thus, understanding the effects of social support on health and well-being involves considering who each relationship partner is, how each partner perceives specific support-relevant situations, and how each partner then thinks, feels, and behaves in these situations.

A handful of studies have acknowledged the overemphasis of past research on individuals' support perceptions and outcomes and the need to focus more on the support recipient's role in shaping the support process (Dunkel-Schetter, Blasband, Feinstein, & Herbert, 1992; Hobfoll & Lerman, 1988; Pasch & Bradbury, 1998), attributes of the support provider (Feeney & Collins, 2001; 2003; Jung, 1989) and relationship factors (e.g., satisfaction or past interaction history; Knoll, Burkert, & Schwarzer, 2006). Moreover, Vaux, Riedel, and Stewart (1987) have suggested that different modes (types) of support provision may shape support outcomes in different ways. However, studies that have considered multiple influences on the social support process in ongoing relationships are rare. Exceptions include a study of married couples by Cutrona et al. (1997) who demonstrated that personality characteristics (extraversion and neuroticism) of both the support recipient and his/her spouse along with their immediate relationship context (relationship mood and history of support exchanges) influence the support perceptions and behaviors of both partners. Moreover, Iida,

Seidman, Shrout, Fujita, & Bolger (2008) recently documented how characteristics of the support recipient (e.g., level of support seeking), the provider (e.g., mood), their relationship (e.g., relationship anxiety, satisfaction), and the stressor (e.g., severity of the stressor) combine to predict support provision in dating couples.

Still missing from the social support literature is an examination of the possibility that support recipients and providers have preferred types of, and different sensitivities to, enacted support in different domains. Lakey et al. (1996) have suggested that the extent to which an interaction is perceived to be supportive (and the extent of subsequent benefits for the recipient) may depend on the *match* between the recipients' and the providers' preferred types of support. This concept may partially explain the weak associations between perceived and enacted support in previous studies, most of which have ignored the match between type of support received and type of support desired. It may also explain why associations between enacted support and well-being are inconsistent or sometimes even negative (Lakey et al., 1996). Across persons who have different preferences for and sensitivities to different types of support, the correlations between received and perceived support may have been attenuated by the lack of "fit" between support providers and recipients.

Although the idea of matching support provision to the needs of the recipient is not entirely new (Cutrona & Russell, 1990; Cutrona & Suhr, 1992), few studies have applied it to examine actual support transactions. One exception is a recent study by Simpson, Winterheld, Rholes, & Oriña (2007). They found that more securely attached people are more calmed when their romantic partners provide greater emotional support, whereas those who are more insecure (dismissive) react more favorably to

instrumental support, especially when they are distressed. Although the results of this study are consistent with Cutrona and colleagues' (1990) emphasis on the importance of matching specific support forms to the contingencies of the specific stressful situation, the study did not test whether perceived support resides in the match between personal characteristics of the support provider and recipient. In addition, the study's focus on support exchanges during a conflict situation did not allow for an examination of preferred types of support that providers and recipients may have in different domains. People's motivations and skills to provide effective support might vary across different domains, and what may be perceived as supportive in one domain by one person may not be perceived as such by another person.

Domains of Social Support. The traditional view of social support focuses primarily on one general type of support, namely, giving comfort and assistance to someone who is faced with a stressful event. Because of this strong focus on social support in response to distress, little is known about other domains in which support transactions may transpire. Moreover, relatively little is known about different motivations to provide support in different domains, and how they operate.

To gain a more comprehensive understanding of social support processes, researchers have begun to broaden the definition of social support to include supportive responses in contexts that are free of stressors. Gable, Reis, Impett, and Asher (2004), for example, found that when people respond to their romantic partners' positive event disclosures in an enthusiastic and supportive manner, disclosers experience increased relationship well-being. Moreover, the associations between positive event responses and well-being are independent of the associations between traditional social support

(i.e., responses to negative events) and well-being. For example, Gable, Gonzaga, and Strachman (2006) found that for men, only perceived responsiveness to positive event disclosures (and not to problem disclosures) predicted relationship well-being. For women, positive event responsiveness, but not problem responsiveness, predicted future relationship health.

Another important context likely to provide opportunities for support exchanges involves partners' expressions of personal goals and aspirations. Only a handful of studies have examined support in this domain. Brunstein, Dangelmayr, and Schultheiss (1996) found that both receipt and provision of support for personal goals predicted spouses' marital satisfaction. Ruehlman and Wolchik (1988) found that significant others' support and hindrance of individuals' personal goals were independently related to individuals' distress and well-being. More recently, Feeney (2004) demonstrated that perceptions of responsive support to one's goal strivings by a close partner predicted important immediate outcomes such as greater self-efficacy, positive mood, and greater perceived likelihood of achieving one's goals.

In sum, the degree to which people benefit from received (enacted) support is not simply a function of the amount or quality of their support interactions with others. It may also depend on personal characteristics of the support recipient, the support provider, and the "dyadic match" in specific situations. Not all people are equally skilled or motivated to provide effective support to their partners, and people's motivations might also influence the extent to which they value and would benefit from receiving certain types of support. Unfortunately, the ways in which certain motivations affect the quality of actual support transactions have not been examined. Only a few

studies have examined motivations for support provision in general (e.g., Feeney & Collins, 2003; Iida et al., 2008), and almost nothing is known about specific motivations that might influence *both* the provision and perception of support in *specific* domains. Some people may, for example, be particularly skilled and motivated to alleviate their partners' real or imagined *distress* or to provide comfort in times of need, whereas others may be more adept at and motivated to respond in a supportive manner in a context that is free of emotional distress, such as encouraging and promoting their partners' *aspirations and goal strivings.* In addition, based on their preexisting motivations and needs, some people may respond more favorably to one type of support than another. Because each type of support serves different functions, their effects on the recipient should be distinct (Feeney, 2004; Gable et al., 2006; Pasch & Bradbury, 1998).

Regulatory Focus Theory

Regulatory focus theory (Higgins, 1997; 1998) provides a useful framework for investigating how motivations of both support recipients and providers should influence the quality of support transactions. The theory identifies individual differences in motivational orientations that might be linked to systematic differences in *both* the perception and provision of support, and that may influence the nature and quality of support exchanges between partners. This framework is consistent with recent research showing that support in response to positive versus negative events may have independent effects on well-being (Gable et al., 2006; Gable, Reis, & Elliot, 2000; 2003; Pasch & Bradbury, 1998), and it provides a basis for understanding motivations

and needs that operate in different support-relevant domains (i.e., support related to distress versus support related to goal achievement).

Regulatory focus theory proposes two distinct motivational systems that operate differently in the service of two fundamental survival needs, namely nurturance and security. A *promotion focus* facilitates the fulfillment of nurturance needs through the pursuit of hopes and aspirations, and is concerned with personal growth, advancement, and accomplishment. A *prevention focus* facilitates the fulfillment of security needs through the pursuit of duties and obligations, and is concerned with safety and protection. The theory also describes the preferred goal-pursuit strategies for each system. A promotion focus is related to the use of eagerness means, that is, means that ensure the presence of rewarding outcomes (e.g., goal accomplishment) and that ensure against the absence of positive outcomes (e.g., missed opportunities). A prevention focus is related to the use of vigilance means, that is, means that ensure against the presence of negative outcomes (e.g., difficulties or setbacks) and that ensure the absence of negative outcomes (e.g., safety). When people use strategies that are consistent with their dominant regulatory focus, they experience regulatory fit (Higgins, 2000). Because these strategies sustain their motivational orientations, regulatory fit leads people to *feel right* about, and to engage more strongly, in what they are doing at the moment (Camacho, Higgins, & Luger, 2003; Cesario, Grant, & Higgins, 2004).

Both regulatory focus systems are believed to exist in all individuals to some degree.[1] A particular regulatory focus can be activated momentarily by situational cues that convey gain/reward-related information or loss/threat-related information (Higgins, 1998; Shah & Higgins, 2001). However, chronic individual differences in regulatory

focus are also thought to arise from genetic predispositions (temperament) and from socialization experiences with significant others (Higgins & Silberman, 1998; Manian, Strauman, & Denney, 1998). These distinct motivational orientations, both when temporarily activated or when assessed as chronic dispositions, are systematically associated with different perceptual sensitivities toward positive versus negative outcomes, distinct emotional experiences, and unique behavioral strategies.

Psychological Manifestations of Regulatory Focus. People who have a stronger *promotion focus* are more likely to attend to and to recall events that signal the presence (gains) or absence (non-gains) of positive outcomes (Higgins, Roney, Crowe, & Hymes, 1994; Higgins & Tykocinski, 1992). They are more open to change and tend to choose novel alternatives over familiar satisfactory options if new alternatives offer an advancement over former ones (Liberman, Idson, Camacho, & Higgins, 1999). Moreover, promotion-focused people experience positive outcomes more intensely and with more cheerfulness than do people who have a stronger prevention focus. Negative outcomes, by comparison, are felt less intensely and with more dejection-related emotions (Higgins, Shah, & Friedman, 1997; Idson, Liberman, and Higgins, 2001). Shah and Higgins (2001) have also confirmed that having a stronger promotion focus predicts the efficiency with which people appraise objects in terms of how cheerful or dejected these objects make them feel. Promotion-focused people prefer to use approach strategies (i.e., approaching matches to desired end-states; Higgins, et al., 1994), eagerness means (e.g., looking for means of advancement; Higgins et al., 2001), and show greater motivation and persistence on tasks that are promotion-framed (Shah, Higgins, & Friedman, 1997).

Consistent with their concerns for safety and security, people who have a stronger *prevention focus* are more likely to attend to and to recall events involving the presence (losses) and absence (non-losses) of negative outcomes (Higgins & Tykocinski, 1992; Higgins et al., 1994). They are more resistant to change and prefer to stick with old reliable options, even when new ones might work better (Liberman, et al., 1999). Moreover, prevention-focused people experience negative outcomes more intensely and with more agitation, whereas positive outcomes are experienced less intensely and with more quiescence-related emotions (Higgins et al., 1997; Idson et al., 2000). Prevention focus is also related to the efficiency with which people appraise objects in terms of quiescence or agitation (Shah & Higgins, 2001). Prevention-focused people prefer to use avoidance strategies (i.e., avoiding mismatches to desired end-states; Higgins et al., 1994), vigilance means (e.g., being careful), and show greater motivation and persistence on tasks that are prevention-framed (Shah, et al., 1997).

Regulatory Focus Theory and Approach-Avoidance Models. Other models of motivation and regulatory processes have also identified independent motivational systems: One system that is believed to regulate approach toward potentially rewarding stimuli and desired outcomes (the approach/appetitive system), and another that regulates avoidance of potentially punishing stimuli and undesired outcomes (the avoidance/aversive system). Pavlov (1927), for instance, identified two types of reflexes, one that orients organisms toward rewarding stimuli, and another that orients them away from punishing ones. Gray also (1990) proposed the existence of two distinct biologically-based systems that underlie individual differences in emotional and behavioral sensitivity to signals of rewards versus threats. The behavioral activation

system (BAS) promotes positive affect and appetitive behaviors in response to potential rewards, whereas the behavioral inhibition system (BIS) invokes negative affect/anxiety and inhibits behavior in response to potential punishments or threats (see also Carver & Scheier, 1990; Carver & White, 1994). Gray's model has been supported by considerable evidence indicating that these motivational dimensions reflect two separate neurobiological systems in the brain (Sobotka, Davidson, & Senulis, 1992; Sutton & Davidson, 1997).

More recently, Gable and Reis (2001) have proposed that approach and avoidance systems may govern thoughts, feelings, and actions in interpersonal relationships, and that the processes involved in attaining positive relationship outcomes should be different from those that regulate the avoidance of negative outcomes. Gable (2006), for instance, has shown that having an approach social motivation is associated with positive social outcomes such as greater satisfaction with social bonds, more positive social attitudes, and less loneliness in different types of relationships over time. Having an avoidance social motivation, in contrast, predicts poorer outcomes such as less satisfaction with social bonds, more loneliness, more negative social attitudes, and less secure feelings about relationships. Gable (2006) has also documented that the association between approach motivation and positive outcomes is mediated by an *exposure process*, such that people who have a stronger approach social motivation are more frequently exposed to positive social events compared to those who have a weaker approach motivation, yet they do *not* react more strongly to them. In contrast, the relation between avoidance motivation and negative outcomes is mediated by a *reactivity process*, in that people who have a stronger avoidance social motivation react more strongly to negative events, even

though they do not report more frequent experience of negative events compared to people who have a weaker avoidance motivation.

In contrast to traditional approach-avoidance models described above, promotion focus and prevention focus refer *both* to approaching positive outcomes *and* to avoiding negative ones (Higgins, 1997; 1998). Thus, promotion focus and prevention focus are not tantamount to the approach system and the avoidance system, respectively. Rather, regulatory focus theory (Higgins, 1997; 1998) specifies the *different ways* in which both promotion-focused and prevention-focused people experience and approach positive outcomes and experience and avoid negative ones. For example, for a promotion-focused person, a positive outcome entails the presence of rewarding aspects (gains), and a negative outcome involves the absence of rewarding aspects (non-gains). For a prevention-focused person, a positive outcome involves the absence of threats (non-losses), and a negative outcome involves the presence of threats (losses).

With these notions in mind, some distinctions can also be made in relation to Gable's (2006) model. In line with Gable's model, regulatory focus theory predicts that prevention-focused persons should be more reactive to negative events that they are trying to avoid. In contrast to Gable's model, however, regulatory focus theory also stipulates that (and how) prevention-focused people should react to and strive for positive outcomes (i.e., outcomes such as safety and security that are characterized by the absence of threats). Moreover, regulatory focus theory predicts that (and how) promotion-focused people should react to positive outcomes, whereas Gable's model suggests that although approach-oriented people experience positive outcomes more frequently, they do not react to them more strongly. In addition, regulatory focus theory predicts that promotion-

focused people should react to and try to avoid negative outcomes that are characterized by the absence of positives (e.g., foregone opportunities).

In sum, regulatory focus theory extends other approach-avoidance models by specifying how people approach pleasure and avoid pain in *different ways*. It specifies the antecedent conditions that should trigger each regulatory system, and it outlines the specific responses that ought to flow from each system. In so doing, it permits more fine-grained predictions about the psychological processes through which approach and avoidance processes should operate in specific social contexts. Moreover, it enables us to identify situations or circumstances in which people should respond in ways that minimize negative outcomes or maximize positive outcomes. And it may allow one to investigate how situations statistically interact with people's chronic motivational orientations, thereby affecting outcomes in relationship contexts.

Regulatory Focus in Social Contexts. Although much research has documented how regulatory foci are associated with assorted psychological processes, researchers have only begun to investigate the role of regulatory focus in social contexts. Liberman, Molden, Idson, and Higgins (2001), for example, found that promotion-focused people generate and endorse more hypotheses for interpersonal actions, and are more likely to take person and situation explanations into account when drawing inferences about others' behavior. Prevention-focused people, in contrast, generate and endorse fewer hypotheses for interpersonal actions, and differentiate between person and situation explanations when making inferences about others' behavior. Sassenberg, Kessler, and Mummendey (2003) have shown that regulatory focus also predicts the amount and type of ingroup favoritism. Shah, Brazy, and Higgins (2004) have demonstrated how

regulatory focus affects the way in which intergroup bias is expressed behaviorally and experienced emotionally. Lockwood, Jordan, and Kunda (2002) have found that people are more motivated by role models who encourage strategies that fit with their own regulatory focus. Ayduk, May, Downey, and Higgins (2003) have shown that prevention-focused persons are more sensitive to cues of rejection, and Oyserman, Uskul, Yoder, Nesse, and Williams (2007) have found that a stronger prevention focus is associated with increased perceptions of unfair treatment.

Extending regulatory focus principles to dyadic contexts, Galinsky, Leonardelli, Okhuysen, and Mussweiler (2005) have examined how promotion-focused negotiators attain superior outcomes than negotiators who have a stronger prevention focus. Studies that move beyond relationships between total strangers include one by Camacho et al. (2003), who showed that regulatory focus predicts how people evaluate recalled conflict resolutions with their parents, and Shah (2003), who demonstrated that representations of significant others (friends or family members) can implicitly affect an individual's own regulatory focus orientation.

Extending Regulatory Focus to Romantic Relationships. Thus far, research has paid little attention to the operation of regulatory focus within romantic relationships. This is surprising, given that chronic individual differences in regulatory focus are believed to arise in part from early socialization experiences with significant others (parents, caregivers) who have responded either negatively or positively to one's nurturance and safety needs (Higgins & Silberman, 1998; Manian, et al., 1998). On the basis of these experiences, which are likely to involve parenting behaviors or interpersonal outcome contingencies, children learn how to regulate themselves to obtain

nurturance and security. In interactions involving a promotion focus, children come to experience pleasure as the presence of positive outcomes (e.g., when the child is rewarded for accomplishments, encouraged to overcome obstacles, or given opportunities to engage in rewarding activities), and pain as the absence of positive outcomes (e.g., when caregivers withdraw love or attention, or act disappointed when the child does not fulfill the hopes/aspirations caregivers have for him or her). Such interactions are presumed to convey that, in order to obtain nurturance, one must focus on accomplishments and pursue hopes and aspirations (ideals). In interactions involving a prevention focus, children experience pain as the presence of negative outcomes (e.g., when caregivers yell at or punish the child when he/she behaves irresponsibly), and pleasure as the absence of negative outcomes (e.g., when caregivers are overprotective, or alert the child to potential dangers in the environment). Such interactions are believed to communicate that, in order to feel secure, one must ensure safety, be responsible, and fulfill duties and obligations (oughts). Providing empirical evidence for these notions, Manian et al. (1998) found that self-regulation toward promotion or prevention concerns was differentially associated with memories of parenting styles of warmth and rejection, respectively. Using a longitudinal design, Manian et al. (2006) demonstrated that nurturance- versus security-oriented parenting styles, as reported by mothers, predicts children's dominant promotion versus prevention focus.

These early experiences with important others should continue to shape behavior in close relationships across the lifespan. Regulatory focus may, for example, generate divergent perceptions and interpretations of the same relational events, affect people's emotional responses to those events, and channel their behavior in unique ways as they

strive to fulfill specific goals and needs. Winterheld and Simpson (2008), for example, have shown that promotion-focused and prevention-focused people experience positive and negative relationship-relevant scenarios in ways that are congruent with their salient motivational concerns. Moreover, consistent with their heightened vigilance to negative outcomes, prevention-focused people anticipate a negative or unsupportive partner response to an ambiguous relationship event, whereas promotion-focused people anticipate a positive or supportive response to the same event.

Regulatory Focus and Social Support. Based on regulatory focus theory and research, individual differences in regulatory focus should also be linked to differences in preferences for support provision and receipt in close relationships. For example, consistent with their eagerness toward advancement, promotion-focused people might be more skilled (i.e., provide more effective support) and motivated to promote and encourage their partners' personal goals, aspirations, or needs for personal growth. Consistent with their vigilance toward negative outcomes, prevention-focused people might be more skilled and motivated to help their partners solve concrete problems or to help them deal with difficulties related to responsibilities and obligations. Moreover, although receiving responsive support should make most people feel good, some forms of support should be more consistent with one or the other regulatory system. For example, because it sustains their eagerness to approach positive outcomes, enthusiastic support for their personal goals and aspirations should be especially important to promotion-focused people. Prevention-focused people, in contrast, might place greater importance on responsive support that sustains their motivation to avoid negative outcomes (i.e., support that helps them reduce or eliminate stressors in their lives, and

that provides them with a sense of safety and security). Consequently, recipients of support that is congruent with their dominant regulatory orientation should experience beneficial outcomes on multiple levels. For example, they should experience greater perceived self-efficacy with regard to the support-relevant issue, in addition to improved emotional and relational well-being.

There is preliminary evidence suggesting that promotion-focused people perceive greater relationship quality than prevention-focused people (Winterheld & Simpson, 2008; see also Grant & Higgins, 2003). Kelly (1955) proposed that people use personal constructs through which they construe events in their social worlds. Salient motivational concerns about promotion or prevention may also act as interpretative filters through which people appraise their partners' support-relevant characteristics during specific supportive interactions. For example, to maintain the eagerness that sustains their focus, promotion-focused people should notice and give more credit to their partners' supportive/positive behaviors or attributes and should perceive fewer unsupportive ones. Conversely, to maintain the vigilance that sustains their focus, prevention-focused people should notice and place greater weight on their partners' unsupportive/negative behaviors and attributes and should perceive fewer supportive ones.

A stronger promotion focus, however, should not always be associated with better relationship outcomes, and a stronger prevention focus should not always be tied to negative outcomes (Simpson, Winterheld, & Chen, 2006). Prevention-focused people might be reluctant to fully "admit" their relationships are going well on explicit self-report measures of relationship quality because this might lower the vigilance that

sustains their focus and perhaps their relationships (Grant & Higgins, 2003). Despite more *global* perceptions of lower relationship quality, prevention-focused people may experience more favorable outcomes when receiving support that meets their needs, and may report temporary increases in relationship well-being immediately following specific interactions. Moreover, promotion-focused persons may, despite their generally more positive evaluations of their relationships, experience less favorable outcomes when their partners fail to provide adequate support in specific contexts (e.g., when their partners fail to foster or interfere with the personal goals they want to achieve).

THE PRESENT RESEARCH

Overview of the Study

The overarching goal of this dissertation is to better understand the psychological and interpersonal processes involved in the provision and receipt of support, as well as the intra- and interpersonal consequences of receiving responsive support in different situations. The objective of this work is to test a series of theoretically-derived predictions regarding regulatory focus, support provision, and perceptions of support from romantic partners. I expect that people who have different regulatory focus orientations will differ in the extent to which they are motivated and/or skilled at encouraging their partners' personal goals and aspirations, versus at assisting their partners with current problems or concerns. Regulatory focus should also predispose people to respond more favorably to one form of support than to the other, and different regulatory focus orientations should motivate people to attend to different behaviors when interacting with their partners.

I tested my predictions (outlined below) in a laboratory-based behavioral observation study that had three phases. In Phase 1, romantic partners each independently completed a regulatory focus measure and other relevant individual difference and relationship measures. One week later, as part of Phase 2, couples visited the lab and engaged in four separate discussions, taking turns to discuss a personal problem/stressor and a personal goal/aspiration. After each discussion, partners completed measures that assessed their perceived supportiveness and responsiveness during the interaction, as well as relevant measures regarding their personal and interpersonal well-being. In Phase 3, trained observers rated the extent to which each partner spontaneously displayed different support-relevant behaviors and attributes.

Predictions

The first set of predictions addresses participants' *promotion focus*. Highly promotion-focused people should be more motivated to provide support in response to their partners' *goals and aspirations* (Hypothesis 1a), and provide more effective (i.e., more positive and less negative) support in this domain (Hypothesis 1b). If highly promotion-focused participants do provide more motivated and effective support for their partners' goals and aspirations, their *partners* (i.e., support recipients) should perceive them as more responsive and supportive in the goal condition (Hypothesis 2a), especially when they (the support recipients) are also more promotion-focused (Hypothesis 2b). To the extent that highly promotion-focused participants provide more effective support for their partners' goals and aspirations, their partners (support recipients) should experience greater short-term benefits in terms of their personal and relational well-being (i.e., increased self-efficacy, emotional well-being, and

relationship mood) in the goal condition (Hypothesis 3a), especially when they (the support recipients) are also more promotion-focused (Hypothesis 3b). Furthermore, given their focus on achieving positive outcomes, highly promotion-focused participants should perceive more supportive behaviors (e.g., more sensitive support) and fewer unsupportive ones (e.g., less negative affect) from their partners. If these perceptions stem from people's promotion focus, they should be independent of the support they actually receive as rated by independent observers and reported by their partners (Hypothesis 4).

The second set of predictions centers on participants' *prevention focus.* Highly prevention-focused participants should be more motivated to provide support when helping their partners' resolve concrete *problems or concerns* (Hypothesis 5a), and provide more effective (e.g., more positive, less negative) support in this domain (Hypothesis 5b). If prevention-focused participants do provide more effective support in response to their partners' problems and concerns, their *partners* (support recipients) should perceive them as more responsive and supportive in the problem condition (Hypothesis 6a), particularly if they (support recipients) are more prevention-focused (Hypothesis 6b). To the extent that prevention-focused participants provide more effective support in response to their partners' problems and concerns, their partners (support recipients) ought to experience more short-term benefits in terms of their personal and relational well-being (i.e., increased self-efficacy, emotional well-being, and relationship mood) in the problem condition (Hypothesis 7a), especially when they (support recipients) are also more prevention-focused (Hypothesis 7b). Furthermore, consistent with their vigilance toward negative outcomes, prevention-focused people

should perceive more unsupportive behaviors (e.g., more negative affect) and fewer supportive behaviors (e.g., less sensitive support) from their partners, independent of the support they actually receive, as rated by independent observers and reported by their partners (Hypothesis 8).

Method

Participants. Participants were recruited through flyers posted throughout the campus of a large Midwestern University and metropolitan community, and through online advertisements posted on Craigslist.org, a popular classifieds portal. The recruitment materials stated that the study would examine personality in relationships, briefly described the study, and specified that participants had to be involved in a heterosexual, monogamous and exclusive romantic relationship for a minimum of 6 months (to ensure that participants were involved in meaningful relationships). Each couple was offered $50 for participating in this study. If participants were enrolled in psychology courses, they were offered extra-credit in exchange for their participation. If only one partner was enrolled in a psychology course, the other partner was offered $25. Interested couples contacted the researcher via e-mail, and were given two envelopes, with each envelope containing a consent form and the background questionnaires (described below).

101 couples completed the background questionnaires, and 95 couples returned for the laboratory visit. Thus, the final sample consisted of 95 couples (190 participants). The average age of men in the final sample was 23.91 years (*SD* = 4.19; range: 18-38 years) and the average age of women was 22.51 years (*SD* = 3.59; range: 18-34 years). Most couples were involved in dating relationships (78%), and a smaller

percentage were engaged (10%) or married (12%). 44% of the couples were cohabitating. The mean length of relationships was 31.22 months (*SD* = 24.73 months; range: 6 to 142 months). 78 percent of participants were Caucasian, 10% Asian/Asian-American, 3% African/African-American, 2% were Hispanic, and 8% described themselves as multi-racial.

Phase 1: Individual Difference Measures. During Phase 1, participants completed the background questionnaire packet, which consisted of demographic information (i.e., gender, age, ethnicity, relationship length, and relationship status) and the measures described below. To reduce the likelihood of questionnaire priming and influencing behaviors of interest, couples completed the questionnaires at home one to four weeks prior to the laboratory visit. Couples were instructed to complete the questionnaires privately and independently, and *not* to share or discuss their responses with their partners until after completion of the study. All of the Phase 1 measures are included in Appendix A.

Regulatory Focus in Relationships Measure. The regulatory focus in relationships measure always appeared first in the questionnaire packet. Regulatory focus in relationships was assessed with a modified version of a regulatory focus scale developed by Lockwood et al. (2002). Lockwood and colleagues' original scale consists of 18 items that assess chronic promotion and prevention goals about life in general (e.g., "In general, I am focused on preventing negative events in my life"). The scale is tailored to college student participants and therefore contains several items that assess participants' goals in the academic domain (e.g., "I often think about how I will achieve academic access"). Because the purpose of the current study was to test whether

regulatory focus yields theoretically meaningful effects in the domain of romantic relationships, the original scale items were modified to situate them in an interpersonal context (Winterheld & Simpson, 2008). Two items from the original scale were excluded because they could not be meaningfully modified and were redundant with other items. Example items measuring participants' chronic *promotion* concerns about their romantic relationships are "I often think about how I will create a successful relationship," and "In general, I am striving to nurture, grow and enhance my relationships." Example items measuring *prevention* concerns are "I often worry that I will fail to accomplish my relationship goals," and "I am often anxious that I am falling short of my duties and obligations in my relationships."

All 16 items were rated on 9-point Likert-type scales (anchored 1= *Not at all true of me* and 9 = *Highly true of me*). The items were submitted to an exploratory factor analysis (EFA) using principal-axis extraction with varimax rotation, which revealed two factors (with eigenvalues greater than 1) that accounted for 47% of the variance. The first factor accounted for 26% of the variance, and had high loadings (> .62) on items related to prevention concerns; the second factor accounted for 21% and had high loadings (>. 53) on items related to prevention concerns.[2] Participants' responses on the items for each factor were averaged to compute prevention and promotion scores for each participant. The Cronbach's alphas for the prevention scale were .86 for women, and .80 for men, and alphas for the promotion scale were .80 for women, and .76 for men. Means, standard deviations, and correlations of the promotion and prevention scales are depicted in Tables 1 and 3. For women, promotion focus and prevention focus were correlated, $r = .30$, $p < .01$, whereas for men they were not. [3]

Other Regulatory Focus Measure. Participants also completed the 11-item Regulatory Focus Questionnaire (RFQ; Higgins et al., 2001). The RFQ is a measure of individuals' perceived histories of effective and ineffective self-regulation as related to prevention and promotion needs. Measures of perceived regulatory effectiveness should be unrelated to individual differences in people's general concern with promotion and prevention goals (see Brazy & Shah, 2006; Higgins et al., 1997; Shah & Higgins, 2001). Thus, the RFQ was included in this study to afford examination of whether the Regulatory Focus in Relationships scale (adapted after Lockwood et al., 2002) makes independent contributions to the hypothesized effects. The RFQ prevention scale assesses individuals' subjective histories of success in prevention regulation with items such as "How often did you obey rules and regulations that were made by your parents?" or "How often have you gotten into trouble because you were not careful enough?" In contrast, the promotion scale assesses individuals' subjective histories of success in promotion regulation with items such as "How often have you accomplished things that got you 'psyched' to work even harder?" or "Compared to most people, how often do get what you want out of life?" The scale consists of six promotion items and five prevention items. Participants responded to items on a scale ranging from 1 (*never*) to 5 (*very often*). The average of the six promotion items was computed to create promotion scores (alphas were .69 and .72 for women and men, respectively) and the average of the five prevention items was computed to create prevention scores (alphas were .82 and .87 for women and men, respectively). For women, the RFQ promotion scale was unrelated to both the Promotion Focus in Relationships scale (r = -.02, *ns*) and the Prevention Focus in Relationships scale (r = -.17, *ns*). Moreover, women's RFQ

prevention cores were associated with neither the Promotion Focus in Relationships scale (r = -.06, *ns*) nor the Prevention Focus in Relationships scale (r = -.01, *ns*). For men, the RFQ promotion scale was unrelated to the Promotion Focus in Relationships scale (r = .03, *ns*), but it was significantly and negatively associated with the Prevention Focus in Relationships scale (r = -.41, p <.01). Men's RFQ prevention scores were unrelated to the Promotion Focus in Relationships scale (r = .03, *ns),* but correlated significantly and negatively with the Prevention Focus in Relationships scale, (r = -.21, p < .05).

The hypothesized effects of regulatory focus orientations on participants' support behaviors or perceptions of support could be due to other individual difference and relationship factors that correlate with regulatory orientations, some of which might affect the support-related outcome variables. Thus, the following measures were included for discriminant validation.

General Motivational Orientation. Participants completed Carver and White's (1994) Behavioral Inhibition System (BIS) and Behavioral Activation (BAS) scales to measure individual differences in general dispositional motivational orientations. This measure was included to ensure that the effects of regulatory focus on support-related variables were independent of participants' general approach (BAS) and avoidance (BIS) tendencies. Associations between promotion focus and BAS-related approach orientations and between prevention focus and BIS-related avoidance orientations have been found with self-report measures (Higgins et al., 2001; Summerville & Roese, 2007; Winterheld & Simpson, 2008) and with electro-encephalographic (EEG) research (Amodio et al., 2004).

The BIS/BAS measure is a 20-item scale that assesses the strength of people's general approach (BAS) and avoidance (BIS) motivations. The BIS scale consists of 7 items that measure concerns about the possibility of aversive outcomes and the extent of negative responses to such events (e.g., "I worry about making mistakes"). The BAS scale consists of 13 items divided into three subscales: Fun Seeking (e.g., "I crave excitement and new sensations") measures the willingness to try new things; Reward Responsiveness (e.g., "When I get something I want, I feel excited and energized") taps the extent of positive reactions to rewards; and Drive (e.g., "I go out of my way to get things I want") assesses the willingness to approach positive outcomes. Participants responded to these items on Likert-type scales, anchored 1 (*very true for me*) and 4 (*very false for me*). Because all three BAS subscales were relevant for the purpose of this study, they were combined to form a single BAS scale. The internal reliabilities were adequate (BIS α = .76 for men, and .71 for women; BAS α = .77 for men, and .83 for women).

Social Approach and Avoidance Goals. Gable (2006) has found that *social* approach and avoidance goals steer individuals toward potentially rewarding relational outcomes or away from potentially aversive relationship outcomes. These tendencies should be related to promotion and prevention focus in relationships. To demonstrate that regulatory focus influences the hypothesized outcomes above and beyond the effects of social approach and avoidance goals, participants completed the friendship approach and avoidance goals measure (Elliot, Gable, & Mapes, 2006). The measure was slightly reworded to adapt it to romantic partners rather than to friends.

Four items of the 8-item measure assess social avoidance goals (e.g., “I am typically trying to avoid disagreements and conflicts with my romantic partners.”), and four items assess social avoidance goals (e.g., “I am typically trying to share many fun and meaningful experiences with my romantic partners.”). Participants rated the degree to which they agree or disagree with each item on a scale ranging from 1 (*not at all true of me*) to 7 (*very true of me*). The average of the four avoidance items was computed to create the social avoidance goal score (alphas were .75 and .67 for women and men, respectively) and the average of the four approach items was computed to create the social approach goals score (alphas were .77 and .85 for women and men, respectively).

Attachment Measure. Promotion and prevention orientations may be related to adult attachment dimensions (Mikulincer & Shaver, 2001) due to similar developmental antecedents (e.g., similar parenting histories of rejection or overprotection). Moreover, attachment orientations have been related to perceptions of social support, support provision, and support seeking. For example, insecurely attached people tend to appraise their partners’ support attempts as less helpful (Collins & Feeney, 2004), and are less inclined to offer effective support to their partners (Simpson, Rholes, & Nelligan, 1992), To discount the possibility that the hypothesized results are due to attachment orientations or stem from shared variance with attachment orientations, participants completed the Adult Attachment Questionnaire (AAQ; Simpson, Rholes, & Phillips, 1996). This 17-item measure assesses the two primary dimensions of attachment: anxiety (e.g., “I usually want more closeness and intimacy than others do”) and avoidance (e.g., “Others often want me to be more intimate than I feel comfortable being”). Participants rated the degree to which they agree or disagree with each item on

a scale ranging from 1 (*I strongly disagree*) to 7 (*I strongly agree*). The scale consists of eight avoidance and nine anxiety items. The average of the eight avoidance items was computed to create the avoidance score (alphas were .82 and .77 for women and men, respectively) and the average of the nine anxiety items was computed to create the anxiety score (alphas were .82 and .83 for women and men, respectively).

Personality Measure. Carver, Sutton, and Scheier (2000) conceptualize extraversion as reward responsiveness/approach, and neuroticism as threat responsiveness/avoidance. This suggests that promotion and prevention strategies might be qualities subsumed by these traits. Indeed, associations between extraversion and neuroticism and promotion and prevention orientations, respectively, have been established (Grant & Higgins, 2003; Higgins et al., 2001). Furthermore, personality traits have been linked with several support-related outcomes in close relationships. Extraversion, for instance, has been associated with higher perceived support in social relationships (Asendorpf & Wilpers, 1998) and more provision of support toward romantic partners (Cutrona, et al., 1997). Neuroticism, in contrast, has been shown to predict lower satisfaction with support (Cutrona et al., 1997).

Participants completed John et al.'s (1990) Big Five Scale, a 35-item measure that assesses the five major dimensions of personality: neuroticism (propensity to experience negative emotions), extraversion (inclination to experience positive emotions, sociability), agreeableness (propensity to be trusting and considerate of others), conscientiousness (inclination toward persistency and organization), and openness to experience (tendency toward curiosity and variety). Participants responded to each item on a 5-point scale (anchored 1 = *disagree strongly*, 5 = *agree strongly*).

The average of each scale was computed to create the scale score for each personality dimension. Internal reliabilities were adequate (extraversion α = .87 for men, and .89 for women; neuroticism α = .80 for men, and .75 for women; agreeableness α = .80 for men. and .76 for women; openness α = .74 for men, and .79 for women; conscientiousness α = .76 for men, and .72 for women).

Relationship Satisfaction and Closeness. Affective qualities of a relationship such as satisfaction and closeness have been shown to predict support provision and perceived support availability. Moreover, research has shown that perceived support can be more strongly related to generic relationship satisfaction than to enacted support (Kaul & Lakey, 2003). Finally, the hypothesized effects could also be accounted for by the nature or quality of the relationships in which participants with different regulatory focus orientations are involved. Therefore, participants completed Fletcher, Simpson, and Thomas's (2000) Perceived Relationship Quality Components Inventory (PRQC), which assesses six distinct components of perceived relationship quality that could be differentially important to participants who have different promotion or prevention orientations. Using 7-point Likert type scales anchored 1 (*Not at all*) and 7 (*Extremely*), participants rated their current relationship on subscales of satisfaction (α = .91 and 92, for women and men, respectively), commitment (α = .93 and .91, for women and men, respectively), closeness (α = .62 and .84, for women and men, respectively), trust (α = .84 and .76, for women and men, respectively), passion (α = .83 and .85, for women and men, respectively), and love (α = .83 and .75, for women and men, respectively). An overall PRQC scale score for each participant was calculated by summing the 6 subscales (α = .90, for both women and men).

Phase 2: Videotaped Interactions. Once both partners had completed the Phase 1 measures (described above), couples contacted the researcher to schedule an appointment for the laboratory visit. Couples visited the laboratory, one couple at a time. The visit lasted approximately 2 hours. After a brief introduction to the study, couples were told that they would engage in two sets of videotaped interactions (a total of four discussions) with their partner: In the first set of interactions they would first discuss one partner's issue (e.g., the man's problem), and then the other partner's issue in the same category (e.g., the woman's problem). In the second set of interactions, they would then again take turns, this time discussing the issues from the other category (e.g., the man's goal, followed by a discussion of the woman's goal).

After this overview of the study, the experimenter led the partners into separate rooms where they were asked to first identify either a personal problem/stressor or a personal goal/aspiration and to complete the pre-interaction measures (a detailed description of this procedure and the measures will follow). When both partners were finished, an experimenter led them to the camera room where they were seated across from each other at a table. After receiving the instructions described below, couples engaged in the four separate videotaped discussions. Each interaction lasted about 7-8 minutes. After each interaction, each partner completed post-interaction measures (described below) in a separate room.

The order of the interactions was randomly assigned and counterbalanced. Possible order effects were controlled by alternating the gender of the "initiator." Specifically, in approximately 25% of the couples, the man discussed his problem/stressor first, in 25 % the woman discussed her goal/aspiration first, in 25 % of

the couples the man discussed his goal/aspiration first, and in 25% the woman discussed her problem/stressor first. The subsequent (second) interaction consisted of the *other* partner discussing his/her issue in the same category (i.e., both partners discussed either problems/stressors or goals/aspirations first). Participants then took turns discussing the other issue (third and forth interaction), with the same person who went first in the first set of interactions going first in the second set (adapted after Gable et al., 2006). An inspection of mean differences of all the dependent variables (see below) revealed no significant differences based on order (all *p*s > .05).

Upon completion of the final set of measures, participants were thoroughly debriefed, received payment/compensation, and thanked for their participation.

Problem/Stressor Condition.

Before engaging in the discussion of their personal problems/stressors, participants were led to separate rooms and received the following instructions by the experimenter (adapted from Gable et al., 2006):

> "In the following set of interactions, we are interested in how couples discuss personal concerns such as problems or stressors. We are <u>not</u> interested in the concerns you may have about your relationship or partner. Instead, we are interested in how couples talk about concerns that affect one of you in your personal life. Please pick a current problem, concern, or stressor that you are facing in your life. Examples are work/academic problems such as doing poorly in school, work-related stress, having problems with colleagues or a boss; financial problems, personal illness, or having problems with a friend or family member. It can be any problem or

stressor that is a burden to you and that you would like to resolve or eliminate from your life, no matter how big or small you may think it is."

Pre-Discussion (Time 1) Materials and Measures. Next, participants were given a form on which they were asked to briefly describe the problem/stressor they chose to discuss with their partner. Examples of problems/stressors included "I would like to get out of debt/find a job" (or other related financial/employment issues), " Resolving the conflicts with my mother" (or conflicts with friends or co-workers), and " I am worried about my father's health/surgery" (or related concerns regarding friends' or own health). Then participants answered several questions regarding the problem/stressor and completed baseline measures pertaining to their personal and relational well-being (described next). All measures that were administered before and after the discussions are located in Appendix B.

Pre-Discussion (Time 1) Problem/Stressor Perceptions. To obtain baseline measures of participants perceptions' of the problem/stressor, they completed a modified self-efficacy measure (Bandura, 2000) that asked them to rate how confident they are right now that they can solve the problem on a 10-point scale ranging from 0 (*cannot do at all*) to 10 (*highly certain that I can do it*). Because the following variables could potentially predict perceptions of the problem/stressor, they were included as control variables: Participants were asked (1) how frequently they had tried to solve the problem in the past, (2) how successful potential past attempts had been, (3) how frequently they had discussed the problem with their partner, and (4) how much control they believed they had over solving the problem.

Pre-Discussion (Time 1) Relationship Well-Being. Participants completed a measure of their current relationship mood (Brunstein et al., 1996). This measure contains eight positive (e.g., harmonious, happy, loved, accepted) and eight negative (e.g., tense, hurt, betrayed, suppressed) affect adjectives. For each adjective, participants used a 7-point scale anchored 1 (*not at all*) and 7 (*a great deal*) to rate the extent to which they were currently experiencing these feelings within the context of their relationship. Subscales of positive and negative mood were highly intercorrelated at both Times 1 and 2 (*r*s = -.85), and therefore combined into a total relationship mood scale after reverse-scoring the negative items (see Brunstein et al., 1996). Higher scores indicate more positive relationship mood, and alphas for the composite measure were .90 (men) and .98 (women).

Pre-Discussion (Time 1) Individual Well-Being. Participants' emotional well-being was assessed by the Positive Affect/Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). Participants used 5-point scales ranging from 1 (*very slightly or not at all*) to 5 (e*xtremely*) to indicate how they currently felt. Sample items for positive mood include "excited" and "enthusiastic," and sample items for negative items include "nervous" and "afraid." The average of the items was computed to obtain scale scores for positive mood (alphas were .84 and .92 for men and women, respectively), and scale scores for negative mood (alphas were .90 and .89 for men and women, respectively).

After completing these measures, participants were led to the camera room, and received the following instructions (adapted after Gable et al., 2006):

> "In the following interaction, you will discuss a personal problem or concern that [name of partner] currently has. When you have finished the discussion, you will complete a set of questionnaires. Then you will repeat the process, except the discussion will be about [name of other partner]'s problem. While you are interacting, please feel free to talk about anything related to the problem. Some suggestions for the person who has the problem would be to discuss the circumstances surrounding the problem, how you feel and what you think about it, and any other issues or details you think are relevant. When the discussion is about your partner's problem, you can respond to, add to, or talk about as much or as little as you would under normal circumstances."

Post-Discussion (Time 2) Measures. After each problem discussion, both partners (i.e., support recipient and provider) completed a set of questionnaires in separate rooms. Participants were asked to answer several questions regarding their problem/stressor and to complete a series of relationship and individual well-being measures.

Post-Discussion (Time 2) Problem/Stressor Perceptions. To assess whether support recipients' perceptions of their problems/stressors had changed after the discussion, they completed the same perceived self-efficacy measure as before.

Post-Discussion (Time 2) Relationship and Individual Well-Being. To assess immediate personal and interpersonal consequence of partner support, support recipients completed the same measures as they did prior to the interaction: The relationship mood scale (alphas were .90 for men, and .90 for women) and the PANAS

(alphas for positive mood were .87 for men and .90 for women; alphas for negative mood were .90 for men and .84 for women).

To assess participants' perceptions of their partners' support behavior, they completed three measures. First, support recipients used 7-point scales anchored 1 (*not at all*) to 7 (*a great deal*) to rate how motivated their partner seemed to support them. Second, support recipients completed the abbreviated 10-item version of Reis's (2003) 18-item Responsiveness Scale, which is designed to assess how understood, validated, and cared for individuals feel when interacting with their romantic partner. Sample items include "My partner focused on the best side of me," and "My partner got the facts right about me." Participants responded to the items on a scale that ranged from 1 (*not at all true*) to 9 (*completely true*). All items were summed to compute a total score of perceived partner responsiveness (alphas were .92 and .95 for women and men, respectively). Third, for each of 18 items, participants rated their partners' positive and negative support behaviors on a 7-point scale ranging from 1 (*not at all*) to 7 (*a great deal).* The items for this scale were inspired by Cutrona (1996). A factor analysis of the 18 items confirmed that they loaded on two factors, positive support behaviors (e.g., "My partner expressed warmth and positive emotions," "My partner was concerned about me," and "My partner was compassionate toward me"), and negative support behaviors (e.g., "My partner expressed negative emotions," "My partner was intrusive and interfering," and "My partner was emotionally distant"). Each set of items was the aggregated to compute a perceived positive partner support score and a perceived negative partner support score for each participant. Both scales had good reliabilities:

Alphas for positive partner support were .90 for men and .91 for women, and alphas for negative partner support were .77 for men and .81 for women.

To assess the degree of agreement between partners regarding supportiveness and responsiveness, the support *provider* completed parallel measures regarding his/her own support behaviors. Support providers rated how motivated they were to support their partner during the discussion; they also completed the Reis's Responsiveness Scale, (alphas were .85 for men and .93 for women), and the scale assessing positive and negative support behaviors. A factor analysis of the support providers' ratings of their own support behavior during the problem discussion confirmed the same two-dimensional structure. Thus, items were aggregated to form a scale of perceived positive self support (alphas were .78 for men, .80 for women) and perceived negative self support (alphas were .71 for men, and .79 for women).

Personal Goals/Aspirations Condition.

Before engaging in the discussion of their personal goals/aspirations, partners were led to separate rooms and received the following instructions (adapted from Gable et al., 2006):

> "In the following set of interactions, we are interested in how couples discuss the goals, dreams and aspirations they have for the future. We are <u>not</u> interested in the goals that you have as a couple or that involve the active participation of both you and your partner (e.g., having a baby, going on a vacation together). Instead, we are interested in how couples talk about goals that *one* partner has in his or her life. Please pick a goal that is personally important to you and that you would *very* much like to achieve. Examples are work or education goals such as

> going to graduate school, receiving a promotion at work, switching jobs; personal development goals such as starting up a new hobby or becoming a volunteer; health/fitness goals such as starting an exercise program; spiritual goals such as learning more about a religion, etc. It can be any goal, dream, or aspiration that, once achieved, will provide you with a sense of happiness and fulfillment, no matter how small or far-reaching you may think it is."

Pre-discussion (Time 1) Materials and Measures. Next, participants completed a form on which they were asked to briefly describe the goal/aspiration they chose to discuss with their partner. Examples of goals/aspirations included "I want to quit smoking" (or related health and fitness goals), "I want to find a fulfilling career" (or related employment or academic goals), and "I want to travel the world" (or related vacation or leisure goals). Then participants answered several questions regarding the goal/aspiration and completed baseline measures pertaining to their personal and relational well-being (described next; see Appendix B).

Pre-Discussion (Time 1) Goal/Aspiration Perceptions. To obtain baseline measures of participants perceptions' of their goal/aspiration, they completed a modified self-efficacy measure (Bandura, 2000) that asked them to rate how confident they are right now that they can achieve the goal on a 10-point scale ranging from 0 (*cannot do at all*) to 10 (*highly certain that I can do it*). Because the following variables could potentially predict perceptions of the goal, they were included as control variables. Participants were asked (1) how frequently they had tried to achieve the goal in the past, (2) how successful potential past attempts had been, (3) how frequently they

had discussed the goal with their partner, and (4) how much control they believed they had over achieving the goal.

Pre-Discussion (Time 1) Relationship Well-Being. Participants completed a measure of their current relationship mood (Brunstein et al., 1996). This measure was described above (see Problem Condition). Subscales of positive and negative mood were combined into a total relationship mood scale after reverse-scoring the negative items. Higher scores indicate more positive relationship mood, and alphas for the composite measure were .92 (men) and .94 (women).

Pre-Discussion (Time 1) Individual Well-Being. Participants' emotional well-being was assessed by the PANAS (Watson, et al., 1988). The PANAS was described above (see Problem Condition). Internal reliabilities for the PANAS were again adequate (alphas for positive mood were .75 and .90 for men and women, respectively, and the alphas for negative mood were .92 and .90 for men and women, respectively).

After completing these measures, participants were led to the camera room, and received the following instructions (adapted after Gable et al., 2006):

> "In the following interaction, you will talk about a personal goal or aspiration that [*name of partner*] has. When you have finished the discussion, you will complete a few short forms, and then you will repeat the process, except the discussion will center on [*name of other partner*]'s goal/aspiration. While you are interacting, please feel free to talk about anything related to the issue you are discussing. Some suggestions for the person disclosing the goal or aspiration would be to discuss the circumstances surrounding the goal, how you feel and what you think about

it, and any other issues or details you think are relevant. When the discussion is about your partner's goal, you can respond to, add to, or talk about as much or as little as you would under normal circumstances."

Post-Discussion (Time 2) Measures. After each discussion, both partners (i.e., support recipient and provider) completed a set of questionnaires in separate rooms. Participants answered several questions regarding their goal/aspiration and completed a series of relationship and individual well-being measures (see Appendix B).

Post-Discussion (Time 2) Goal/Aspiration Perceptions. To assess whether support recipients' perceptions of their goals/aspirations have changed after the discussion, they completed the same perceived self-efficacy measure as before.

Post-Discussion (Time 2) Relationship and Individual Well-Being. To assess immediate personal and interpersonal consequence of partner support, support recipients completed the same measures as they did prior to the goal discussion. Internal reliabilities for the relationship mood scale were adequate (alphas were .88 for men, and .91 for women), as were reliabilities for the PANAS (alphas for positive mood were .87 for men and .89 for women; alphas for negative mood were .91 for men and .87 for women).

To assess participants' perceptions of their partners' support behavior, they completed three measures. First, support recipients rated on a 7-point scale anchored 1 (*not at all*) to 7 (*a great deal*) how motivated their partner seemed to support them. Second, support recipients completed the abbreviated 10-item version of Reis's (2003) 18-item Responsiveness Scale (described above in the Problem Condition). Alphas were .96 and .95 for women and men, respectively. Finally, participants rated their

partners' positive and negative support behaviors on the same18 items as described above in the Problem Condition. A factor analysis of the 18 items confirmed that they loaded on two factors, positive partner support, and negative partner support. Each set of items was again aggregated to compute a perceived positive partner score and a perceived negative partner support score for each participant. Both scales were internally reliable (alphas for positive partner support were .91 for men and .92 for women, and alphas for negative partner support were .75 for men and .80 for women).

To assess the degree of agreement between partners regarding supportiveness and responsiveness, the support *provider* completed parallel measures regarding his/her own support behaviors. Support providers rated how motivated they were to support their partner during the discussion; they also completed the Reis's Responsiveness Scale (alphas were .92 for men and .95 for women), and the scale assessing positive and negative support behaviors. A factor analysis of the support providers' ratings of their own support behavior during the goal discussion confirmed the earlier two-dimensional structure. Thus, items were aggregated to form a scale of perceived positive self support (alphas were .79 for men, .79 for women) and perceived negative self support (alphas were .73 for men, and .81 for women).

Phase 3: Behavioral Codings. The videotaped interactions were viewed and coded by eight trained observers who were blind to the hypotheses and participants' characteristics. Two independent coding teams were used to quantify the behaviors and affects displayed in the 384 interactions: Four coders rated the problem/stressor discussions, and four coders rated the goal/aspiration discussions. Development of the coding scheme was informed by Feeney's (2004) research on responsive support of goal

strivings, and traditional social support behavioral coding schemes used in previous research (e.g., Collins & Feeney, 2000; Pasch & Bradbury, 1998; Simpson et al. 2007).

Before coding the interactions, coders were asked to watch as many interactions as possible in order to norm them to the range of possible behaviors in the particular situation in which participants were interacting. Coders were then given detailed definitions, instructions, and training on each rated construct. After training on a sample of pilot interactions, each coder rated each dyad member independently of the other coders on specific behaviors and attributes. To estimate interrater reliability, Cronbach's alpha was calculated. Cronbach's alpha is an appropriate estimate of interrater reliability in this context because all observers rated all participants (targets), and averages of the observers' ratings were used in the data analyses (McGraw & Wong, 1996).

Coding of Support Providers' Behaviors. Independent observers rated each partner's support provision behavior on several dimensions, and made their ratings on 9-point Likert-type scales (where 1 = *not at all*, 9 = *a great deal*). Specifically, the behavioral ratings assessed the extent to which support providers (1) extended *sensitive and responsive support* (which includes behaviors such as attentive listening, encouragement of the partners' goals in the goals condition, being sympathetic to the partners' concerns in the problems condition, offering emotional and instrumental support), (2) extended *intrusive and interfering support* (which includes behaviors such as interfering with the partners' goals, being too dominating and directive when giving advice about how to solve problems, and trying to dissuade the partner from pursuing his/her goals, (3) expressed *negative affect* (e.g., hostility by criticizing or blaming the

partner, annoyance, and anxiety/stress), (4) expressed *positive affect/warmth* (e.g., expressions of affection for the partner, nurturance, and reassurance), (5) appeared *withdrawn and distancing* (i.e., did not show much/any interest in the partner's issue, appeared distracted and disengaged), and (6) communicated future availability. Inter-observer reliabilities ranged from .70 to .75 in the problem condition for both women and men, and from .65 to .80 in the goal condition for women, and from .70 to .86 for men. Items were then aggregated across observers and factor analyzed. The factor analysis revealed two factors: One factor reflected positive support behaviors, and the second negative support behaviors. Thus, positive and negative support items were aggregated to form two scales: positive support behavior (alphas = .81 for women, and .79 for men), and negative support behavior (alphas = .77 for women and .75 for men).

Results

Descriptive Statistics and Correlations

A summary of the means and standard deviations of the predictor variables is presented in Table 1. A summary of the means and standard deviations for the dependent measures in the problem and goal conditions appears in Table 2. Matched-pairs *t*-tests revealed a few significant gender differences. In the goal condition, independent observers rated women as more motivated than men to provide support, $t(94) = -4.40$, $p < .01$, and as having provided more positive support compared to men, $t(94) = -3.18$, $p < .01$. In the problem condition, men, compared to women, reported having provided more negative support, $t(94) = 2.56$, $p < .05$. Independent observers seemed to confirm this: They rated men as having provided more negative support in the problem condition, $t(94) = 4.12$, $p < .01$. Moreover, compared to men, women

reported greater change (i.e., decrease) in positive emotions in the problem condition, $t(94) = 2.16$, $p < .01$.

I next tested for significant between-condition mean differences in the dependent measures. Only a few significant effects emerged. Women [($t(94) = 1.96$, $p < .05$)] and men [($t(94) = 5.32$, $p < .01$)] were rated by independent observers as more motivated to provide support in the problem condition than in the goal condition. Women were rated as having provided more negative support in the goal condition than in the problem condition, $t(94) = 5.20$, $p < .01$). Men, in contrast, were rated as having provided more negative support in the problem condition than in the goal condition, $t(94) = 5.11$, $p < .01$). Finally, women [($t(94) = 2.98$, $p < .01$)] and men [($t(94) = 3.26$, $p < .01$)] reported greater increases in positive emotions in the goal condition than in the problem condition.

A summary of zero-order correlations between the predictor variables is depicted in Table 3. Men's prevention focus was positively correlated with women's prevention focus, $r = .28$, $p < .01$, and men's prevention focus was also positively associated with women's promotion focus, $r = .25$, $p < .05$.

A summary of zero-order correlations between the predictor variables and dependent measures for the problem and goal condition is presented in Table 4 (for men) and Table 5 (for women). Men's promotion focus was positively associated with self-reported motivation to provide support in both the problem condition ($r = .28$, $p < .01$) and the goal condition ($r = .23$, $p < .05$). It appears that promotion-focused men were rated (by independent observers) as more motivated to provide support in the goal condition ($r = .28$, $p < .05$). Promotion-focused men reported having provided more

positive support in both the problem condition (r = .37, p < .01) and the goal condition (r = .24, p < .05), and independent observers rated promotion-focused men as having provided more positive support in the goal condition (r = .26, p < .05). Promotion-focused men reported having provided less negative support in the problem condition (r = -.28, p < .01), whereas independent observers rated promotion-focused men as having provided more negative support in the problem condition, r = .23, p < .05). Men's promotion focus was positively associated with greater perceived partner responsiveness in both the problem condition (r = .21, p < .05) and the goal condition (r = .33, p < .01), and with greater perceived positive partner support in the goal condition (r = .28, p < .01). Prevention-focused men perceived lower positive partner support (r = -.23, p < .05) and lower partner responsiveness (r = -.26, p < .01) in the goal condition. They did, however, perceive greater negative partner support in both the problem condition (r = .20, p < .05) and the goal condition (r = .28, p < .01).

Women's promotion focus was positively associated with greater partner-rated motivation to provide support in the goal condition (r = .25, p < .05). Promotion-focused women also reported having provided more positive support in both the problem condition (r = .26, p < .05) and the goal condition (r = .25, p < .05). Women's promotion focus was associated with greater change (increase) in negative emotions in the problem condition, r = .30, p < .01). Women's prevention focus was associated with lower partner-rated motivation to provide support in the problem condition, r = -.22, p < .05. Prevention-focused women also reported having provided less positive support (r = -.22, p < .05) and more negative support (r = .24, p < .05) in the problem condition. They further perceived lower partner responsiveness (r = -.21, p < .05), less positive

partner support (r = -.24, p < .05), and more negative partner support (r = .28, p < .05) in the problem condition. Prevention-focused women experience greater change (increase) in relationship mood in the problem condition (r = .27, p < .01), and greater change (increase) in negative emotions in both the problem condition (r = .21, p < .05) and the goal condition (r = .20, p < .01).

Actor-Partner Interdependence Model (APIM) Analyses

Couple members' scores were significantly correlated for some variables (see Table 3), indicating that some degree of dyadic interdependence existed within couples. To address this issue, the data were analyzed using the Actor-Partner Interdependence Model (APIM; Kashy & Kenny, 2000; Kenny, 1996), which properly models the covariance and statistical dependency that naturally exists within dyads. The APIM uses the dyad as the unit of analysis, and allows one to estimate actor and partner effects separately. That is, the APIM can test not only whether an actor's (i.e., the person providing a response or behavior) own attributes predict his or her responses and behaviors (*actor effects*), but also whether the attributes of the actor's *partner* predict the actor's responses and behaviors (*partner effects*), controlling for the actor's own attributes. In the current study, for example, an "actor effect" for promotion focus would exist if an individual's promotion focus score predicted his or her motivation to provide support, controlling for his or her partner's promotion focus. A "partner effect" would be evident if an individual's *partner's* promotion focus score predicted the actor's motivation to provide support, controlling for the actor's own promotion focus. All APIM analyses were conducted using the MIXED program in SPSS (SPSS Version 16.0). Actor and partner effects are reported as regression coefficients. All predictor

variables were centered on the grand sample mean (Aiken & West, 1991). The degrees of freedom were calculated for each step (i.e., they were estimated for both the between-dyad and the within-dyad variables). All of the significant and marginally significant effects that emerged are reported below.

Overview of Hypothesis Testing

In preliminary analyses, I tested for two-way and three-way interactions involving gender and each of the predictor variables listed above. Any significant interactions involving gender are reported below.

The base APIM regression model used to test the hypotheses contained five independent variables: condition, actors' continuous promotion focus scores, actors' continuous prevention focus scores, partners' continuous promotion focus scores, partners' continuous prevention focus scores, and all possible 2-way interactions between these variables. Gender (which was effect-coded) was included as a control variable in all analyses. In addition, some models included theoretically relevant 3-way interactions, as reported below. Hypothesis testing was organized around the main concerns of the study: (1) Regulatory focus differences in support provision, and (2) regulatory focus differences in support perceptions and associated benefits for support recipients.

Regulatory Focus Predicting Support Provision

I first tested whether regulatory focus differentially predicts individuals' support provision, specifically, (a) their motivation to provide support to their partners during the different discussions (i.e., goal and problem discussions), and (b) the quality of the support provided. To reduce the influence of shared method variance, the outcome

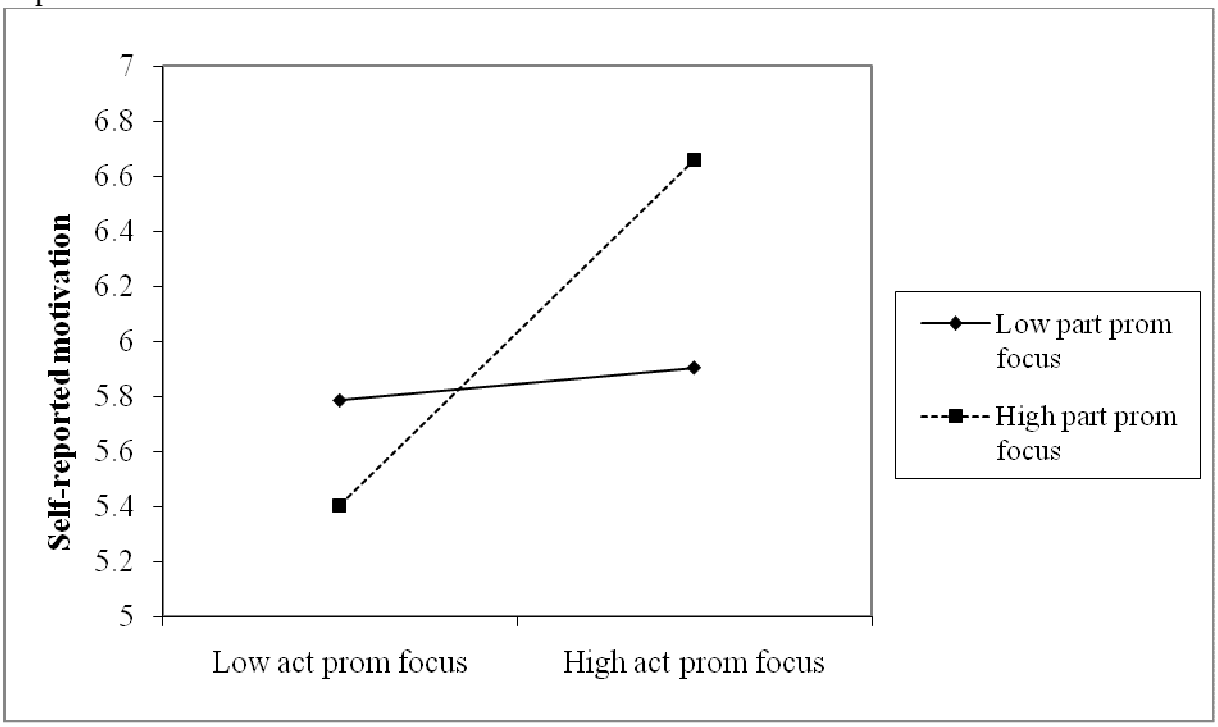
measures were obtained from multiple sources (support providers themselves, their partners, and independent observers).

Actors' (Support Providers') Regulatory Focus and Motivation to Provide Support. To test whether regulatory focus differentially predicted individuals' (actors') motivation to provide support, three separate models involving all the predictor variables in the base model described above, and all possible 2-way interactions between these variables, were run: One model with self-reported motivation as the dependent measure, one with partner-reported motivation as the dependent measure, and one with observer-rated motivation as the dependent measure. For ease of presentation, the hypothesis tests involving *promotion focus* and motivation to provide support are reported first (Hypothesis 1a), followed by hypothesis tests involving *prevention focus* and motivation to provide support (Hypothesis 5a).

Promotion Focus and Motivation to Provide Support. The first hypothesis was that highly promotion-focused individuals (actors) would be more motivated to provide support to their partners in the goal condition (Hypothesis 1a). When *self-reported* motivation was the dependent measure, the predicted interaction between actors' promotion focus and condition was not significant, $b = .0009$, $t(269) = .12$, *ns.* However, a main effect for actors' promotion focus revealed that highly promotion-focused actors reported greater motivation to support their partners, $b = .05$, $t(167) = 4.48$, $p < .0001$. This main effect was qualified by an interaction that indicated that highly promotion-focused actors reported greater motivation to provide support if their partners were more promotion-focused as well, $b = .005$, $t(86) = 2.93$, $p < .005$. To illustrate the interaction (see Figure 1 below), I computed the simple slope of actors'

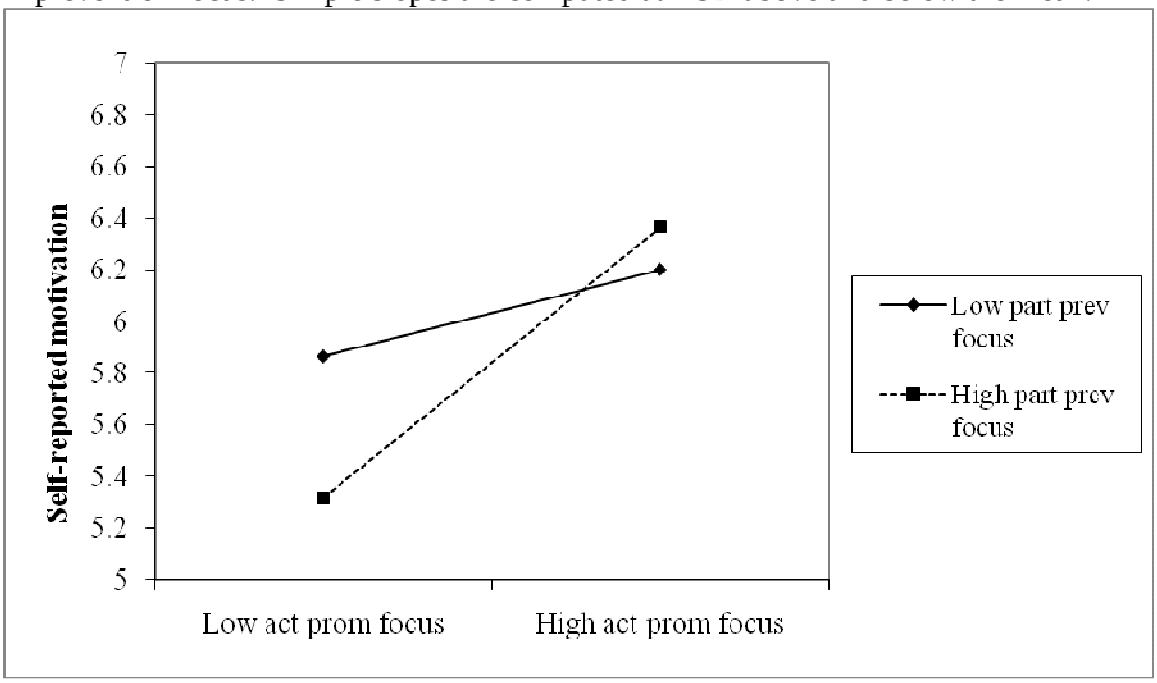
promotion focus scores on self-reported motivation at one standard deviation above and below the mean on partners' promotion focus scores (Aiken & West, 1991).

Figure 1. Association between actors' (support providers') promotion focus and actors' self-reported motivation for actors whose partners (support recipients) were high or low in promotion focus.



An interaction between actor promotion focus and partner *prevention* focus also emerged, such that highly promotion-focused actors rated themselves as more motivated to provide support to their partners if their partners were higher on prevention focus, $b = .003$, $t(150) = 2.09$, $p < .04$ (see Figure 2 below).

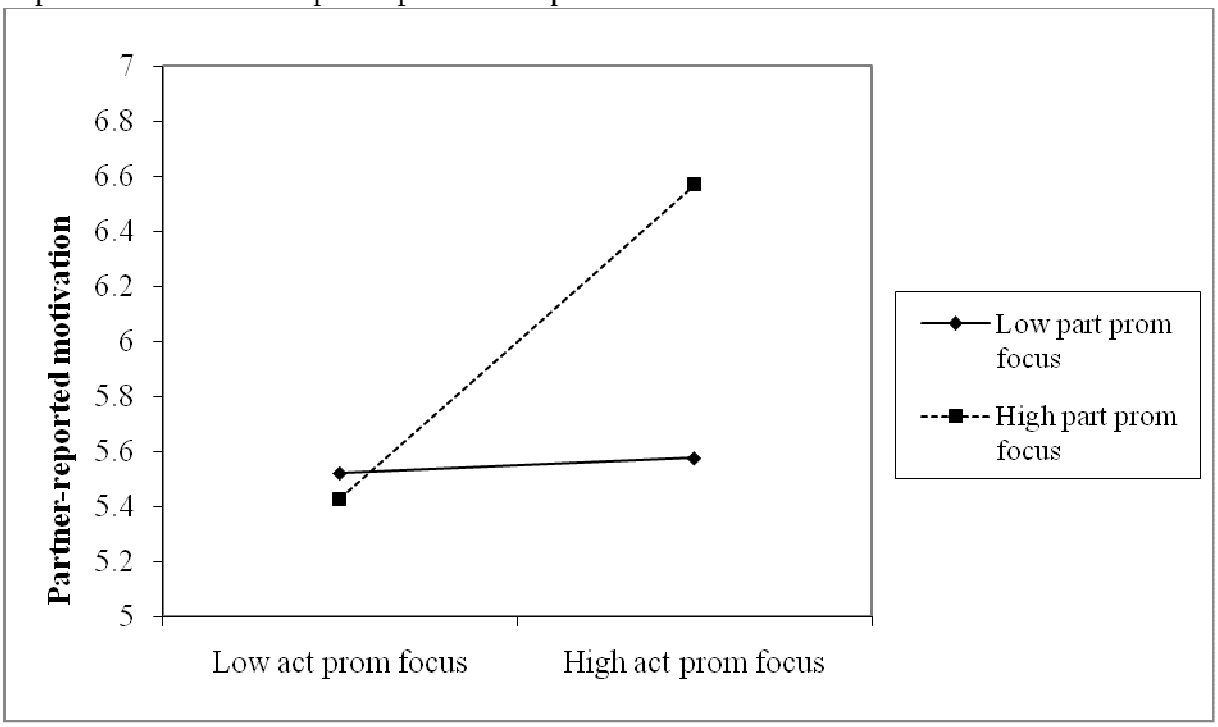
Figure 2. Association between actors' (support providers') promotion focus and actors' self-reported motivation for actors whose partners (support recipients) were high or low in prevention focus. Simple slopes are computed at *1 SD* above and below the mean.



When (actors') *partner-rated* motivation was the dependent measure, actors who had more promotion-focused partners did not rate their partners as more motivated to provide support in the goal condition: The interaction between partners' promotion focus and condition was not significant, $b = .004$, $t(267) = .52$, *ns*. A main effect for partners' promotion focus showed that actors who had more promotion-focused partners rated them as more motivated to provide support during the discussions, $b = .03$, $t(172) = 2.70$, $p = .009$. A main effect for actors' promotion focus also emerged, suggesting that highly promotion-focused actors perceived their partners as more motivated to provide support, $b = .04$, $t(172) = 3.56$, $p < .001$. These main effects were qualified by an interaction between actor promotion focus and partner promotion focus, which indicated that highly promotion-focused actors perceived their partners as most

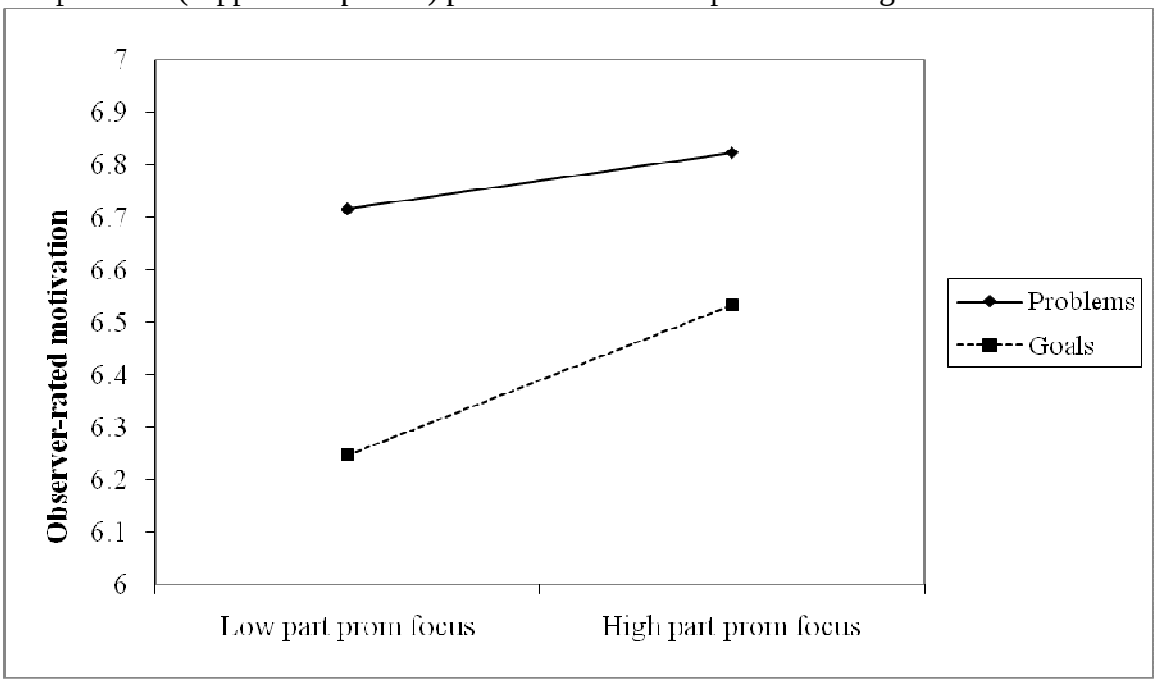
motivated if their partners were also more promotion-focused, b = .005, t(86) = 2.60, p =.01 (see Figure 3).

Figure 3. Association between actors' (support providers') promotion focus and actors' partner-rated motivation for actors whose partners (support recipients) were high or low in promotion focus. Simple slopes are computed at *1 SD* above and below the mean.



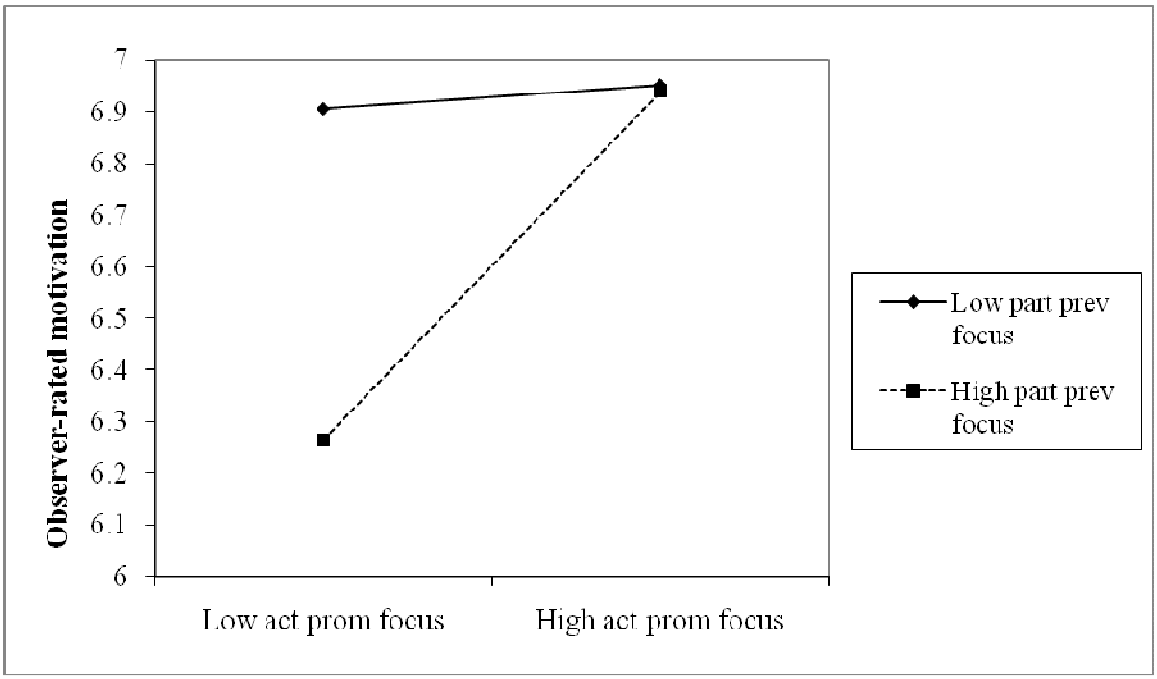
When *observer-rated* motivation was the dependent measure, the predicted interaction between actors' promotion focus and condition was not significant, b = -.0009, t(209.83) = -13, *ns*. However, a marginally significant interaction between condition and *partner* promotion focus emerged, b = .03, t(209.91) = 1.66, p = .10. It revealed that actors were rated as more motivated to provide support to their partners' goals if their partners were higher in promotion focus (see Figure 4).

Figure 4. Association between observer-rated actors' (support providers') motivation and partners' (support recipients') promotion focus for problem and goal conditions.



A main effect for actor promotion focus also was found, suggesting that highly promotion-focused actors were rated as more motivated to provide support, $b = .02$, $t(167.92) = 2.60$, $p = .01$. Moreover, a main effect for gender emerged, suggesting that women were rated as more motivated to provide support than men, $b = -.14$, $t(195.22) = -2.87$, $p < .005$. Finally, there was a main effect for condition, such that actors were rated as more motivated in the problem than the goal condition, $b = -.38$, $t(230.30) = -7.47$, $p < .001$. An interaction between actor promotion focus and partner prevention focus, $b = .002$, $t(157.59) = 2.02$, $p < .05$, showed that promotion-focused actors were rated as most motivated to provide support if their partners were more prevention-focused (see Figure 5).[4]

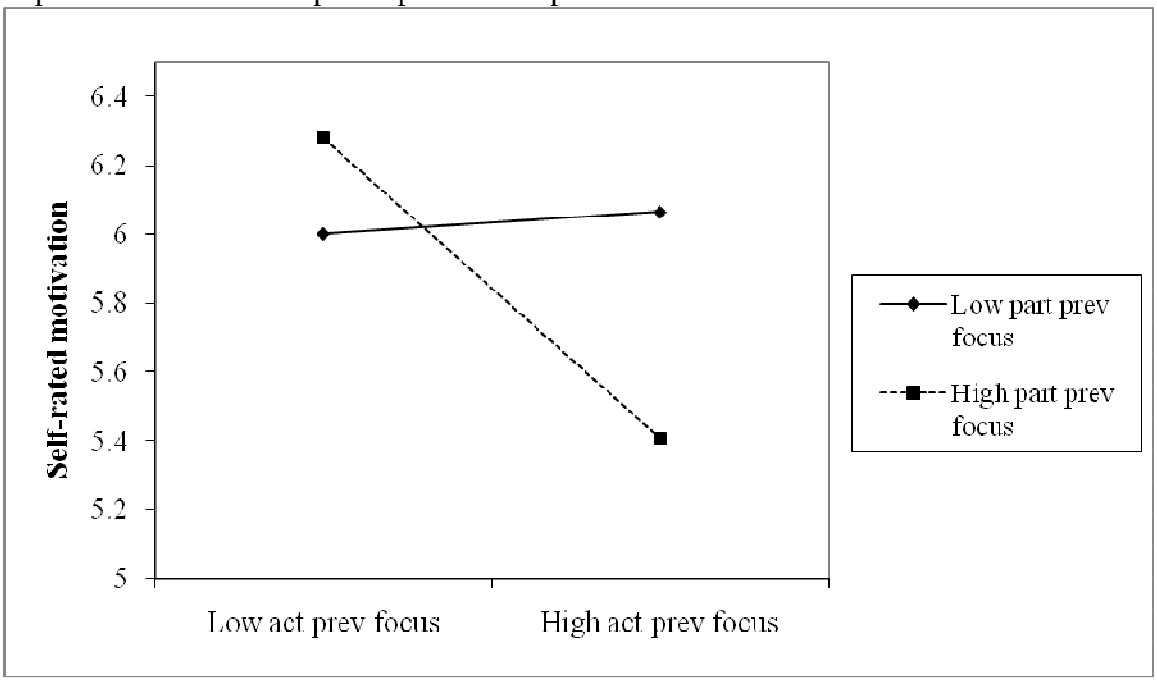
Figure 5. Association between actors' (support providers') promotion focus and observer-rated actors' (support providers') motivation for actors whose partners (support recipients) were high or low in prevention focus. Simple slopes are computed at *1 SD* above and below the mean.



Prevention Focus and Motivation to Provide Support. It was predicted that highly prevention-focused actors would be more motivated to provide support in response to their partners' problems (Hypothesis 5a). When *self-reported* motivation was the dependent measure, the predicted interaction between actors' prevention focus and condition was not significant, $b = -.0002$, $t(268.19) = -.02$, *ns*, suggesting that highly prevention-focused actors did not rate themselves as more motivated to provide support to their partners in the problem condition. However, a main effect for actors' prevention focus indicated that highly prevention-focused actors reported lower motivation to support their partners, $b = -.02$, $t(200.16) = -2.74$, $p < .008$. An interaction between actor prevention focus and partner prevention focus showed that highly

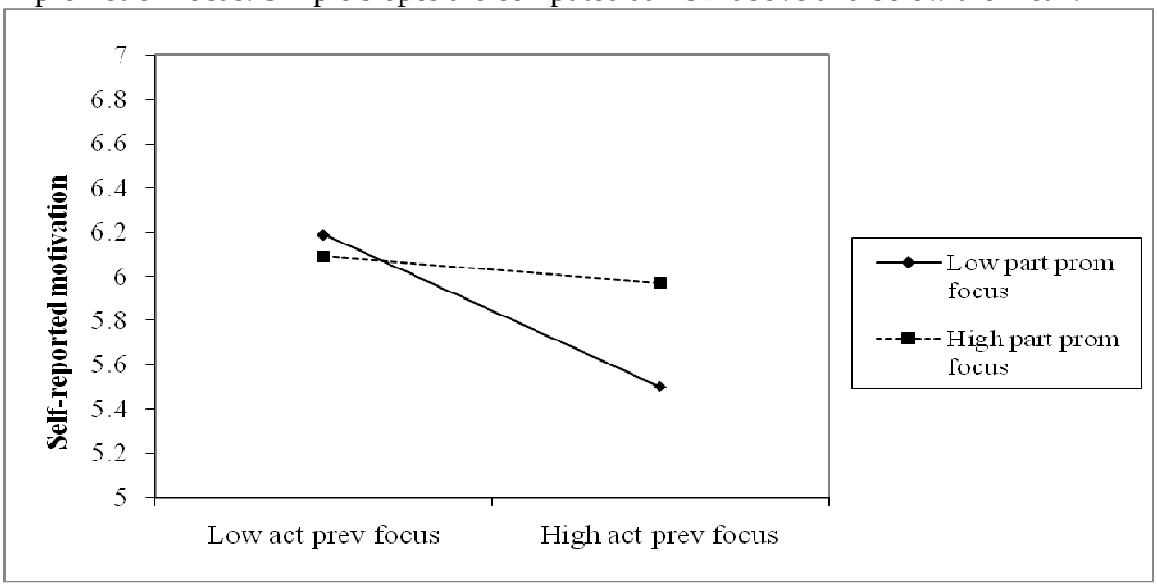
prevention-focused actors rated themselves as least motivated when their partners were also highly prevention-focused, b = -.003, t(85.98) = -2.20, p <.04 (see Figure 6).

Figure 6. Association between actors' (support providers') prevention focus and actors' self-reported motivation for actors whose partners (support recipients) were high or low in promotion focus. Simple slopes are computed at *1 SD* above and below the mean.



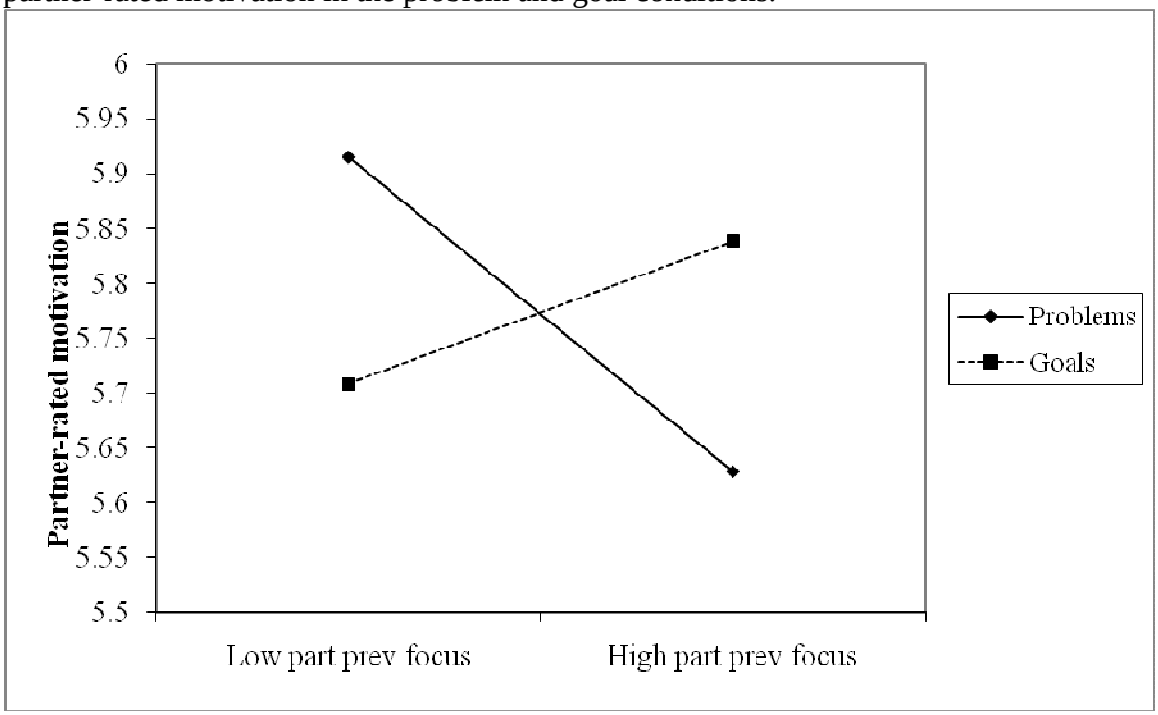
A marginally significant interaction between actor prevention focus and partner promotion focus revealed that highly prevention-focused actors rated themselves as least motivated to provide support if their partners were lower in promotion focus, b = .002, t(148.96) = 1.68, p <.09 (see Figure 7).

Figure 7. Association between actors' (support providers') prevention focus and actors' self-reported motivation for actors whose partners (support recipients) were high or low in promotion focus. Simple slopes are computed at *1 SD* above and below the mean.



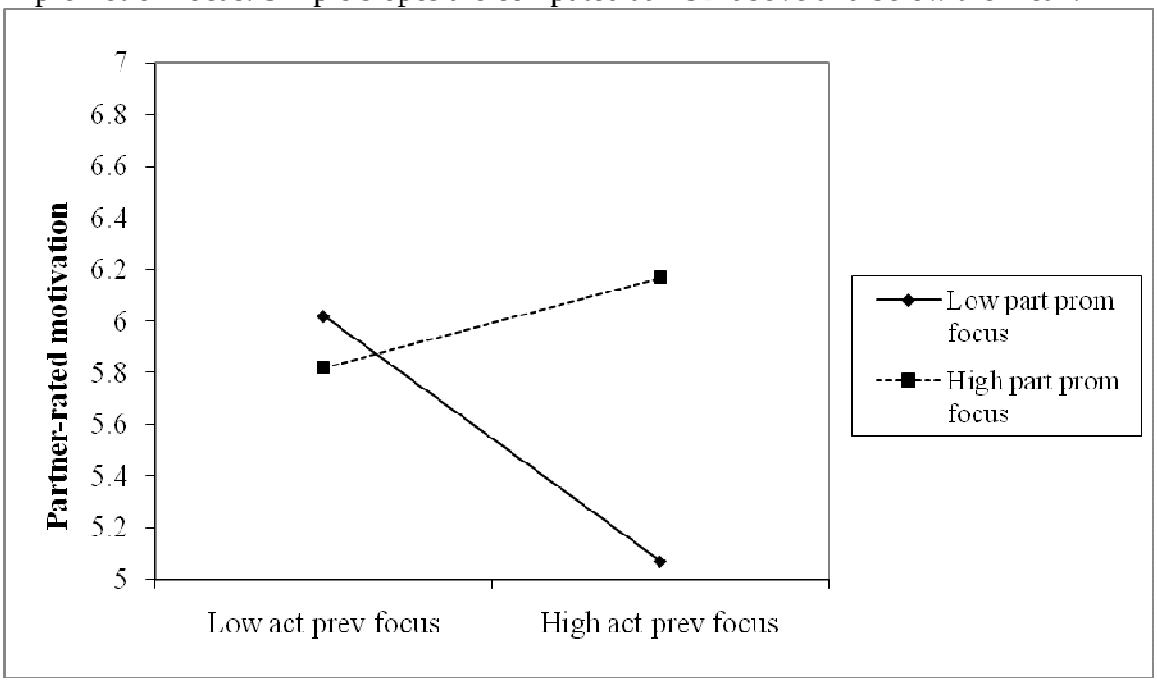
When *partner-rated* motivation was the dependent measure, actors whose partners were more prevention-focused did not rate their partners as more motivated to provide support in the problem condition, $b = .004$, $t(267.71) = .52$, *ns*. A marginally significant main effect for partner prevention focus suggested that actors rated their partners as less motivated to provide support if their partners were more prevention-focused, $b = -.16$, $t(208.90) = -1.78$, $p = .08$. Unexpectedly, an interaction between partner prevention focus and condition showed that actors rated their partners as more motivated to provide support in response to their (actors') goals if their partners were more prevention-focused, but less motivated to do so in response to their problems, $b = .02$, $t(267.36) = 3.25$, $p < .001$ (see Figure 8).

Figure 8. Association between actors' (support providers') prevention focus and actors' partner-rated motivation in the problem and goal conditions.



An interaction between actor prevention focus and partner promotion focus revealed that highly prevention-focused actors rated their partners as more motivated to provide support if their partners were more promotion-focused, but as less supportive if they scored lower on promotion focus, $b = .005$, $t(154.07) = 3.52$, $p < .001$ (see Figure 9).

Figure 9. Association between actors' (support providers') prevention focus and actors' partner-rated motivation for actors whose partners (support recipients) were high or low in promotion focus. Simple slopes are computed at *1 SD* above and below the mean.



Finally, a marginally significant main effect for actor prevention focus suggested that highly prevention-focused actors rated their partners as less motivated to support them (actors), $b = -.16$, $t(209.77) = -1.86$, $p = .06$.

When *observer-rated* motivation was the dependent measure, the predicted interaction between actors' prevention focus and condition failed to emerge, $b = .002$, $t(203.85) = .35$, *ns*. A main effect for actor prevention focus revealed that highly prevention-focused actors were rated as less motivated to provide support, $b = -.02$, $t(187.74) = -2.49$, $p < .02$. Further, a main effect for partner prevention focus indicated that actors were rated as less motivated to provide support if their partners were more prevention-focused, $b = -.02$, $t(187.74) = -2.49$, $p < .02$.

Summary of Actors' (Support Providers') Regulatory Focus and Motivation to Provide Support. The analyses thus far can be summarized as follows. As reported by

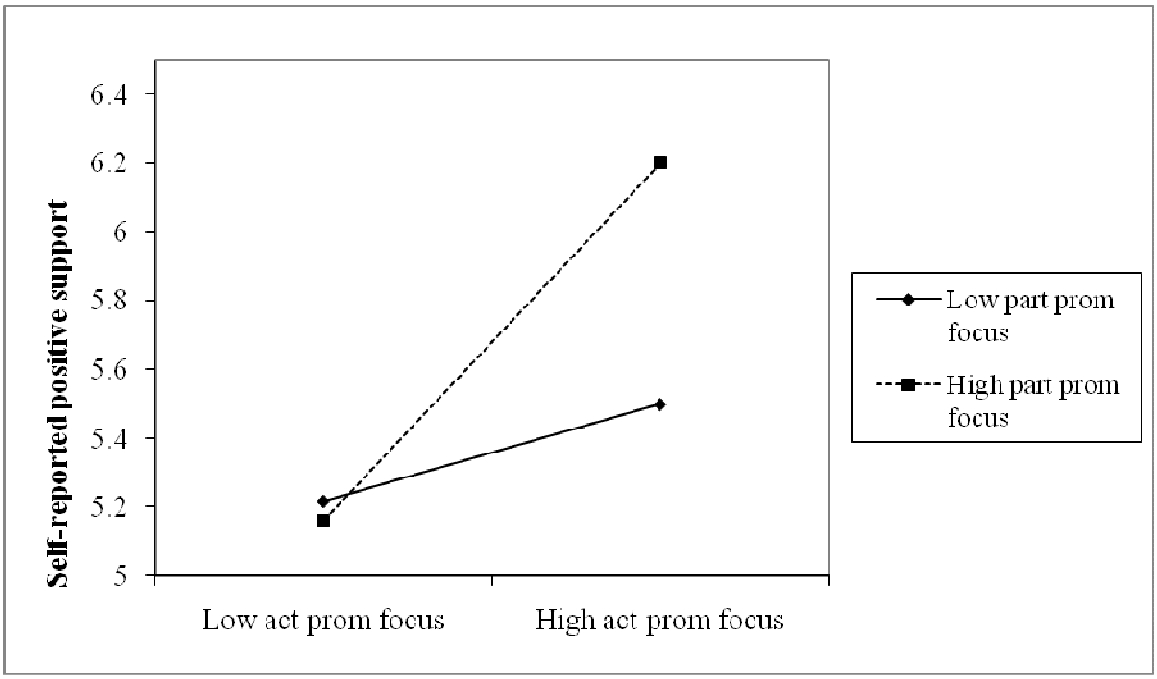
themselves *and* confirmed by their partners and independent observers, highly promotion-focused support providers (actors) seemed more motivated to provide support to their partners. They seemed especially more motivated (as rated by themselves and their partners) if their partners were also more promotion-focused. Contrary to my expectations, however, highly promotion-focused actors were not more motivated to support their partners' goals, but individuals were rated by independent observers as (marginally) more motivated to provide support for their partners' goals if their *partners* were more promotion-focused. Unexpectedly, highly promotion-focused individuals also reported greater motivation to provide support to their partners if their partners were more *prevention-focused*, which was also confirmed by independent observers. Highly prevention-focused individuals were rated (by themselves, their partners, *and* independent observers) as less motivated to provide support in general, and their motivation was particularly low if their partners were either high in prevention focus or low in promotion focus. Moreover, the partners of highly prevention-focused individuals were rated (by independent observers) as less motivated to give them support. Unexpectedly, highly prevention-focused individuals were not more motivated to provide support to their partners' problems, but were more motivated to provide support to their partners' *goals* (as rated by their partners).

Actors' (Support Providers') Regulatory Focus and Quality of Provided Support. The next set of analyses tested whether regulatory focus differentially predicted the quality/effectiveness of support provided. Effective support provision was defined as providing more positive (e.g., caring, practical) support and little negative (e.g., dominating, distant) support. Four separate models involving all the predictor

variables in the base model described above and all possible 2-way interactions between them were run: one with self-rated positive support, one with self-rated negative support, one with observer-rated positive support, and one with observer-rated negative support. For ease of presentation, the hypothesis tests involving *promotion focus* and quality/effectiveness of support provision (Hypothesis 1b) will be reported first, followed by tests involving *prevention focus* and quality/effectiveness of support provision (Hypothesis 5b).

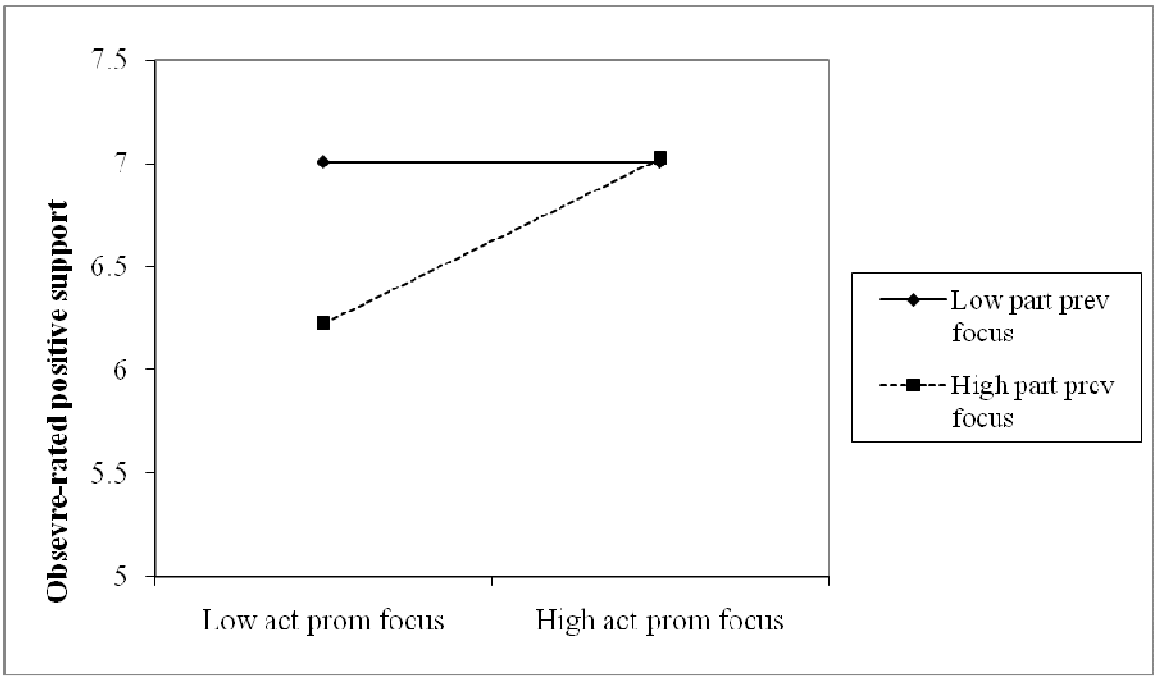
Promotion Focus and Quality of Provided Support. It was predicted that highly promotion-focused individuals would provide more effective (i.e., more positive, less negative) support in response to their partners' goals (Hypothesis 1b). When *self-reported* positive support was the dependent measure, the predicted interaction between actor promotion focus and condition was non-significant, b = -.004, t(269.00) = -.90, *ns;* highly promotion-focused actors did not report more positive support provision in response to their partners' goals. A main effect for actor promotion focus, however, suggested that highly promotion-focused actors perceived themselves as having provided more positive support during these discussions, b = .05, t(163.71) = 5.95, p <.001. A main effect for partner promotion focus indicated that actors whose partners were more promotion-focused viewed themselves as providing more positive support, b = .02, t(163.71) = 2.89, p <.005. These main effects were qualified by an interaction between actor promotion focus and partner promotion focus: highly promotion-focused actors rated themselves as having provided the most positive support if their partners were also more promotion-focused, b = .004, t(86.00) = 2.66, p <.01 (see Figure 10).

Figure 10. Association between actors' (support providers') promotion focus and actors' self-reported positive support for actors whose partners (support recipients) were high or low in promotion focus. Simple slopes are computed at *1 SD* above and below the mean.



When *observer-rated* positive support was the dependent measure, the predicted interaction between actor promotion focus and condition was once again non-significant, $b = .002$, $t(208.34) = .24$, *ns*. A main effect, however, confirmed that highly promotion-focused actors did provide more positive support during the discussions, $b = .03$, $t(148.50) = 2.97$, $p < .005$. An interaction between actor promotion focus and partner prevention focus indicated that highly promotion-focused actors were rated as providing more positive support if their partners were more prevention-focused, $b = .003$, $t(139.84) = 2.63$, $p < .01$ (see Figure 11).[5]

Figure 11. Association between actors' (support providers') promotion focus and observer-rated positive (actor) support for actors whose partners (support recipients) were high or low in prevention focus. Simple slopes are computed at *1 SD* above and below the mean.



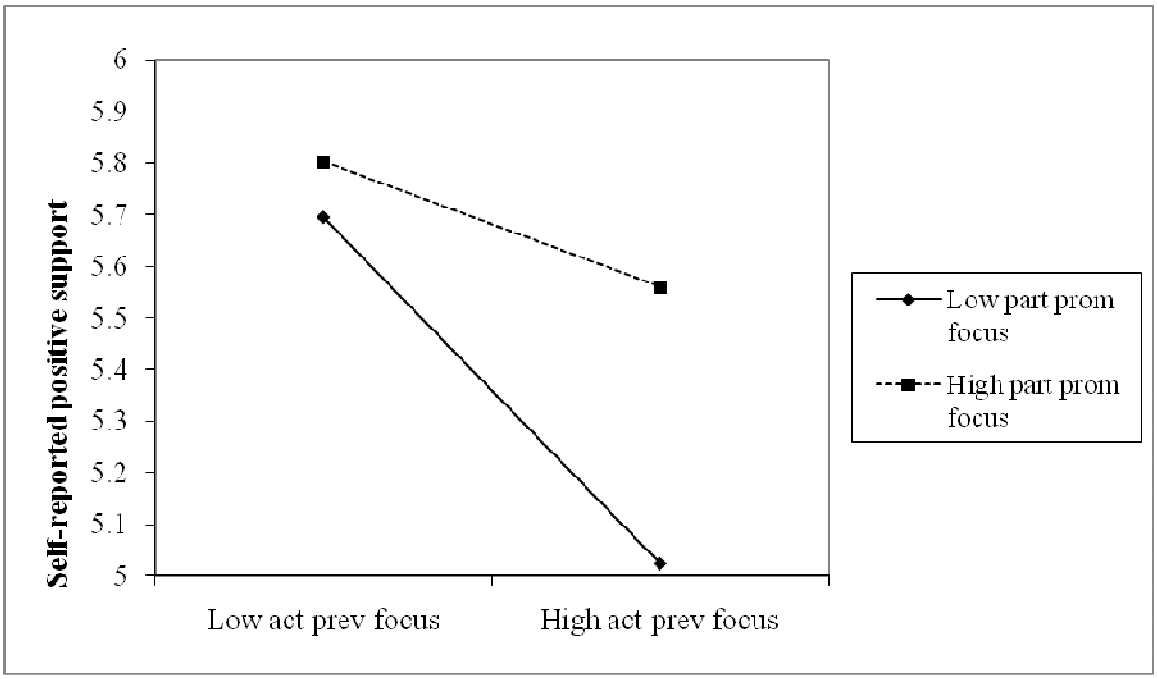
When *self-reported* negative (intrusive, distancing) support was the dependent measure, the predicted interaction between actor promotion focus and condition was non-significant, b = -.006, t(231.57) = .37, *ns*. A main effect for actor promotion focus, however, revealed that highly promotion-focused actors rated themselves as having provided less negative support, b = -.02, t(165.52) = -3.91, $p < .001$. In addition, a main effect for partner promotion focus showed that actors rated themselves as having provided less negative support if their (the actors') partners were more promotion-focused, b = -.01, t(164.83) = -2.10, $p < .04$. A main effect for gender also showed that men provided more negative support than did women, b = .08, t(268.37) = 2.53, $p < .02$.

When *observer-rated* negative support was the dependent measure, no effects involving promotion focus were found. A main effect for condition showed that more

negative support was provided in the problem condition, b = -1.14, t(244.93) = -10.56, p < .001. A main effect for gender confirmed that men were rated as having provided more negative support than did women, b = 1.69, t(220.33) = 14.54, p < .001.[6]

Prevention Focus and Quality of Provided Support. It was also predicted that highly prevention-focused participants (actors) would provide more effective support (i.e., more positive and less negative support) in response to their partners' problems (Hypothesis 5b). When *self-reported* positive support was the dependent measure, the expected interaction between actor prevention focus and condition failed to emerge, b = --.0003, t(269.00) = -.07, *ns*. A main effect for actor prevention focus suggested that highly prevention-focused actors rated themselves as providing less positive support, b = -.025, t(197.54) = -4.27, p < .001. A main effect for partner prevention focus further revealed that actors whose partners were more prevention-focused perceived themselves as providing less positive support, b = -.011, t(197.54) = -2.06, p < .05. A marginally significant interaction between actor prevention focus and partner promotion focus was also found: Actors who were higher in prevention focus rated themselves as having provided less positive support if their partners were *lower* in promotion focus, b = .002, t(147.38) = 1.74, p = .09 (see Figure 12).

Figure 12. Association between actors' (support providers') prevention focus and actors' self-reported positive support for actors whose partners (support recipients) were high or low in promotion focus. Simple slopes are computed at *1 SD* above and below the mean.

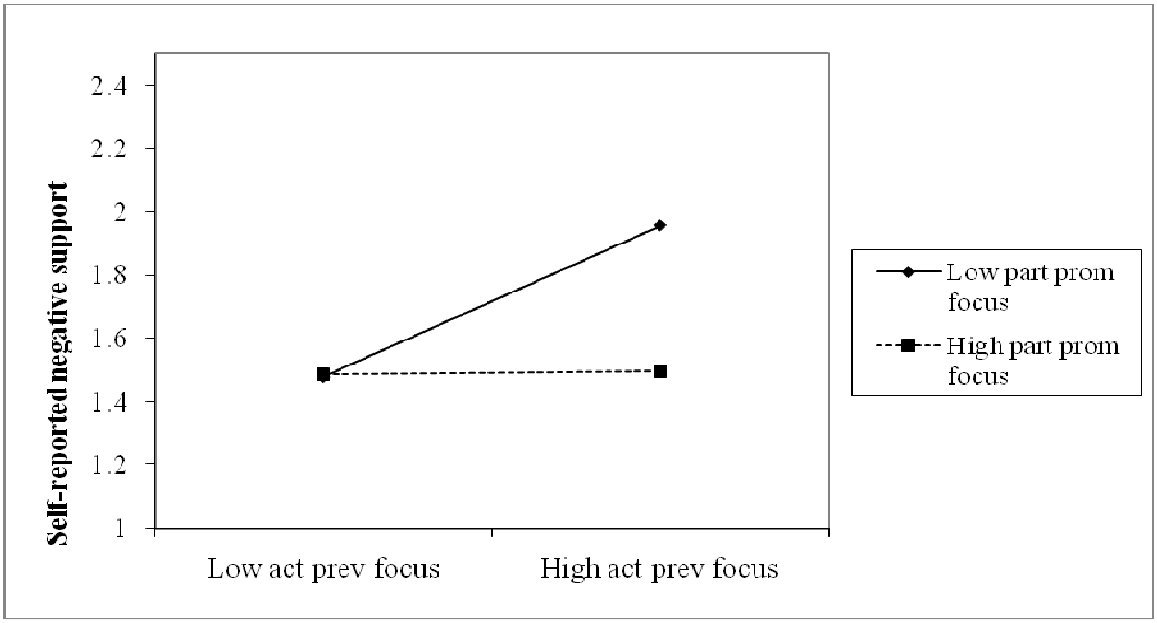


When *observer-rated* positive support was the dependent measure, the only reliable effect for prevention focus was a main effect involving partner prevention focus. This effect showed that actors who had more prevention-focused partners were rated as providing less positive support, $b = -.020$, $t(162.91) = -2.99$, $p < .005$.

When *self-reported* negative support was the dependent measure, this pattern of support provision was partially replicated. A main effect for actor prevention focus indicated that highly prevention-focused actors rated themselves as providing more negative support, $b = .013$, $t(199.27) = 2.96$, $p < .005$. Moreover, a main effect for partner prevention focus showed that actors who had more prevention-focused partners perceived themselves as providing more negative support, $b = .016$, $t(198.87) = 3.60$, $p < .001$. However, no interaction between actor prevention focus and condition emerged,

b = -.002, *t*(268.39) = -.53, *ns*. Finally, an interaction between actor prevention focus and partner promotion focus showed that highly prevention-focused actors reported providing more negative support if their partners were less promotion-focused, *b* = -.001, *t*(148.24) = -1.95, *p* = .05 (see Figure 13).

Figure 13. Association between actors' (support providers') prevention focus and actors' self-reported negative support for actors whose partners (support recipients) were high or low in promotion focus. Simple slopes are computed at *1 SD* above and below the mean.



When *observer-rated* negative support was the dependent measure, no prevention focus effects emerged.

Summary of Actors' (Support Providers') Regulatory Focus and Quality of Support Provision. Contrary to my expectations, highly promotion-focused individuals did not provide more effective support in response to their partners' goals. Highly promotion-focused individuals did, however, report more positive support (which was confirmed by independent observers) and less negative support provision. They reported particularly high levels of positive support provision if their partners were also

more promotion-focused. Independent observers also rated highly promotion-focused individuals as having extended more positive support to more highly *prevention-focused* partners. In addition, individuals whose partners were more promotion-focused reported providing more positive and less negative support to them. Also contrary to predictions, highly prevention-focused individuals did not provide more effective support in response to their partners' problems. Instead, highly prevention-focused individuals rated themselves (and were rated by independent observers) as having provided less positive and more negative support. Individuals with more prevention-focused partners reported extending less positive and more negative support to them. Highly prevention-focused individuals also reported providing (marginally) less positive support and more negative support if their partners were less promotion-focused.

Regulatory Focus Predicting Support Perceptions and Associated Benefits for the Recipient

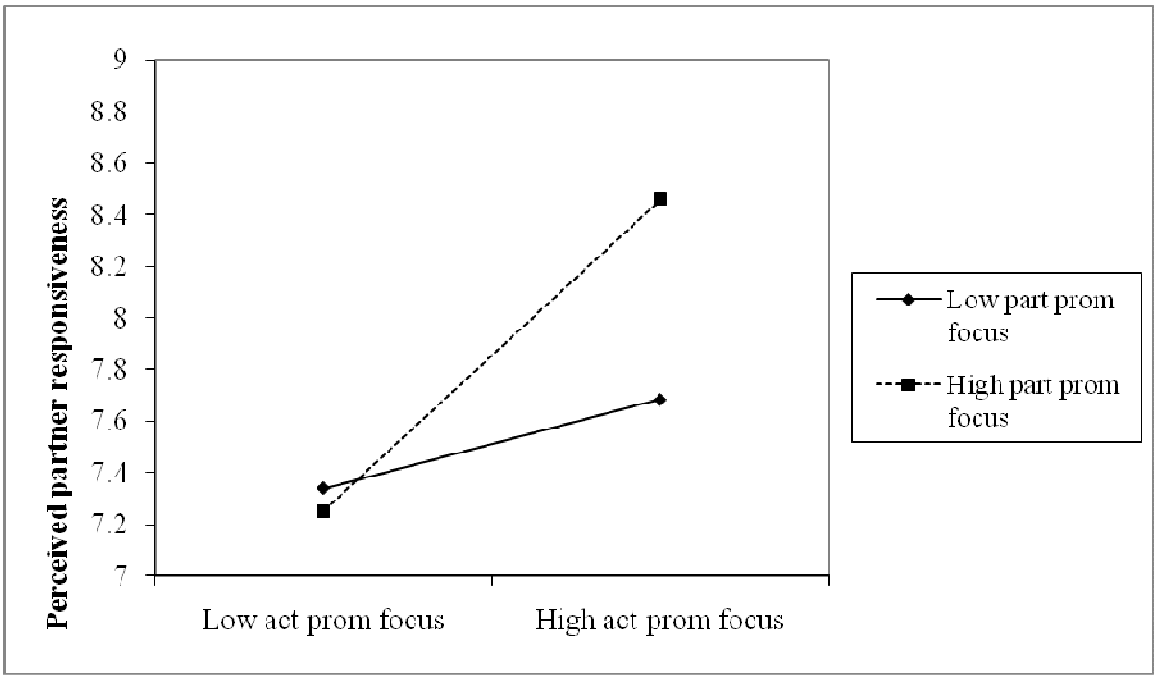
Next, I tested (a) whether partners' regulatory focus was differentially associated with actors' support perceptions, (b) whether support recipients experienced different short-term benefits associated with support received from partners who had different regulatory orientations, and (c) whether actors' own regulatory focus was differentially associated with their support perceptions of their partners.

Actors' (Support Recipients') Perceptions of Partners with Different Regulatory Orientations. I first tested whether actors (support recipients) involved with *partners* who had different regulatory orientations perceived their partners as differentially responsive to their (actors') goals or problems. Perceived partner responsiveness was measured using Reis's (2003) Partner Responsiveness Scale. The model that was tested

included all the predictor variables in the base model (described above), all possible 2-way interactions, and relevant 3-way interactions, treating actors' perceived partner responsiveness as the dependent measure.

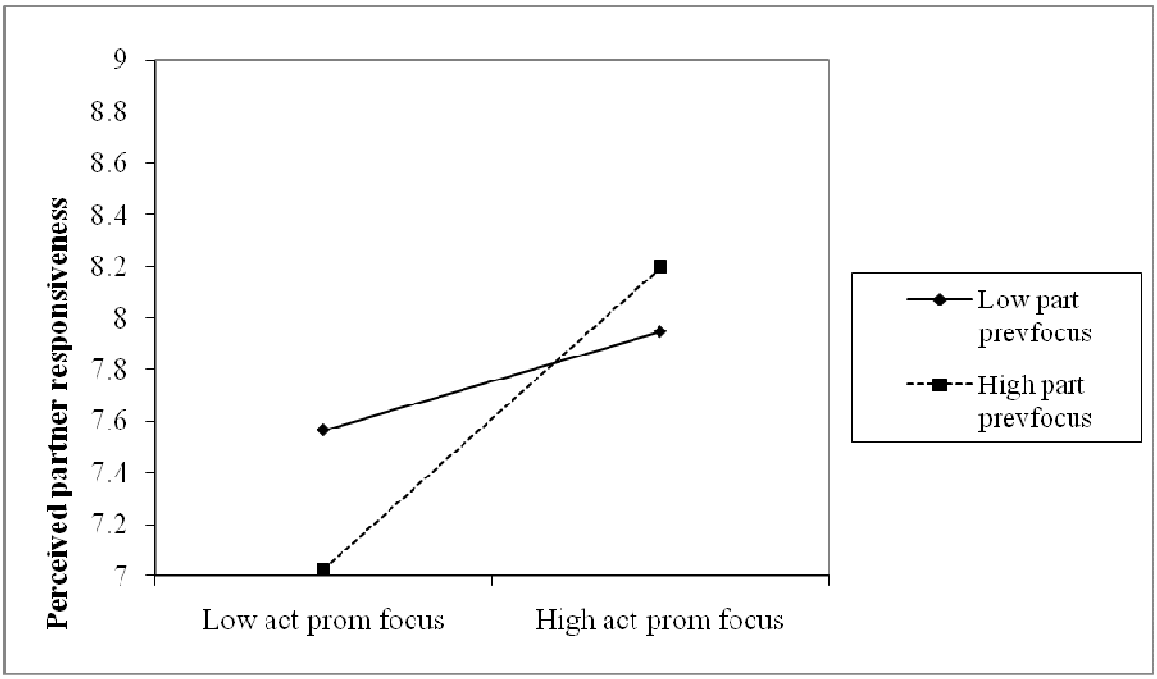
Actors' (Support Recipients') Perceptions of Promotion-Focused Partners. It was predicted that if highly promotion-focused individuals provided more responsive support in the goal condition, actors (support recipients) with more promotion-focused partners should perceive their partners as more responsive if they (actors) disclosed their goals and aspirations (Hypothesis 2a). The predicted interaction between condition and partner promotion focus was not significant, $b = .002$, $t(266.23) = .22$, *ns.* It was further predicted that highly promotion-focused actors should be particularly sensitive to support for their goals from more promotion-focused partners, perceiving them as more responsive in the goal condition (Hypothesis 2b). The 3-way interaction among actor promotion focus, partner promotion focus, and condition was not significant, $b = -.001$, $t(266.38) = -1.20$, *ns.* However, a main effect for actor promotion focus emerged; highly promotion-focused actors perceived their partners as generally more responsive, $b = .05$, $t(159.92) = 5.12$, $p < .001$. A main effect for partner promotion focus indicated that actors rated their partners as more responsive if their partners were more promotion-focused, $b = .02$, $t(160.18) = 2.27$, $p < .03$. An interaction between actor promotion focus and partner promotion focus also indicated that highly promotion-focused actors perceived their partners as particularly responsive if their partners were also more promotion-focused, $b = .004$, $t(86.581) = 2.26$, $p < .03$ (see Figure 14).

Figure 14. Association between actors' (support recipients') promotion focus and actors' perceived partner responsiveness for actors whose partners (support providers) were high or low in promotion focus. Simple slopes are computed at *1 SD* above and below the mean.



An interaction between actor promotion focus and partner prevention focus indicated that highly promotion-focused actors also perceived their partners as particularly responsive if their partners were highly *prevention*-focused, $b = .003$, $t(144.48) = 2.35$, $p < .02$ (see Figure 15).

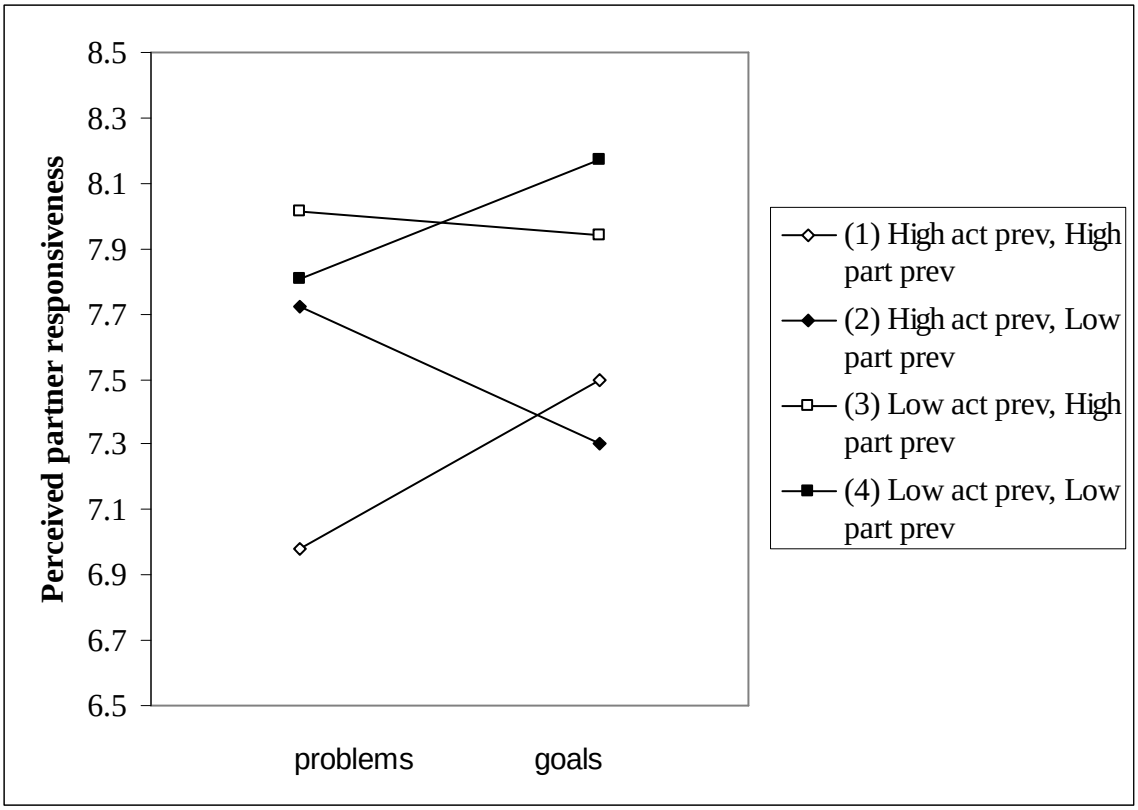
Figure 15. Association between actors' (support recipients') promotion focus and actors' perceived partner responsiveness for actors whose partners (support providers) were high or low in prevention focus. Simple slopes are computed at *1 SD* above and below the mean.



Actors' (Support Recipients') Perceptions of Prevention-Focused Partners. It was also predicted that if highly prevention-focused individuals provided more responsive support in the problem condition, actors (support recipients) should perceive highly prevention-focused partners as more responsive to their (the actors') problems (Hypothesis 6a). The expected interaction between condition and partner prevention focus did not emerge, $b = .007$, $t(266.03) = 1.14$, *ns.* It was further predicted that highly prevention-focused actors should be particularly sensitive to support for their problems from more prevention-focused partners, perceiving them as more responsive in the problem condition (Hypothesis 6b). A 3-way interaction among actor prevention focus, condition, and partner prevention focus indicated that highly prevention-focused partners were perceived as least responsive in the problem condition, but primarily by

actors who were higher in prevention focus, b = .002, t(265.75) = 2.29, p <. 025 (see Figure 16).

Figure 16. Associations among actors' (support recipients') prevention focus, partners' (support providers') prevention focus, and condition (problem vs. goal) predicting actors' perceived partner responsiveness. Simple slopes are computed at *1 SD* above and below the mean.



Moreover, a main effect for actor prevention focus emerged, suggesting that highly prevention-focused actors perceived their partners as generally less responsive, b = -.03, t(191.65) = -4.45, p =.001.

Summary of Actors' (Support Recipients') Perceptions of Partners with Different Regulatory Orientations. Whereas actors (individuals) did not perceive highly promotion-focused partners as being more responsive in the goal condition, they did perceive more promotion-focused partners as more responsive in general, especially if

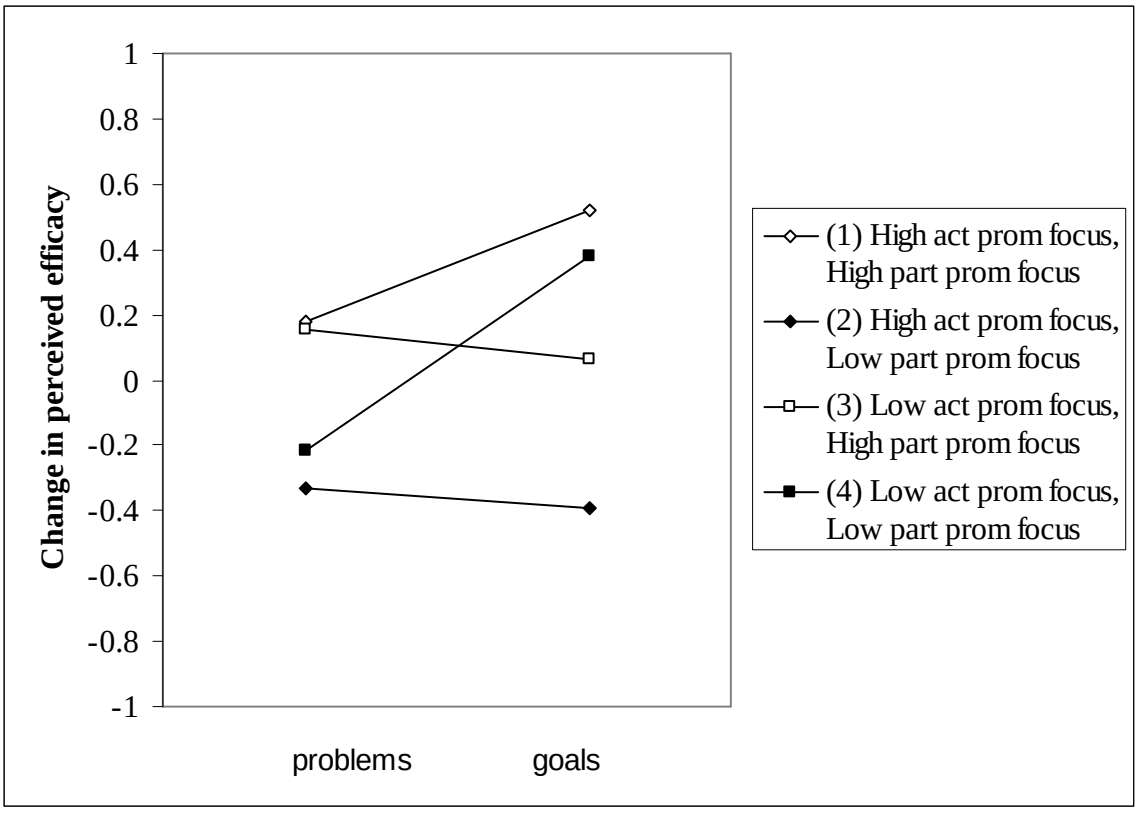
actors were more promotion-focused themselves. In addition, highly promotion-focused actors also perceived highly *prevention-focused* partners as particularly responsive. Unexpectedly, actors perceived highly prevention-focused partners as *least* responsive in the problem condition, especially if they (actors) were also more prevention-focused.

Support Providers' Regulatory Focus Predicting Short-Term Benefits for Actors (Support Recipients). Next, I tested whether actors (support recipients) experienced different short-term benefits in well-being after having received support from partners who had different regulatory orientations. Short-term benefits of effective support were expected to be reflected in perceived self-efficacy, relationship well-being (relationship mood), and emotional well-being. Four models involving all the predictor variables in the base model (described above), all possible 2-way interactions, and relevant 3-way interactions were run: one model with change in self-efficacy as the dependent measure, one model with change in relationship mood as the dependent measure, and two models with emotions as the dependent measure (one model with positive emotions, one with negative emotions). For each of the dependent measures, pre-interaction scores were partialed out, and the residualized post-interaction scores were used in all analyses reported below (Cohen & Cohen, 1983). These scores are thus labeled change scores [7]

Short-Term Benefits for Actors (Support Recipients) with Promotion-Focused Partners. If actors received more responsive support for their goals from highly promotion-focused partners, actors (support recipients) should experience immediate improvements in well-being (Hypothesis 3a). When change in *perceived self-efficacy* was the dependent measure, the expected interaction between partner promotion focus and condition did not emerge, $b = -.005$, $t(266) = -.41$, *ns*. It was also predicted that

highly promotion-focused actors would be particularly sensitive to support for their goals from promotion-focused partners, experiencing larger changes (i.e., increases) in well-being (Hypothesis 3b). A marginal 3-way interaction among actor promotion focus, partner promotion focus, and condition confirmed that highly promotion-focused actors in the goal condition did report larger changes in perceived self-efficacy if they received support from highly promotion-focused partners, b = .003, $t(267) = 1.71$, p=.09 (see Figure 17).

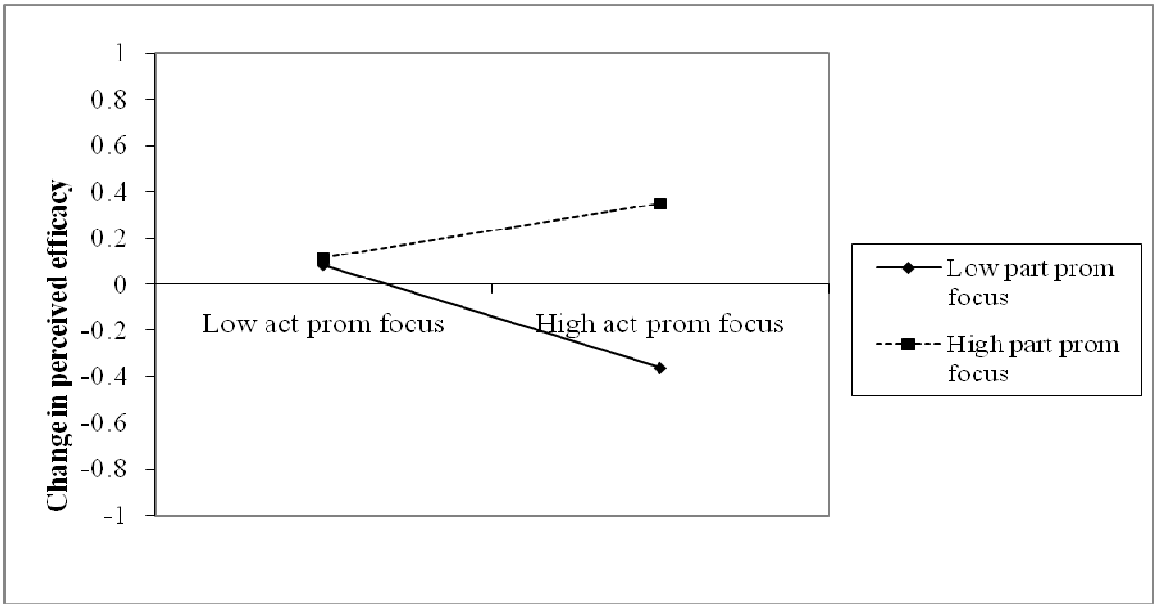
Figure 17. Associations among actors' (support recipients') promotion focus, partners' (support providers') promotion focus, and condition (problem vs. goal) predicting actors' change in perceived efficacy. Simple slopes are computed at *1 SD* above and below the mean.



In addition, a partner promotion focus effect indicated that actors reported greater changes (i.e., increases) in efficacy if they had highly promotion-focused partners, b =

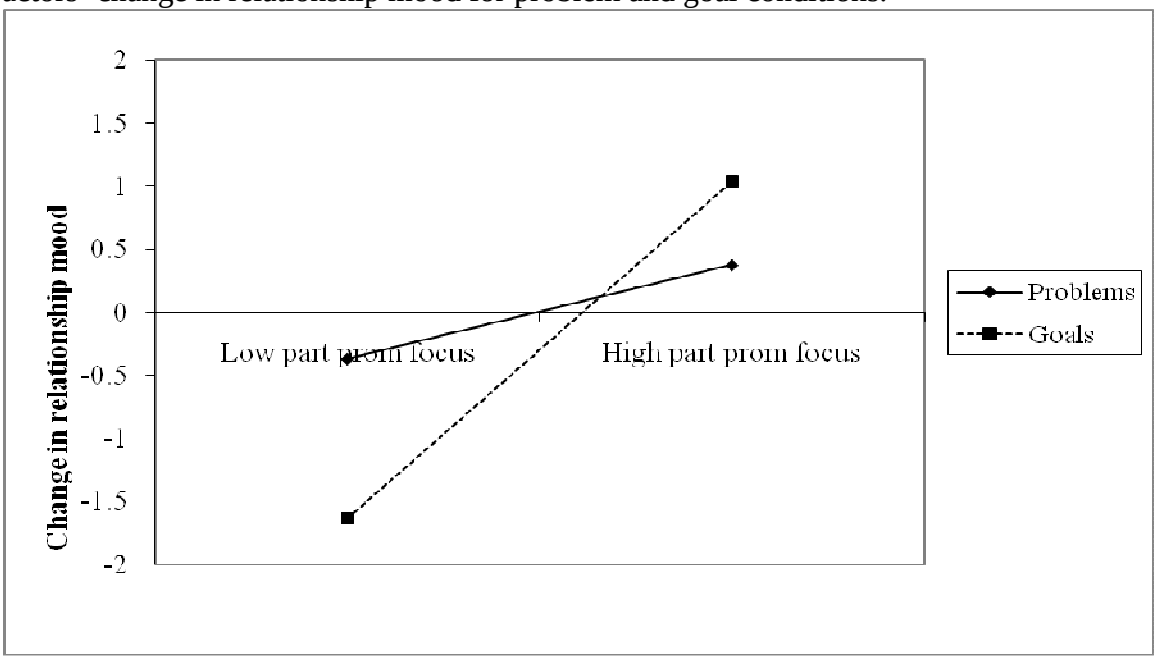
.03, $t(277) = 2.04$, $p<.05$. A marginally significant interaction between actor promotion focus and partner promotion focus also emerged. It revealed that highly promotion-focused actors reported larger changes (i.e., increases) in efficacy if actors were involved with highly promotion-focused partners, and decreases in efficacy if they were involved with partners who were lower in promotion focus, $b = .003$, $t(86) = 1.82$, $p=.07$ (see Figure 18).

Figure 18. Association among actors' (support recipients') promotion focus and actors' change in perceived self-efficacy for actors whose partners (support providers) were high or low in promotion focus. Simple slopes are computed at *1 SD* above and below the mean.



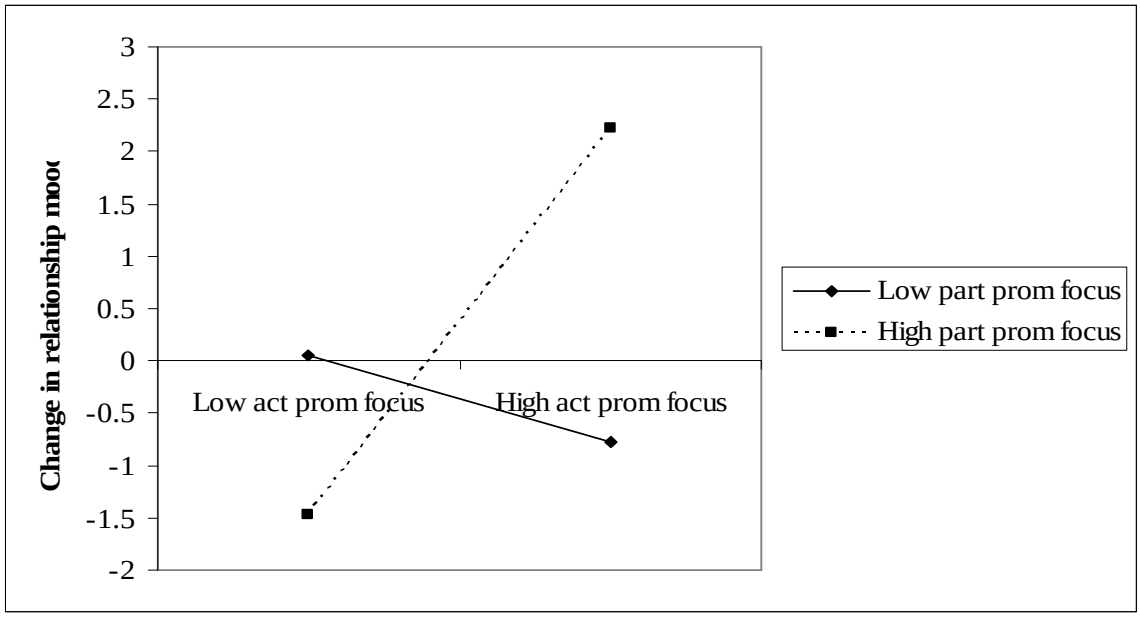
When change in *relationship mood* was the dependent measure, the predicted interaction between partner promotion focus and condition emerged. It indicated that actors experienced larger changes (i.e., increases) in relationship well-being if they received support for their goals from highly promotion-focused partners, $b = .13$, $t(259) = 2.52$, $p <.02$ (see Figure 19).

Figure 19. Association between actors' (support recipients') promotion focus and actors' change in relationship mood for problem and goal conditions.



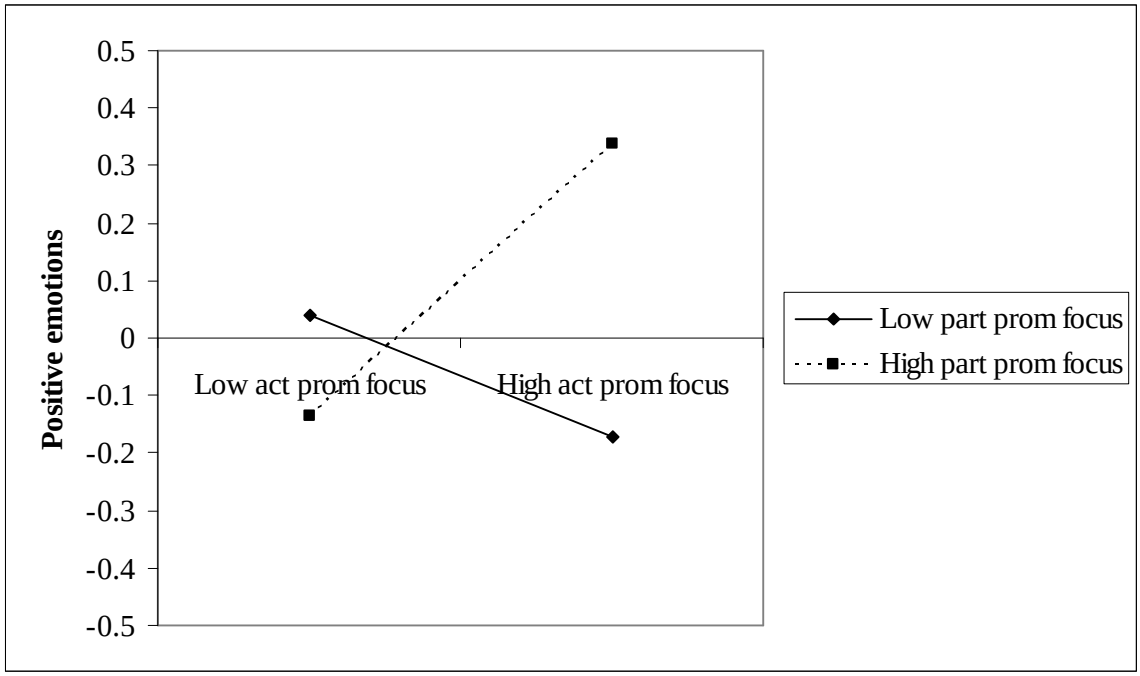
Moreover, an interaction between actor promotion focus and partner promotion focus emerged, revealing that highly promotion-focused actors reported more change (i.e., increase) in relationship well-being if their partners were also more promotion-focused, $b = .02$, $t(80) = 2.00$, $p < .05$ (see Figure 20).

Figure 20. Association between actors' (support recipients') promotion focus and actors' change in relationship mood for actors whose partners (support providers) were high or low in promotion focus. Simple slopes are computed at *1 SD* above and below the mean.



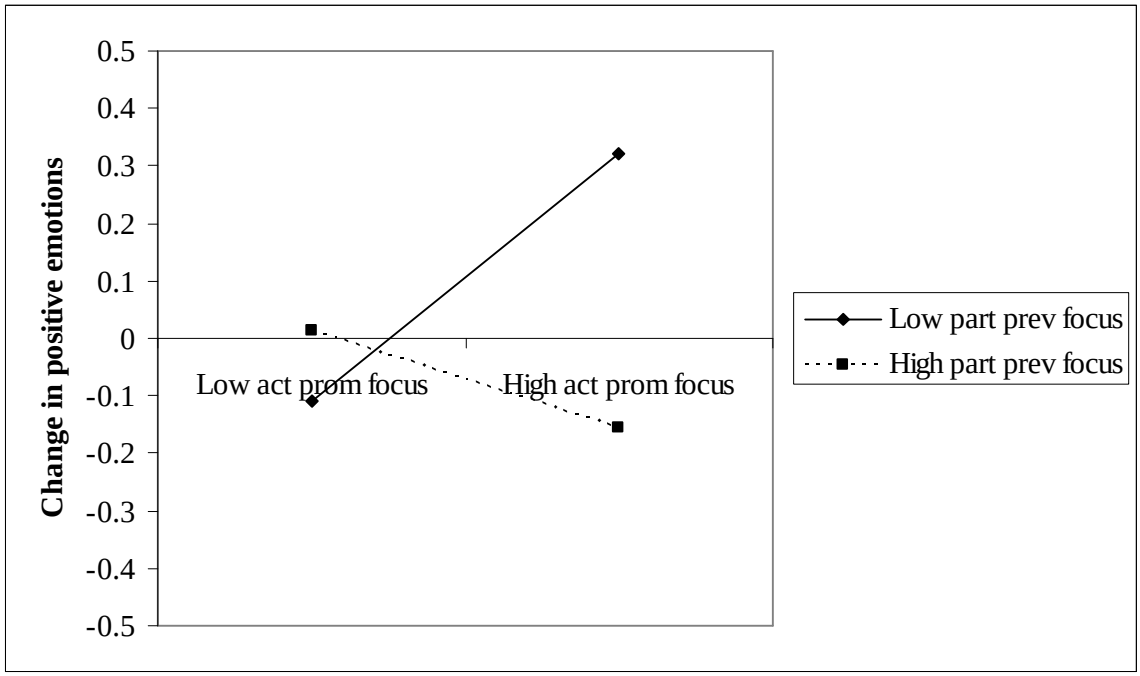
When change in *positive emotions* was the dependent measure, neither the expected interaction between partner promotion focus and condition, $b = .003$, $t(266) = .32$, *ns*, nor the expected three-way interaction between actor promotion focus, partner promotion focus, and condition emerged, $b = -.0002$, $t(266) = -.15$, *ns*. An interaction between actor promotion focus and partner promotion focus, however, showed that highly promotion-focused actors reported more change (i.e., increases) in positive emotions if their partners were also more promotion-focused, $b = .003$, $t(86) = 1.96$, $p = .05$ (see Figure 21).

Figure 21. Association between actors' (support recipients') promotion focus and actors' change in positive emotions for actors whose partners (support providers) were high or low in promotion focus. Simple slopes are computed at *1 SD* above and below the mean.



A marginally significant interaction between actor promotion focus and partner prevention focus indicated that highly promotion-focused actors also reported larger changes (i.e., increases) in positive emotions if their partners were less prevention-focused, $b = -.002$, $t(228) = -1.70$, $p = .09$ (see Figure 22).

Figure 22. Association between actors' (support recipients') promotion focus and actors' change in positive emotions for actors whose partners (support providers) were high or low in prevention focus. Simple slopes are computed at *1 SD* above and below the mean.



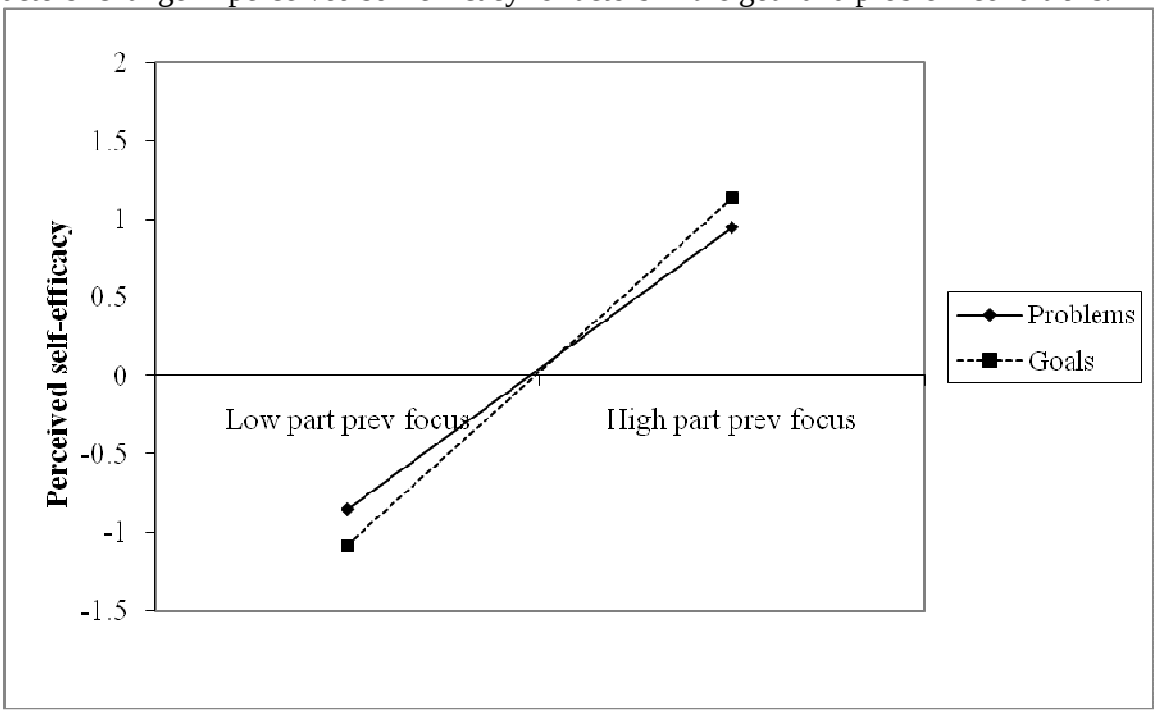
A main effect for condition was also found. It indicated that greater changes in positive emotions occurred in the goal compared to the problem condition, $b = .23$, $t(266) = 2.97$, $p < .004$.[8]

When change in *negative emotions* was the dependent measure, only one main effect for actor promotion focus was found, suggesting that highly promotion-focused actors reported greater change (i.e., larger increases) in negative emotions, $b = .23$, $t(266) = 2.97$, $p < .004$.

Short-Term Benefits for Actors (Support Recipients) with Prevention-Focused Partners. If actors received more responsive support from highly prevention-focused partners for their problems, actors (support recipients) should experience immediate improvements in well-being (Hypothesis 7a). When change in *perceived self-efficacy*

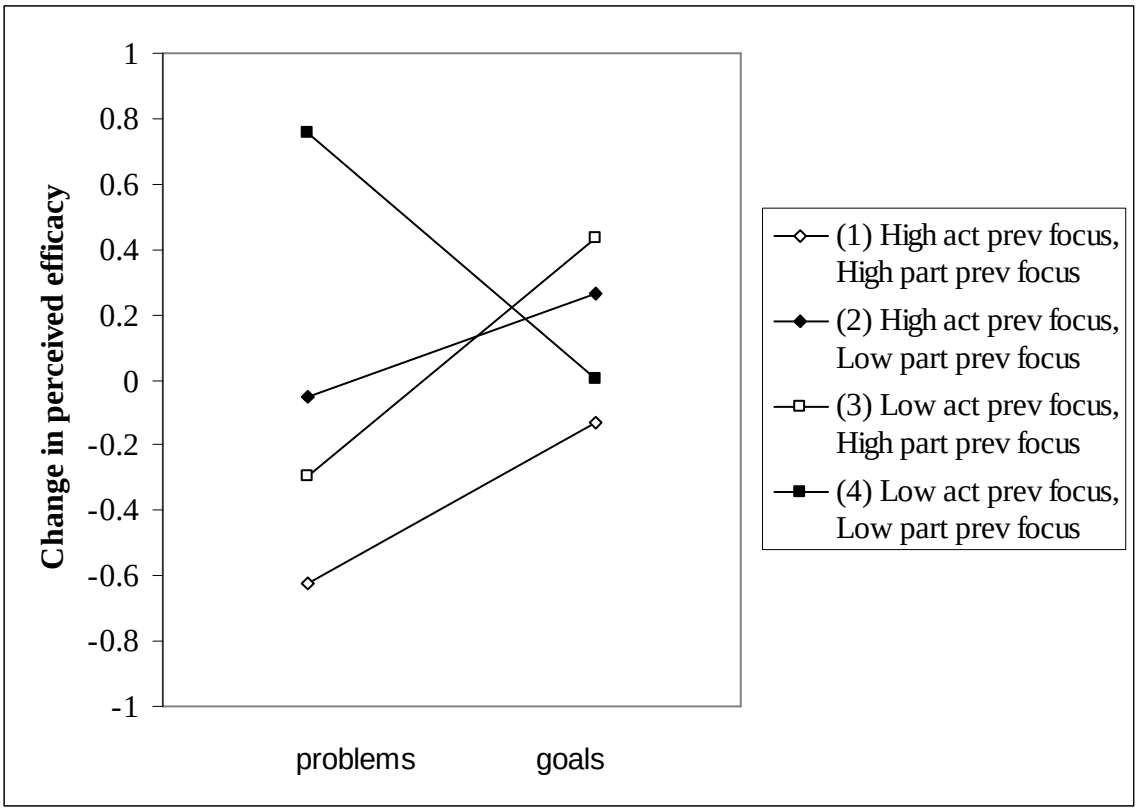
was the dependent measure, the expected interaction between partner prevention focus and condition emerged. However, it showed that actors with highly prevention-focused partners reported larger changes (i.e., increases) in perceived efficacy in the goal condition $b = .02$, $t(266) = 2.30$, $p < .03$ (see Figure 23).

Figure 23. Association between actors' (support recipients') prevention focus and actors' change in perceived self-efficacy for actors in the goal and problem conditions.



In addition, it was predicted that highly prevention-focused actors should be particularly sensitive to support for their goals from highly prevention-focused partners, thus experiencing larger changes in well-being (Hypothesis 7b). A marginally significant 3-way interaction among actor prevention focus, partner prevention focus, and condition suggested that less prevention-focused actors seemed to experience greater change (increase) in perceived efficacy in the problem condition if they received support from less prevention-focused partners, $b = -.002$, $t(266) = -.18$, $p = .07$ (see Figure 24).

Figure 24. Associations among actors' (support recipients') prevention focus, partners' (support providers') prevention focus, and condition (problem vs. goal) predicting actors' change in perceived efficacy. Simple slopes are computed at *1 SD* above and below the mean.

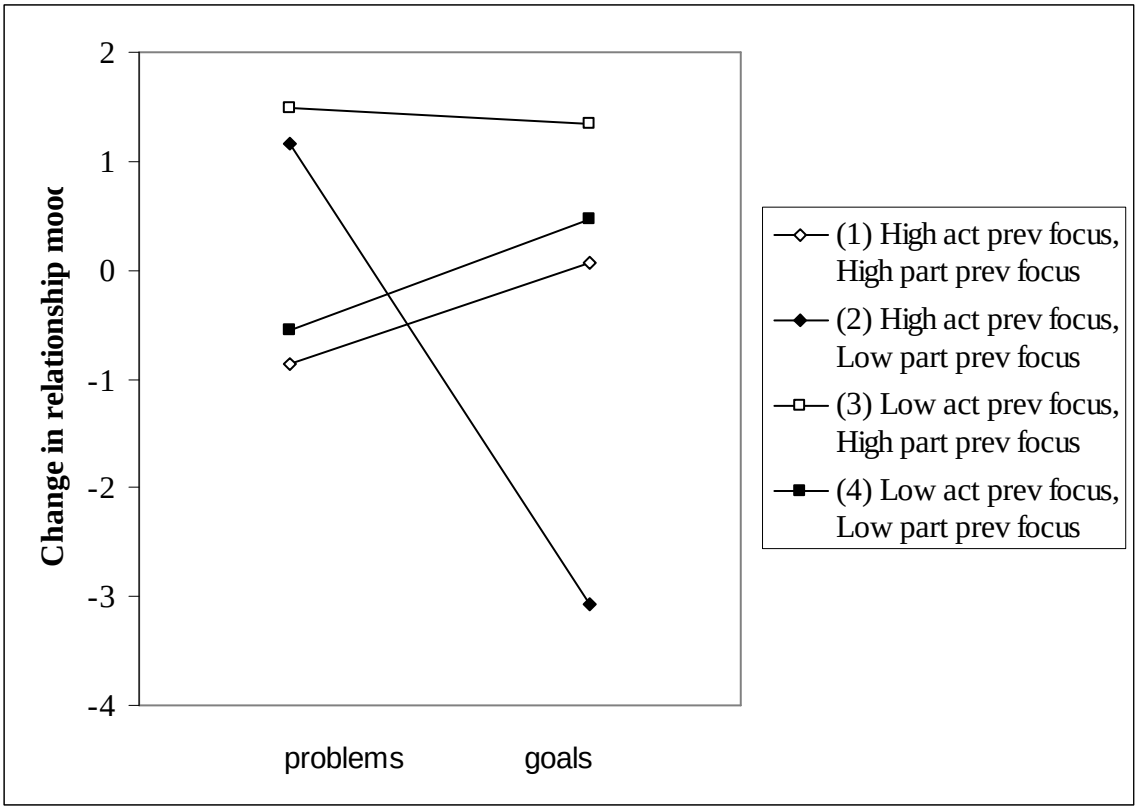


Moreover, a main effect for prevention focus indicated that highly prevention-focused actors reported less change in self-efficacy, b = -.02, t(320.57) = -1.97, p = .05. Further, a partner effect for prevention focus indicated that actors who had more prevention-focused partners also reported less change in perceived efficacy, -.02, t(320.42) = -2.17, p <.04.

When change in *relationship mood* was the dependent measure, the predicted interaction between condition and partner prevention focus was not significant, b = .05, t(258) = 1.27, *ns*. That is, actors did not report changes in relationship mood after receiving support from highly prevention-focused partners. However, the predicted 3-

way interaction among actor prevention focus, partner prevention focus, and condition was found. It indicated that highly prevention-focused actors reported greater improvements in relationship mood if they received support in the problem condition from partners who were *lower* in prevention focus, $b = .009$, $t(257) = 1.96$, $p = .05$ (see Figure 25).

Figure 25. Associations among actors' (support recipients') prevention focus, partners' (support providers') prevention focus, and condition (problem vs. goal) predicting actors' change in relationship mood. Simple slopes are computed at *1 SD* above and below the mean.

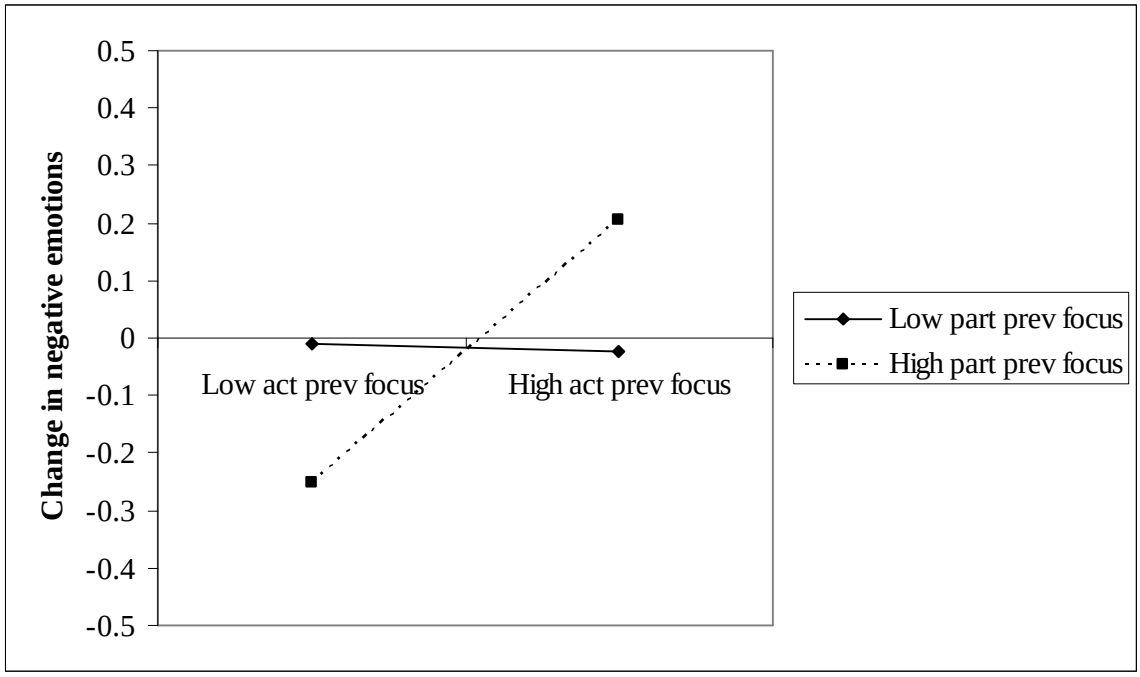


When change in *positive emotions* was the dependent measure, neither the expected interaction between partner prevention focus and condition, $b = -.0003$, $t(267) = .97$, *ns*, nor the expected three-way interaction among actor prevention focus, partner prevention focus, and condition emerged, $b = .0004$, $t(266) = .62$, *ns*. Only a marginally

significant main effect for actor prevention focus was found, suggesting that highly prevention-focused actors reported less change in positive emotions, b = -.02, $t(305)$ = -1.76, p <.08.

When change in *negative emotions* was the dependent measure, a main effect for actor prevention focus indicated that highly prevention-focused actors reported more change in negative emotions, b = .01, $t(271)$ = 2.00, p <.05. A marginally significant interaction between actor prevention focus and partner prevention focus revealed that highly prevention-focused actors reported greater change (i.e., increases) in negative emotions if their partners were also highly prevention-focused, b = .001, $t(86)$ = 1.69, p =.10 (see Figure 26).

Figure 26. Association between actors' (support recipients') prevention focus and actors' change in negative emotions for actors whose partners (support providers) were high or low in prevention focus. Simple slopes are computed at *1 SD* above and below the mean.



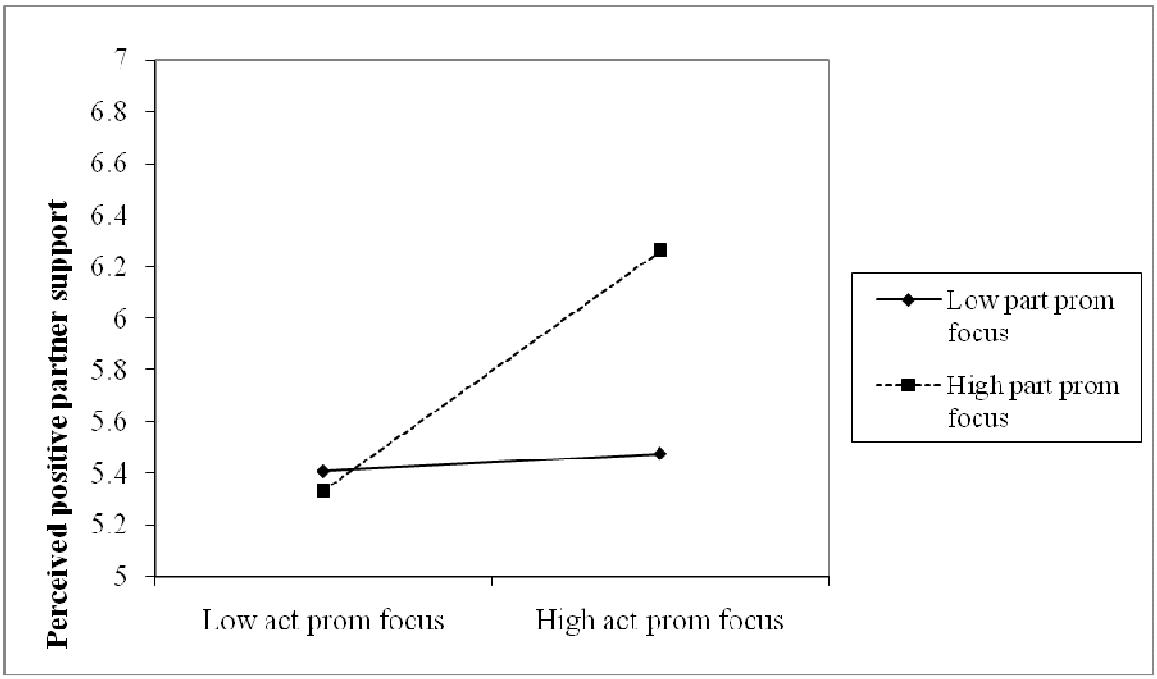
Summary of Support Providers' Regulatory Focus and Short-Term Benefits for Actors (Support Recipients). As predicted, individuals (support recipients) reported (marginal) increases in self-efficacy after receiving support from highly promotion-focused partners in response to their goals, but only if support recipients were more promotion-focused themselves. Furthermore, as predicted, individuals reported improved relationship mood (relationship well-being) after having been supported by highly promotion-focused partners in the goal condition. Highly promotion-focused support recipients reported improved relationship mood after having been supported by highly promotion-focused partners. Support recipients also reported increases in positive emotions after receiving support from highly promotion-focused partners (and, marginally, less prevention-focused partners) if support recipients were also higher on promotion focus. Highly promotion-focused support recipients also reported increases in negative emotions overall. Contrary to expectations, support recipients reported increases in perceived efficacy after receiving support from highly prevention-focused partners in the *goal* condition. Unexpectedly, less prevention-focused actors seemed to experience (marginally) greater change (increase) in perceived efficacy in the problem condition if they received support from less prevention-focused partners. Highly prevention-focused support recipients reported less increase in self-efficacy overall, and so did those who conversed with highly prevention-focused partners. Moreover, as expected, highly prevention-focused support recipients reported improved relationship mood after having been supported in the problem condition, but unexpectedly by partners who were *less* prevention-focused. Highly prevention-focused support

recipients also reported marginal increases in negative emotions, especially when supported by highly prevention-focused partners.

Actors' (Support Recipients') Regulatory Focus and Support Perceptions. I next tested whether actors' own regulatory focus predicted their support perceptions. Two models that included all the variables in the base model and all possible 2-way interactions were run: one model with perceived positive partner support as the dependent measure, and one model with perceived negative partner support as the dependent measure.

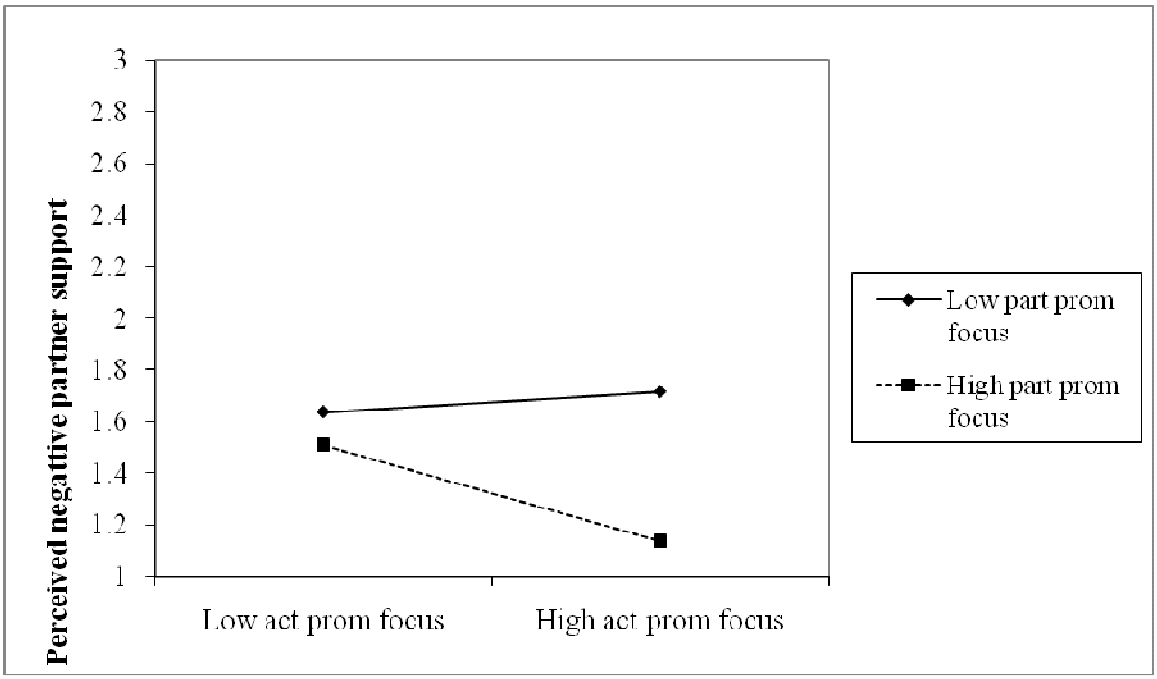
Support Perceptions of Promotion-Focused Actors (Support Recipients). Because of their eagerness toward positive outcomes, it was predicted that highly promotion-focused individuals would perceive more supportive behaviors from their partners and fewer unsupportive ones (Hypothesis 4). A main effect for actor promotion focus was found, such that highly promotion-focused actors perceived their partners as providing more *positive support, b* = .03, $t(165) = 3.85$, $p < .001$. This main effect was qualified by an interaction that revealed that highly promotion-focused actors were especially likely to perceive positive support from their partners if their partners were also more promotion-focused, $b = .004$, $t(87) = 2.69$, $p < .01$ (see Figure 27).

Figure 27. Association between actors' (support recipients') promotion focus and actors' perceived positive partner support for actors whose partners (support providers) were high or low in promotion focus. Simple slopes are computed at *1 SD* above and below the mean.



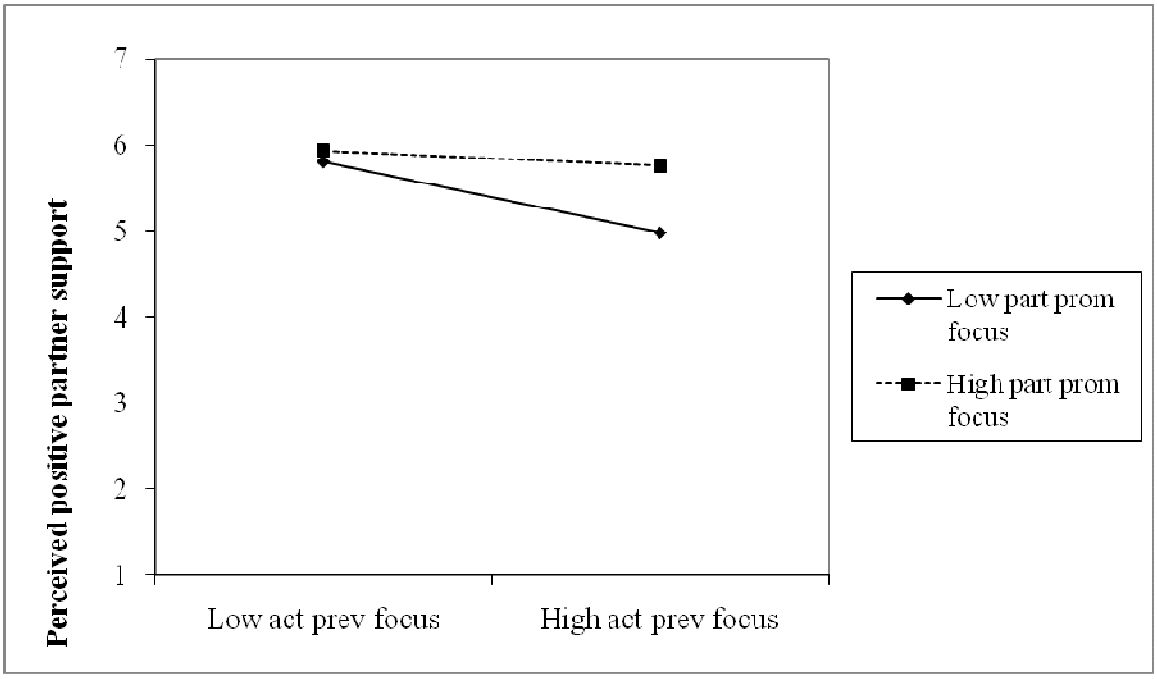
When perceived *negative* partner support was the dependent measure, a marginally significant main effect for promotion focus revealed that highly promotion-focused actors perceived less negative support, $b = -.01$, $t(165) = -1.87$, $p = .06$. In addition, an interaction involving actor promotion focus and partner promotion focus revealed that highly promotion-focused actors perceived less negative support from partners who also scored higher on promotion focus, $b = -.002$, $t(86) = -2.20$, $p < .03$ (see Figure 28).

Figure 28. Association between actors' (support recipients') promotion focus and actors' perceived negative partner support for actors whose partners (support providers) were high or low in promotion focus. Simple slopes are computed at *1 SD* above and below the mean.



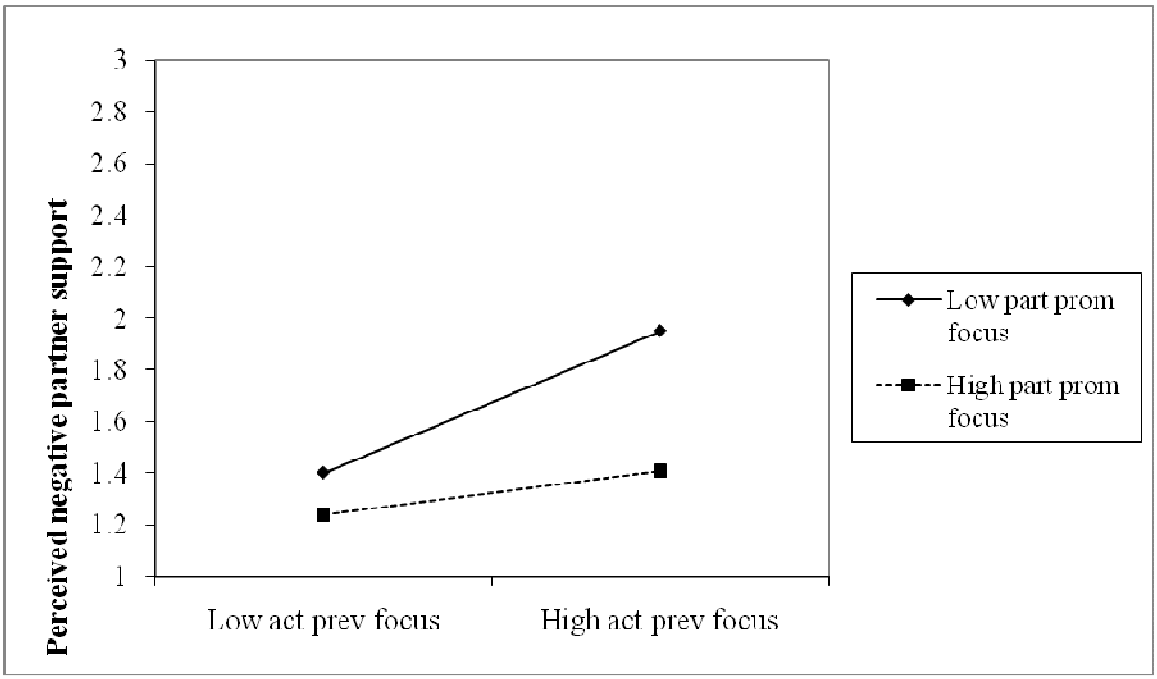
Support Perceptions of Prevention-Focused Actors (Support Recipients). It was predicted that highly prevention-focused individuals, because of their vigilance toward negative outcomes, would perceive more negative/unsupportive behaviors from their partners and fewer positive ones (Hypothesis 8). As predicted, a main effect emerged for actor prevention focus, indicating that highly prevention-focused actors perceived less positive partner support, $b = -.03$, $t(199) = -3.94$, $p < .001$. In addition, a marginally significant actor prevention focus by partner promotion focus interaction was found, indicating that highly prevention-focused actors perceived less positive support from partners who were lower in promotion focus, but more positive support from highly promotion-focused partners, $b = .002$, $t(148) = 1.77$, $p = .08$ (see Figure 29).

Figure 29. Association between actors' (support recipients') prevention focus and actors' perceived positive partner support for actors whose partners (support providers) were high or low in promotion focus. Simple slopes are computed at *1 SD* above and below the mean.



When perceived *negative* partner support was the dependent measure, a main effect for actor prevention focus confirmed that highly prevention-focused actors perceived more negative support from their partners, $b = .02$, $t(199) = 4.58$, $p < .001$. This main effect was qualified by an interaction between actor prevention focus and partner promotion focus, suggesting that highly prevention-focused actors perceived greater negative support from partners who were less promotion-focused, and less negative support from highly promotion-focused partners, $b = -.001$, $t(149) = -2.17$, $p < .04$ (see Figure 30).

Figure 30. Association between actors' (support recipients') prevention focus and actors' perceived negative partner support for actors whose partners' (support providers) were high or low in promotion focus. Simple slopes are computed at *1 SD* above and below the mean.



To discount the possibility that the effects of actors' regulatory focus on perceived *positive* partner support might be attributable to highly promotion-focused individuals having more supportive partners and highly prevention-focused individuals having less supportive partners, I repeated the above APIM analyses involving actors' perceptions of positive partner support while statistically controlling for both observer-ratings and partners' reports of their own positive support provided during the conflict discussions. The reported effects of regulatory focus remained significant when I did so, *p*s <.02. Moreover, to ensure that the effects of regulatory focus on perceived *negative* partner support were not the result of more prevention-focused individuals having more unsupportive partners and more promotion-focused individuals having less unsupportive partners, I repeated the analyses involving actors' perceptions of negative

partner support while controlling for both observer-ratings and partners' reports of negative support. The effects of regulatory focus remained again significant, *p*s <.03.

Summary of Actors' Regulatory Focus and Support Perceptions. As predicted, highly promotion-focused support recipients reported having perceived more positive partner support, especially if their partners were also more promotion-focused; they also perceived less negative partner support, particularly if they had highly promotion-focused partners. Also as predicted, highly prevention-focused support recipients perceived greater negative partner support, especially from *less* promotion-focused partners; they also perceived less positive partner support, especially from less promotion-focused partners (marginally). Moreover, these effects do not seem to be explained by highly promotion-focused individuals attracting more supportive partners, or highly prevention-focused individuals attracting more unsupportive ones.

Discriminant Validity Analyses

To ensure that the effects of regulatory focus on all dependent measures stemmed primarily from individuals' regulatory orientations rather than from correlated dispositions, I repeated the APIM analyses reported above with covariates, statistically controlling for individual differences in: (1) Promotion and prevention focus as measured by the RFQ (Higgins et al., 2001), which assesses the history of individuals' self-regulation with respect to promotion and prevention needs over the course of their lives; (2) general approach and avoidance motivation (the BIS and the BAS scales; Carver & White, 1994); (3) social approach and avoidance motivation (Gable, 2006); (4) avoidant and anxious attachment (Simpson et al., 1996); and (5) extraversion and neuroticism (John et al., 1991). Covariates were tested one at a time. 93% of the

reported significant main effects and interactions remained significant or marginally significant (all *p*s <.12).

Finally, to ensure that the effects of regulatory focus were not merely a reflection of global relationship evaluations, I repeated the above APIM analyses once again, this time controlling for individuals' perceived relationship quality scores (the PRQC; Fletcher et al., 2000). All previously reported regulatory focus effects remained at least marginally significant (all *p*s <.10), except for one main effect that became non-significant (i.e., partner prevention focus predicting perceived positive self support).

GENERAL DISCUSSION

In this dissertation, I used a regulatory focus theoretical framework to investigate social support exchanges as they naturally unfolded between romantic partners in ongoing relationships. Social support was conceptualized as a dyadic process that involves considering the characteristics (i.e., the regulatory focus orientations) of both partners, how they interacted in support-relevant situations (i.e., situations involving support for an actor's goals vs. problems), and how these interactions are related to both partners' perceptions and relationship well-being. It was predicted that people who have different regulatory orientations would differ in the extent to which they are motivated to provide effective support in response to their partners' personal goals versus their partners' current problems or concerns. Furthermore, different regulatory orientations were expected to predispose certain people to respond more favorably to and capitalize more on one form of support than the other, and different regulatory orientations ought to motivate people to attend to different behaviors during support transactions with their partners.

Promotion focus and social support

Given their eagerness for advancement, highly promotion-focused people should be more motivated to support or to encourage their partners' goal strivings or aspirations. If so, their partners should perceive them as particularly responsive and should experience benefits when receiving support for the personal goals that they (the partners) would like to achieve. Although highly promotion-focused people reported greater motivation to provide support (confirmed by both their partners and independent observers) and did provide more positive support overall (confirmed by independent observers), they were not more motivated to support, or to provide more effective support, of their partners' personal goals per se. Independent observers, however, did rate participants as marginally more motivated to provide support for their partners' goals if their *partners* were more promotion-focused. This suggests that highly promotion-focused partners' enthusiasm for their goals may have mobilized their significant others' support. Two additional findings bolster this interpretation. First, participants whose partners were more promotion-focused partners reported that they extended more positive (and less negative) support to their partners. Second, highly promotion-focused participants reported greater motivation to support and to provide more positive (and less negative) support if their partners were also higher in promotion focus.

Did people with highly promotion-focused partners feel more or better supported by their partners in the goal condition? As predicted, participants reported improved relationship mood after receiving support for their goals from highly promotion-focused partners. In addition, persons who received more support for their goals from highly

promotion-focused partners reported marginally enhanced self-efficacy, but only if these support recipients were more promotion-focused themselves. In addition, participants perceived highly promotion-focused partners as generally more responsive, and they reported increases in positive emotions after receiving support from highly promotion-focused partners, especially if recipients of that support were also more promotion-focused.

Also as predicted, highly promotion-focused support recipients perceived more positive (and fewer negative) support behaviors from their partners. Importantly, these effects remained significant when both observer-ratings of partners' support and partners' own ratings of their provided support are statistically controlled. This suggests that highly promotion-focused people do not merely attract more supportive (or less unsupportive) partners, but may harbor a perceptual bias that occurs in certain types of interactions with their romantic partners. Dispositional regulatory orientations, much like personal constructs (Kelly, 1955), might act as perceptual filters through which relationship-relevant events and others' behaviors are interpreted. Their distinct motivations should prompt promotion-focused and prevention-focused people to perceive their partners' behaviors in ways that help them meet their specific relationship-relevant goals and needs.

Prevention focus and social support

Consistent with their vigilance to negative outcomes, highly prevention-focused people should be more motivated to provide effective support in response to their partners' problems or concerns. Consequently, their partners should perceive them as particularly responsive and should experience benefits after disclosing problems and

receiving support for the stressors that they would like to eliminate from their lives. Unexpectedly, highly prevention-focused people reported lower motivation to provide support overall (confirmed by their partners and independent observers) and extended less positive and more negative support (confirmed by independent observers), especially to partners who scored lower in promotion focus or higher in prevention focus. Moreover, partners of highly prevention-focused people rated these participants as more motivated to provide support in response to their *goals*.

Thus, people whose partners were relatively more prevention-focused did not feel more or better supported by their partners in the problem condition. In fact, support recipients with more prevention-focused partners perceived their partners as *least* responsive in the problem condition, and this was especially true if recipients were more prevention-focused themselves. Unexpectedly, yet in line with highly prevention-focused people's greater motivation to provide support in the *goal* condition (see above), support recipients reported increases in self-efficacy after receiving support from more prevention-focused partners in response to their goals.

Perhaps because support for their problems is important to them, highly prevention-focused support recipients did report improved relationship mood after receiving support in the problem condition, but only if the support was provided by partners who were *lower* in prevention focus. Furthermore, individuals involved with highly prevention-focused partners reported less self-efficacy overall, and marginally significant increases in negative emotions. Individuals involved with highly prevention-focused partners also confirmed that they were less motivated to support these partners and that they provided less positive and more negative support to such partners.

Why were highly prevention-focused people not more effective support providers in response to their partners' problems? In a recent conflict resolution social interaction paradigm, Winterheld and Simpson (2008) found that highly prevention-focused people try to resolve conflicts with their romantic partners by focusing on the negative aspects of their relationships that contribute to the conflict and by engaging in less creative problem-solving. This interpersonal strategy might have been adopted by highly prevention-focused people in the current study. That is, highly prevention-focused people's concrete focus on negative aspects when discussing their partners' problems might have prevented their partners from "moving past" the problem. If so, this might explain why highly prevention-focused people were perceived as less responsive in the problem condition. It may also explain why individuals involved with more prevention-focused partners reported less self-efficacy, extended more negative support to them, and were less motivated to support them. Conversely, highly prevention-focused people's concrete focus on negative features may have had some advantages when discussing their partners' *goals* (e.g., discovering and discussing obstacles that need to be removed before one can achieve one's goals). This could explain why individuals perceived highly prevention-focused partners more favorably in the goal condition.

Finally, as predicted, highly prevention-focused support recipients perceived more negative (and fewer positive) support behaviors from their partners. This effects remained significant above and beyond both observer ratings and partner's ratings of support provided, suggesting that more prevention-focused people' support perceptions partially stem from their dispositional regulatory orientations.

Unexpected findings

Interestingly, highly promotion-focused people were particularly motivated to support their partners effectively if their partners were more prevention-focused, which was confirmed by independent observers. Highly promotion-focused people also perceived their highly prevention-focused partners as more responsive overall. Couples that had divergent regulatory orientations (in that one partner was more promotion-focused whereas the other was more prevention-focused) may still be a well functioning unit, despite their incompatible orientations. Interruptions of well-practiced interaction routines by one partner may be experienced as positive by the other, if/when the interruption facilitates the fulfillment of the second partner's goals and needs (Berscheid, 1983). For example, a highly promotion-focused person who enthusiastically encourages his/her more prevention-focused partner who is dissatisfied with his/her current job to explore new and better-paid employment options might be perceived as highly supportive by the prevention-focused partner, who might provide responsive support in return. A similar dynamic might apply to couples in which partners are low or high in one particular regulatory orientation. In this study, for example, highly prevention-focused people experienced improved relationship mood after receiving support for their problems from partners who were low in prevention focus.

Methodological Issues

One methodological issue deserving attention is the way in which regulatory focus was measured. There is some debate in the literature about whether the Lockwood and colleagues' (2002) scale (of which an adapted version was used in the current

study) is appropriate for assessing regulatory focus (Summerville & Roese, 2007). In the regulatory focus literature, a distinction has been made between individual differences in: (1) people's focus on promotion and prevention, and (2) their general effectiveness in each domain (Brazy & Shah, 2004; Higgins et al., 2001). Summerville and Roese (2007) have termed the former the "reference-point definition" of regulatory focus, and the latter the "self-guide definition." The "self-guide definition," rooted in self-discrepancy theory (Higgins, 1987), refers the extent to which people use two different self-guides (i.e., representations of significant others' end-states) for self-regulation: Ideal and ought self-guides. The RFQ (Higgins et al., 2001) was developed to measure individual differences in people's effectiveness or past success regarding the use of promotion strategies (defined by their ideal self-guides) and prevention strategies (defined by their ought self-guides) to fulfill their needs for promotion (growth) and prevention (security), respectively. In contrast, the "reference-point definition" refers to individual differences in people's general focus on or concern with promotion (growth) and prevention (security), *independent* of their history of success or failure in each domain (Brazy & Shah, 2004). Whereas Lockwood and colleagues' (2002) measure was designed to assess individual differences in people's general focus with respect to promotion and prevention (independent of their effectiveness in each domain), Summerville and Roese (2007) have argued that this measure is more similar to a measure of approach and avoidance (i.e., the BIS/BAS) than to the RFQ, and that it is more closely related to affect whereas regulatory focus is theorized to be independent of affective valence.

In the present study, this concern is partially alleviated because all significant effects remained at least marginally significant when statistically controlling for the BIS and the BAS. In addition, all significant effects remained at least marginally significant when statistically controlling for the RFQ dimensions. Thus, the Regulatory Focus in Relationships measure used in this study accounted for independent variability in the dependent measures above and beyond individual differences in people's general effectiveness/past success in using promotion and prevention strategies. These results provide further validation evidence that the Regulatory Focus in Relationships measure assesses individual differences in people's general focus with respect to promotion and prevention in relationships. A fuller assessment of the validity of this measure, and how (and when) related regulatory focus and approach-avoidance variables may interact, is well beyond the scope of this study, but an important venue for future research.

Caveats

The results of this study should be interpreted with some caveats in mind. First, given the correlational nature of the data, causal conclusion about associations between regulatory focus and support provision and perceptions cannot be drawn. Second, the large number of tests that were conducted could raise concerns about inflated Type I error rates. Although the theory-based approach to the data analysis leads me to believe that the results are not likely due to chance, replication of the findings is necessary. Third, the current effects might be limited to support processes that occurred during the particular lab interaction tasks (discussing personal goals or concerns) used in this study. Fourth, although the current sample involved primarily dating relationships, most of these relationships were relatively stable (mean relationship length was more than 2.5

years). Nevertheless, the results might not necessarily generalize to older couples involved in long-standing marriages. Finally, variables in addition to regulatory focus are likely to be predictors of support provision and perceptions (see, for example, Barbee & Cunningham, 1995). My goal, however, was to articulate and test how support interactions between romantic partners could be examined from a regulatory focus perspective.

Conclusions

Although this study documented that certain situational factors appear to elicit or facilitate the expression of people's chronic regulatory orientations (e.g., support in the goal condition by highly promotion-focused partners predicted changes in their partners' relationship mood), people's chronic regulatory tendencies typically transcended or outweighed the situational context (e.g., highly promotion-focused support providers were not necessarily more engaged and effective in the goal condition, but did support their partners more effectively in general). Thus, contrary to expectations, regulatory orientations were not systematically related to preferred types of support in different situations for different people. One explanation for this may be that participants reframed the instructions in the different conditions, which may have obscured some important anticipated associations between the conditions and regulatory foci. For instance, highly promotion-focused people may have re-interpreted problems as opportunities for growth rather than as concerns or stressors to be minimized. Correspondingly, highly prevention-focused people may have viewed goals as challenges to be overcome rather than as aspirations to be achieved. Also, the controlled lab setting may have not permitted the detection of certain differences in support with

respect to goals versus problems that may occur in more natural settings. For example, goal support might involve more instrumental assistance that cannot be easily observed or measured in the laboratory.

There may be another explanation for why chronic tendencies outweighed situational factors in this study. I found consistent evidence that dispositional regulatory focus had both actor and partner effects when predicting support provision and support perceptions. These partner effects are particularly noteworthy, given that many of them were confirmed by independent observers or by partners. Importantly, the partner effects underscore the fact that individuals are embedded within relationships in which they influence and are influenced by their partners. During the laboratory-based support interactions, what might have been most salient to participants was not the content or the nature of the manipulated support-relevant issue (i.e., whether the issue was a goal or a problem); instead, participants might have attended more closely to the *partner* with whom they conversed and their partner's chronic needs, motives, and behavioral tendencies. The chronic regulatory focus of either partner, therefore, may have overwhelmed the specific situational context. In other words, the power of the situation may have been attenuated by chronic regulatory focus-relevant perceptions and/or behaviors of the partners.

In conclusion, the current study has important implications for research and theory on social support processes and regulatory focus. For example, this work highlights the intrinsically interpersonal, *dyadic* nature of social support processes and the importance of studying perceptions and behaviors of *both* partners, not merely one partner. The degree to which people provide effective support, or respond favorably to

enacted support, appears to depend on both the motivational orientations and related skills of both support providers and partners, and on how both partners relate to and interact with one another. One cannot fully understand and predict social support processes without information about the chronic tendencies of both support providers and recipients, in addition to the situational demands.

The multi-informant design also addresses an issue that has been of long-standing concern to social support researchers. As described in the introduction, studies that have tested whether enacted support influences people's well-being via global perceptions of support have often found weak associations between enacted and perceived support. The current data show that at least in the context of these specific, brief support interactions, subjective perceptions of support were clearly related to enacted support. For instance, highly promotion-focused people's positive support provision was corroborated by both independent observers and their partners. Moreover, enacted support was related not only to participants' perceptions of support, but also to self-reported increases in their well-being.

At the same time, the data also demonstrate that support perceptions stem from unique subjective construals. Consistent with their salient concerns, people who had different regulatory orientations perceived more or less positive/negative support from their partners, above and beyond actual support ratings from partners, themselves, and independent observer ratings. This demonstrates the value of simultaneously measuring social support from multiple perspectives.

Finally, experimental regulatory focus research has shown that certain situations can lead people to respond in ways congruent with their chronic regulatory orientations

(e.g., Cesario et al., 2004; Idson et al., 2000; Shah et al., 1998). This past research, however, has examined processes occurring *within the heads* of individuals rather than *between* people engaged in ongoing interactions. The current study shows how regulatory focus theory and research might profit from incorporating a dyadic perspective. People's regulatory tendencies are likely to affect not only the quality of their own experiences, but their partners' experiences as well. Whereas an actor's orientation might lead him/her to respond in certain preferred ways that sustain his/her regulatory focus, the actor's experience should differ depending on whether his/her *partner's* responses (that are themselves influenced by the partner's own regulatory focus) sustain or interrupt the actor's orientation. A dyadic perspective might extend regulatory focus processes to the sort of naturally occurring events that arise spontaneously in people's relationships, and allow for new insights into how regulatory focus processes might operate in the lab *and* in people's everyday lives.

FOOTNOTES

1. If these regulatory systems are independent, then individual differences associated with these systems should also be independent (i.e., a person can be high in both promotion focus and prevention focus, low in both foci, or high in one or the other). Thus, the label "promotion-focused" implies that a person has a stronger promotion focus, relative to prevention focus, whereas "prevention-focused" implies that a person harbors a stronger prevention focus, relative to promotion focus.

2. One potential prevention item was excluded because it had low loadings on both factors (<.20), and one potential promotion item was excluded because it loaded on both factors.

3. Some positive relation between the two scales can be expected given that both measure individuals' motivational tendencies in relationships.

4. Two two-way interaction effects involving observer-rated motivation to provide support and gender were found. One interaction between gender and condition indicated that men in the goal condition were rated as less motivated than women, b = -.16, $t(192)$ = -3.29, p =.001. A second interaction between gender and actors' promotion focus showed that less promotion-focused women were rated as more motivated than less promotion-focused men, b = .02, $t(140)$ = 2.25, p <.03.

5. An interaction effect between gender and condition on observer-rated positive support showed that, compared to women, men were rated as providing less positive support in the goal condition, b = -.10, $t(197)$ = --2.27, p =.025.

6. Two interaction effects involving observer-rated negative support and gender were found. One interaction between gender and condition showed that, compared to

women, men were rated as providing more negative support in the problem condition, *b* = -1.42, *t*(219) = -23.88, *p* <.001. A second interaction between gender and partner prevention focus suggested that men who had more prevention-focused partners were rated as providing more negative support, *b* = -.024, *t*(190) = -3.57, *p* <.001.

7. Several variables related to the problems or goals could have influenced perceptions of the problem/goal and the hypothesized effects. Thus, I repeated the analyses controlling for (1) the frequency of past attempts to solve the problem/achieve the goal, (2) the extent to which these attempts have been successful, (3) the frequency with which the problem/goal has been discussed with the partner, and (4) how much control participants believed they had over solving the problem/achieving the goal. All reported effects remained significant or marginally significant., all *p*s <.09.

8. An interaction between gender and partner promotion focus on change in positive emotions indicated that men who had highly promotion-focused partners experienced greater increases in positive emotion, *b* = -.027, *t*(207) = 2.30, *p* <.025.

Table 1. Means of the Predictor Variables.

	Men	Women	
	M (*SD*)	*M* (*SD*)	Matched-pairs *t*-tests
Predictor Variables			
Promotion Focus	47.10 (6.96)	47.82 (7.74)	$t(94) = -.74$, *ns*
Prevention Focus	25.33 (9.02)	24.78 (9.62)	$t(94) = .48$, *ns*

Note: N = 95 couples (95 men and 95 women)

Table 2. Means and Standard Deviations for the Dependent Measures in the Problem and Goal Conditions for Women and Men.

Dependent Measures:	Condition	Women *M (SD)*	Men *M(SD)*	*t*(94)
Motivation to Provide Support (self-reported)	Problems	6.10 (1.24)	5.83 (1.27)	-1.81
	Goals	5.88 (1.35)	5.78 (1.49)	-.53
Motivation to Provide Support (partner-reported)	Problems	5.81 (1.48)	5.80 (1.37)	-.07
	Goals	5.84 (1.48)	5.74 (1.48)	-.49
Motivation to Provide Support (observer-rated)	Problems	7.20 (.89)	7.19 (.95)	-.07
	Goals	6.71 (.87)	6.04 (1.29)	-4.40**
Positive Support Provision (self-reported)	Problems	5.52 (1.04)	5.42 (.93)	-.91
	Goals	5.62 (.91)	5.51 (1.03)	-.98
Negative Support Provision (self-reported)	Problems	1.51 (.70)	1.74 (.73)	2.56*
	Goals	1.47 (.73)	1.59 (.75)	1.26
Positive Support Provision (observer-rated)	Problems	6.90 (.97)	6.88 (.99)	-.17
	Goals	6.91 (.78)	6.49 (1.11)	-3.18**
Negative Support Provision (observer-rated)	Problems	2.01 (.93)	3.05 (.99)	4.12**
	Goals	2.60 (.98)	2.89 (1.16)	1.69
Perceived Partner Responsiveness	Problems	7.73 (1.28)	7.56 (1.37)	-1.05
	Goals	7.78 (1.36)	7.80 (1.27)	.15
Perceived Positive Partner Support	Problems	5.63 (1.16)	5.54 (1.15)	.81
	Goals	5.66 (1.12)	5.65 (1.00)	.15
Perceived Negative Partner Support	Problems	1.45 (.68)	1.61 (.73)	1.82
	Goals	1.45 (.77)	1.47 (.62)	.25
Change in Perceived Self-Efficacy	Problems	-.19 (1.89)	.05 (1.83)	1.00
	Goals	.12 (1.65)	.04 (1.19)	-.41
Change in Relationship Mood	Problems	.75 (1.90)	-.27 (1.44)	-.96
	Goals	.47 (1.54)	-.77 (1.23)	-1.19
Change in Positive Emotions	Problems	-.51 (1.68)	-.01 (1.51)	2.16**
	Goals	.24 (1.34)	.26 (1.26)	-.17
Change in Negative Emotions	Problems	.08 (1.10)	-.07 (.95)	-1.00
	Goals	.07 (.97)	-.10 (.83)	-1.45

Note: N = 95 couples (95 men and 95 women)
**$p < .01$, *$p < .05$

Table 3. Correlations Among the Predictor Variables.

	1	2	3	4
1. Women's Promotion Focus	--	--	--	--
2. Women's Prevention Focus	.30**	--	--	--
3. Men's Promotion Focus	.15	.05	--	--
4. Men's Prevention Focus	.25*	.28**	.08	--

Note: N = 95 couples (95 men and 95 women)
**$p < .01$, *$p < .05$

Table 4. Correlations Among the Predictor Variables and Dependent Measures in the Goal and Problem Conditions for Men.

	Condition	Promotion Focus	Prevention Focus
Motivation to Provide Support (self-reported)	Problems	.28**	-.13
	Goals	.23*	-.15
Motivation to Provide Support (partner-reported)	Problems	.10	-.11
	Goals	.16	-.03
Motivation to Provide Support (observer-rated)	Problems	.19	-.22
	Goals	.28*	-.18
Positive Support Provision (self-reported)	Problems	.37**	-.11
	Goals	.24*	-.23*
Negative Support Provision (self-reported)	Problems	-.28**	.18
	Goals	-.18	.16
Positive Support Provision (observer-rated)	Problems	.19	-.15
	Goals	.26*	-.18
Negative Support Provision (observer-rated)	Problems	.23*	-.12
	Goals	-.18	.13
Perceived Partner Responsiveness	Problems	.21*	-.19
	Goals	.33**	-.26**
Perceived Positive Partner Support	Problems	.11	-.18
	Goals	.28**	-.11
Perceived Negative Partner Support	Problems	-.10	.20*
	Goals	-.20	.28**
Change in Perceived Self-Efficacy	Problems	-.12	.01
	Goals	.14	.07
Change in Relationship Mood	Problems	-.03	-.02
	Goals	.14	-.14
Change in Positive Emotions	Problems	-.09	.10
	Goals	.08	-.18
Change in Negative Emotions	Problems	.01	-.01
	Goals	.09	.17

Note: N = 95 couples (95 men and 95 women)
**$p < .01$, *$p < .05$

Table 5. Correlations Among the Predictor Variables and Dependent Measures for Women in the Goal and Problem Conditions.

	Condition	Promotion Focus	Prevention Focus
Motivation to Provide Support (self-reported)	Problems	.12	-.15
	Goals	.19	-.06
Motivation to Provide Support (partner-reported)	Problems	.13	-.22*
	Goals	.25*	.01
Motivation to Provide Support (observer-rated)	Problems	-.02	-.19
	Goals	-.10	-.22
Positive Support Provision (self-reported)	Problems	.26*	-.22*
	Goals	.25*	-.15
Negative Support Provision (self-reported)	Problems	-.06	.24*
	Goals	.04	.17
Positive Support Provision (observer-rated)	Problems	.09	-.20
	Goals	.01	-.17
Negative Support Provision (observer-rated)	Problems	.02	.12
	Goals	.01	.07
Perceived Partner Responsiveness	Problems	.17	-.21*
	Goals	.08	-.17
Perceived Positive Partner Support	Problems	.19	-.24*
	Goals	.12	-.18
Perceived Negative Partner Support	Problems	-.08	.28**
	Goals	.07	.15
Change in Perceived Self-Efficacy	Problems	-.19	-.06
	Goals	-.12	-.02
Change in Relationship Mood	Problems	.03	.27**
	Goals	.02	-.05
Change in Positive Emotions	Problems	-.07	.12
	Goals	-.06	-.15
Change in Negative Emotions	Problems	.30**	.21*
	Goals	.04	.20*

Note: N = 95 couples (95 men and 95 women)
**$p < .01$, *$p < .05$

REFERENCES

Acitelli, L. K. (1996). The neglected links between marital support and marital satisfaction. In G. Pierce, B. Sarason, & I. Sarason (Eds.), *Handbook of social support and the family* (pp. 83-103). New York: Plenum.

Acitelli, L. K., & Antonucci, T. C. (1994). Gender differences in the link between marital satisfaction and support in older couples. *Journal of Personality and Social Psychology, 76,* 688-698.

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions.* Newbury Park, CA: Sage.

Amodio, D. M., Shah, J. Y., Sigelman, J., Brazy, P. C., & Harmon-Jones, E. (2004). Implicit regulatory focus associated with asymmetrical frontal activity. *Journal of Experimental Social Psychology, 40,* 225-232.

Asendorpf, J. B., & Wilpers, S. (1998). Personality effects on social relationships. *Journal of Personality and Social Psychology, 74,* 1531-1544.

Ayduk, O., May, D., Downey, G., & Higgins, E. T. (2003). Tactical differences in coping with rejection sensitivity: The role of prevention pride. *Journal of Personality and Social Psychology, 29,* 435-448.

Baldwin, M. W. (1992). Relational schemas and the processing of social information. *Psychological Bulletin, 112,* 461-484.

Bandura, A. (2000). Guide for constructing self-efficacy scales. In F. Pajares & T. Urdan (Eds.), *Self-efficacy beliefs in adolescents* (pp. 307-337). Greenwich, CT: Information Age Publishing.

Barbee, A. P., & Cunningham, M. R. (1995). An experimental approach to social support communications: Interactive coping in close relationships. *Communications Yearbook, 18,* 381-413.

Barrera, M., (1986). Distinctions between social support concepts, measures, and models. *American Journal of Community Psychology, 14*, 413-445.

Belsher, G., & Costello, C. G. (1991). Do confidants of depressed women provide less social support than confidants of nondepressed women? *Journal of Abnormal Psychology, 100*, 516-525.

Berscheid, E. (1983). Emotion. In Kelley, H. H., Berscheid, E., Christensen, A., Harvey, J. H., Huston, T. L., Levinger, G., McClintock, E., Peplau, L. A., & Peterson, D. R. (Eds.), *Close Relationships* (pp. 110-168). New York: W. H. Freeman.

Bolger, N. & Amarel, D. (2007). Effects of social support visibility on adjustment to stress: Experimental evidence. *Journal of Personality and Social Psychology, 92*, 458–475.

Bolger, N., & Eckenrode, J. (1991). Social relationships, personality, and anxiety during a major stressful event. *Journal of Personality and Social Psychology, 61*, 440–449.

Bolger, N., Foster, M., Vinokur, A. D., & Ng, R. (1996). Close relationships and adjustment to a life crisis: The case of breast cancer. *Journal of Personality and Social Psychology, 70*, 283–294.

Bolger, N., Zuckerman, A., Kessler, R. C. (2000). Invisible support and adjustment to stress, *Journal of Personality and Social Psychology, 79*, 953–961.

Bowlby, J. (1969). *Attachment and loss: Vol. 1: Attachment*. New York: Basic Books.

Bowlby, J. (1973). *Attachment and loss: Vol. 2: Separation*. New York: Basic Books.

Bowlby, J. (1980). *Attachment and loss: Vol. 3: Loss.* New York: Basic Books.

Berkman, L. F., & Syme, S. L. (1979). Social networks, host resistance, and mortality: A nine-year follow-up study of Alameda county residents. *American Journal of Epidemiology, 109*, 186-204.

Bradbury T. N., & Fincham, F. D. (1989). Behavior and satisfaction in marriage: Prospective mediating processes. In C. Hendrick (Ed.), *Close Relationships* (pp. 119-143). Newbury Park, CA: Sage.

Brazy, P. C., & Shah, J. Y. (2006). Safety in numbers: Considering the social implications of regulatory focus. *Journal of Personality, 74*, 1647-1672.

Brown, S. L., & Vinokur, A. D. (2003). The interplay among risk factors for suicidal ideation and suicide: The role of depression, poor health, and loved ones' messages of support and criticism. *American Journal of Community Psychology, 32*, 131-141.

Brunstein, J. C., Dangelmayer, G., & Schultheiss, O. C. (1996). Personal goals and social support in close relationships: Effects on relationship mood and marital satisfaction. *Journal of Personality and Social Psychology, 71*, 1006–1019.

Camacho, C. J., Higgins, E. T., & Luger, L. (2003). Moral value transfer from regulatory fit: "What feels right *is* right" and what feels wrong *is* wrong." *Journal of Personality and Social Psychology, 84*, 498-510.

Carver, C. S., & Scheier, M. F. (1990). Principles of self-regulation: Action and emotion. In E. T. Higgins, & R. M. Sorrentino (Eds.), *Handbook of motivation and*

cognition: Foundations of social behavior (Vol. 2, pp. 3-52). New York: Guilford Press.

Carver, C. S., Sutton, S. K., & Scheier, M. F. (2000). Action, emotion, and personality: Emerging conceptual integration. *Personality and Social Psychology Bulletin, 26*, 741-751.

Carver, C. S., & White, T. L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS scales. *Journal of Personality and Social Psychology, 67*, 319-333.

Cassel, J. (1976). The contribution of the social environment to host resistance. *American Journal of Epidemiology, 104*, 107-123.

Cesario, J., Grant, H., & Higgins, E. T. (2004). Regulatory fit and persuasion: Transfer from "feeling right." *Journal of Personality and Social Psychology, 86*, 388-404.

Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum.

Cohen, S., & Willis, T. A. (1985). Stress, social support and the buffering hypothesis. *Psychological Bulletin, 98*, 310–357.

Collins, N. L., Dunkel-Schetter, C., Lobel, M., & Scrimshaw, S. C. M. (1993). Social support in pregnancy: Psychosocial correlates of birth outcomes and postpartum depression. *Journal of Personality and Social Psychology, 65*, 1243–1258.

Collins, N. L., & Feeney, B. C. (2000). A safe haven: An attachment theory perspective on

support seeking and caregiving in intimate relationships. *Journal of Personality and Social Psychology, 78*, 1053-1073.

Collins, N. L., & Feeney, B. C. (2004). Working models of attachment affect perceptions of social support: Evidence from experimental and observational studies. *Journal of Personality and Social Psychology*, *87*, 363-383.

Costanza, R. S., Derlega, V. J., & Winstead, B. A. (1988). Positive and negative forms of social support: Effects of conversational topics on coping with stress among same-sex friends. *Journal of Experimental Social Psychology, 24,* 182-193.

Coyne, J. C., Worthman, C. B., & Lehman, C. R. (1988). The other side of support: Emotional overinvolvement and miscarried helping. In B. H. Gottlieb (Ed.), *Marshaling social support: Formats, processes, and effects* (pp. 305-330). Thousand Oaks, CA: Sage.

Crowe, E., & Higgins, E. T. (1997). Regulatory focus and strategic inclinations: Promotion and prevention decision-making. *Organizational Behavior and Human Decision Processes, 69*, 117-132.

Cutrona, C. E. (1996). Social support as a determinant of marital quality: The interplay of negative and supportive behaviors in marriage. In G. Pierce, B. Sarason, & I. Sarason (Eds.), *Handbook of social support and the family* (pp. 173–194). New York: Plenum.

Cutrona, C. E., Hessling, R. M., & Suhr, J. A. (1997). The influence of husband and wife personality on marital social support interactions. *Personal Relationships, 4*, 379-393.

Cutrona, C. E., & Russell, D. W. (1990). Type of social support and specific stress: Toward a theory of optimal matching. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support*: *An interactional view* (pp. 319-366). New York: Wiley.

Cutrona, C. E., & Suhr, J. A. (1994). Social support communication in the context of marriage: An analysis of couples' supportive interactions. In B. B. Burleson, T. L. Albrecht, & I. G. Sarason (Eds.), *Communication of social support: Messages, relationships and community* (pp. 113-133). Thousand Oaks, CA: Sage.

Davis, M. H., Morris, M. M., & Kraus, L. A. (1998). Relationship-specific and global perceptions of social support: Associations with well-being and attachment. *Journal of Personality and Social Psychology, 74,* 468-481.

Dunkel-Schetter, C., & Bennett, T. L. (1990). Differentiating the cognitive and behavioral aspects of social support. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp. 267 -296). New York: Wiley.

Dunkel-Schetter, C., Blasband, D., Feinstein, L. G., & Bennett Herbert, T. (1992). Elements of supportive interactions: When are attempts to help effective? In S. Spacapan & S. Oskamp (Eds.) *Helping and being helped in the real world* (pp. 83-114). Newbury Park, CA: Sage Publications.

Elliott, A. J., Gable, S. L., & Mapes, R. R. (2006). Approach and avoidance motivation in the social domain. *Personality and Social Psychology Bulletin, 32,* 378-391.

Endler, N. S., & Magnusson, D. (1976). Toward an interactional psychology of personality. *Psychological Bulletin, 83,* 956-979.

Feeney, B. C. (2004). A secure base: Responsive support of goal strivings amd exploration in adult intimate relationships. *Journal of Personality and Social Psychology, 87,* 631-648.

Feeney, B. C., & Collins, N. L. (2001). Predictors of caregiving in adult intimate relationships: An attachment theoretical perspective. *Journal of Personality and Social Psychology, 80,* 972-994.

Feeney, B. C., & Collins, N. L. (2003). Motivations for caregiving in adult intimate relationships: Influences on caregiving behavior and relationship functioning. *Personality and Social Psychology Bulletin, 29,* 950-968.

Fisher, J. D., Nadler, A., & Whitcher-Alagna, S. (1982). Recipients reactions to aid. *Psychological Bulletin, 91,* 27-54.

Fletcher, G. J. O., Simpson J. A., & Thomas G. (2000). The measurement of perceived relationship quality components: A confirmatory factor analytic approach. *Personality and Social Psychology Bulletin, 26,* 340-354.

Florian, V., Mikulincer, M., & Bucholtz, I. (1995). Effects of adult attachment style on the perception and search for social support. *Journal of Psychology, 129,* 665-676.

Förster, J., & Higgins, E. T. (2005). How global versus local perception fits regulatory focus. *Psychological Science, 16,* 631-636.

Gable, S. L. (2006). Approach and avoidance social motives and goals. *Journal of Personality, 74,* 175-222.

Gable, S. L., Gonzaga, G. C., & Strachman, A. (2006). Will you be there for me when things go right? Supportive responses to positive event disclosures. *Journal of Personality and Social Psychology, 91,* 904-917.

Gable, S. L., & Reis, H. T. (2001). Appetitive and aversive social interaction. In J. H. Harvey & A. E. Wenzel (Eds.), *Close romantic relationship maintenance and enhancement* (pp. 169-194). Mahwah, NJ: Lawrence Erlbaum.

Gable, S. L., Reis, H. T., & Elliot, A. J. (2000). Behavioral activation and inhibition in everyday life. *Journal of Personality and Social Psychology, 78,* 1135-1149.

Gable, S. L., Reis, H. T., & Elliot, A. J. (2003). Evidence for bivariate systems: An empirical test of appetition and aversion across domains. *Journal of Research in Personality, 37,* 349-372.

Gable, S. L., Reis, H. T., Impett, E., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of Personality and Social Psychology, 87,* 228-245.

Galinsky, A. D., Leonardelli, G. J., Okhuysen, G. A., & Mussweiler, T. (2005). Regulatory focus at the bargaining table: Promoting distributive and integrative success. *Personality and Social Psychology Bulletin, 31,* 1087-1098.

Goldberg, L. R. (1990). An alternative description of personality: The Big Five factor structure. *Journal of Personality and Social Psychology, 59,* 1216-1229.

Grant, H., & Higgins, E. T. (2003). Optimism, promotion pride, and prevention pride as predictors of quality of life. *Personality and Social Psychology Bulletin, 29,* 1521-1532.

Gray, J. A. (1990). Brain systems that mediate both emotion and cognition. *Cognition and Emotion, 4*, 269-288.

Helgeson, V. S. (1993). Two important distinctions in social support: Kind of support and perceived versus received. *Journal of Applied Social Psychology, 23,* 825-845.

Henderson, A. S. (1977). The social network, support, and neurosis: The function of attachment in adult life. *British Journal of Psychiatry, 136,* 574-583.

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review, 94*, 319-340.

Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist, 52,* 1280-1300.

Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 30, pp. 1-46). New York: Academic Press.

Higgins, E. T. (2000). Making a good decision: Value from fit. *American Psychologist, 55,* 1217-1230.

Higgins, E. T., Friedman, R. S., Harlow, R. E., Idson, L. C., Ayduk, O. N., & Taylor, A. (2001). Achievement orientations from subjective histories of success: Promotion pride versus prevention pride. *European Journal of Social Psychology, 31,* 3-23.

Higgins, E., Roney, C. J. R., Crowe, E., & Hymes, C. (1994). Ideal versus ought predilections for approach and avoidance distinct self-regulatory systems. *Journal of Personality and Social Psychology, 66,* 276-286.

Higgins, E. T., Shah, J., & Friedman, R. (1997). Emotional responses to goal attainment: Strength of regulatory focus as moderator. *Journal of Personality and Social Psychology, 72*, 515-525.

Higgins, E. T., & Silberman, I. (1998). Development of regulatory focus: Promotion and prevention as ways of living. In J. Heckhausen & C. S. Dweck (Eds.), *Motivation and self-regulation across the life span* (pp. 78-113). New York: Cambridge University Press.

Higgins, E. T., & Tykocinski, O. (1992). Self-discrepancies and biographical memory: Personality and cognition at the level of psychological situation. *Personality and Social Psychology Bulletin, 18*, 527-535.

Hobfoll, S. E., & Lerman, M. (1989). Predicting receipt of social support: A longitudinal study of parents' reactions to their child's illness. *Health Psychology, 8*, 61-77.

Holmes, J. G. (2000). Social relationships: the nature and function of relational schemas. *European Journal of Social Psychology, 30*, 447-495.

House, J. S., Landis, K. R., & Umberson, D. (1988). Social relationships and health. *Science, 241*, 540-545.

Iida, M., Seidman, G., Shrout, P. E., Fujita, K., & Bolger, N. (2008). Modeling support provision in intimate relationships, *Journal of Personality and Social Psychology, 94*, 460-478.

Idson, L.C., Liberman, N., & Higgins, T.E. (2000). Distinguishing gains from nonlosses and losses from nongains: a regulatory focus perspective on hedonic intensity. *Journal of Experimental Social Psychology, 36*, 252-274.

John, O. P., Donahue, E. M, & Kentle, R. L. (1991). *The Big Five Inventory— Versions 4a and 54.* Berkeley, CA: University of California, Berkeley, Institute for Personality and Social Research.

Julien, D., & Markman, H. J. (1991). Social support and social networks as determinants of individual and marital outcomes. *Journal of Social and Personal Relationships, 8,* 549-568.

Jung, J. (1989). Social support rejection and reappraisal by providers and recipients. *Journal of Applied Social Psychology, 19*, 159-173.

Kahn, R. L. (1994). Social support: Content, causes, and consequences. In R. P. Abeles (Ed.), *Aging and quality of life* (pp. 163-184). New York: Springer.

Kashy, D. A., & Kenny, D. A. (2000). The analysis of data from dyads and groups. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social psychology* (pp. 451-477). New York: Cambridge University Press.

Kaul, M., & Lakey, B. (2003). Where is the support in perceived support? The role of generic relationship satisfaction and enacted support in perceived support's relation to low distress. *Journal of Social and Clinical Psychology, 22*, 59-78.

Kawachi, I., & Berkman, L. F. (2001). Social ties and mental health. *Journal of Urban Health: Bulletin of the New York Academy of Medicine, 78,* 458-467.

Kelly, G. A. (1955). *A theory of personality: The psychology of personal constructs*. New York: Norton.

Kenny, D. A. (1996). Models of interdependence in dyadic research. *Journal of Social and Personal Relationships, 13*, 279-294.

Knoll, N., Burkert, S., & Schwarzer, R. (2006). Reciprocal support provision: Personality as a moderator? *European Journal of Personality, 20,* 217-236.

Kobak, R. R., & Sceery, A. (1988). Attachment in late adolescence: Working models, affect regulation, and perception of self and others. *Child Development, 59,* 135-146.

Lakey, B., & Heller, K. (1988). Social support from a friend, perceived support, and social problem solving. *American Journal of Community Psychology, 16,* 811-824.

Lakey, B., McCabe, K. M., Fisicaro, S. A., & Drew, J. B. (1996). Environmental and personal determinants of support perceptions: Three generalizability studies. *Journal of Personality and Social Psychology, 70,* 1270-1280.

Lee, A. Y., Aaker, J. L., & Gardner, W. L. (2000). The pleasures and pains of distinct self-construals: The role of interdependence in regulatory focus. *Journal of Personality and Social Psychology, 78,* 1122–1134

Liberman, N., Idson, L. C., Camacho, C. J., & Higgins, E. T. (1999). Promotion and prevention choices between stability and change. *Journal of Personality and Social Psychology, 77,* 1135-1145.

Liberman, N., Molden, D. C., Idson, L. C., & Higgins, E. T. (2001). Promotion and prevention focus on alternative hypotheses: Implications for attributional functions. *Journal of Personality and Social Psychology, 80,* 5-18.

Lockwood, P., Jordan, C. H., & Kunda, Z. (2002). Motivation by positive or negative role models: Regulatory focus determines who will best inspire us. *Journal of Personality and Social Psychology, 83,* 854-864.

Lu, L., & Argyle, M. (1992). Receiving and giving support: Effects on relationships and well-being. *Counseling Psychology Quarterly, 5*, 123-133.

Manian, N., Strauman, T. J., Denney, N. (1998). Temperament, recalled parenting styles, and self-regulation: Testing the developmental postulates of self-discrepancy theory. *Journal of Personality and Social Psychology, 75*, 1321-1332.

Manian, N., Papadakis, A. A., Strauman, T. J., & Essex, M. (2006). The development of children's ideal and ought self-guides: Parenting, temperament, and individual differences in guide strength. *Journal of Personality, 74*, 1619-1646.

McGraw, K. O., & Wong, S. P. (1996). Forming inferences about some intraclass correlation coefficients. *Psychological Methods, 1*, 30-46.

Mikulincer, M., & Shaver, P. R. (2001). Attachment theory and intergroup bias: Evidence that priming the secure base schema attenuates negative reactions to out-groups. *Journal of Personality and Social Psychology, 81*, 97-115.

Mischel, W. (1968). *Personality and assessment.* New York: Wiley.

Newcomb, M. D. (1990). Social support and personal characteristics: A developmental and interactional perspective. *Journal of Social and Clinical Psychology, 9*, 54-68.

Newsom, J. T., & Schulz, R. (1998). Caregiving from the recipient's perspective: Negative reactions to being helped. *Health Psychology, 17*, 172–181.

Ognibene, T. C., & Collins, N. L. (1998). Adult attachment styles, perceived social support, and coping strategies. *Journal of Social and Personal Relationships, 15*, 323-345.

Oyserman, D., Uskul, A. K., Yoder, N., Nesse, R. M., & Williams, D. R. (2007). Unfair treatment and self-regulatory focus. *Journal of Experimental Social Psychology, 43*, 505-512.

Pasch, L. A., & Bradbury, T. N. (1998). Social support, conflict, and the development of marital dysfunction. *Journal of Consulting and Clinical Psychology, 66*, 219-230.

Pasch, L. A., Bradbury, T. N., & Davila, J. (1997). Gender, negative affectivity, and observed social support behavior in marital interaction. *Personal Relationships, 4*, 361-378.

Pavlov, I. (1927). *Conditioned reflexes: An investigation into the physiological activity of the cortex.* New York: Dover.

Reis, H. T. (2003). A self-report measure of perceived partner responsiveness. Unpublished data, University of Rochester.

Reis, H. T., & Franks, P. (1994). The role of intimacy and social support in health outcomes: Two processes or one? *Personal Relationships, 1*, 185-197.

Ruehlman, L. S., & Wolchik, S. A. (1988). Personal goals and interpersonal support and hindrance as factors in psychological distress and well-being. *Journal of Personality and Social Psychology, 55,* 293–301.

Sassenberg, K., Kessler, T., & Mummendey, A. (2003). Less negative = more positive? Social discrimination as avoidance or approach. *Journal of Experimental Social Psychology, 39*, 48-58.

Sarason, B. R., Pierce, G. R., & Sarason, I. G. (1990). Social support: The sense of acceptance and the role of relationships. In B. R. Sarason, I. G. Sarason, &G. R.

Pierce (Eds.), *Social support: An interactional view* (pp. 97-128). New York: Wiley.

Sarason, B. R., Sarason, I. G., & Gurung, R. A. R.(1997). Close personal relationships in health outcomes: A key to the role of social support. In S. Duck, (Ed.), *Handbook of Personal Relationships* (pp. 547-573). Chichester, UK: Wiley & Sons.

Sarason, B. R., Sarason, I. G., & Pierce, G. R. (1990). Traditional views of social support and their impact on assessment. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp. 9-25). New York: Wiley.

Sarason, I. G., Sarason, B. R., & Shearin, E. N. (1986). Social support as an individual difference variable: Its stability, origins, and relational aspects. *Journal of Personality and Social Psychology, 50,* 845-855.

Seidman, G., Shrout, P. E., & Bolger, N. (2006). Why is enacted social support associated with increased distress? Using simulation to test two possible sources of spuriousness. *Personality and Social Psychology Bulletin, 32,* 52–65.

Shah, J. (2003). The Motivational looking glass: How significant others implicitly affect goal appraisals. *Journal of Personality and Social Psychology, 85,* 424-439.

Shah, J. Y., Brazy, P. C., & Higgins, E. T. (2004). Promoting us vs. preventing them: Regulatory focus and the manifestations of intergroup bias. *Personality and Social Psychology Bulletin, 30,* 433–446

Shah, J., & Higgins, E. T. (2001). Regulatory concerns and appraisal efficiency: The general impact of promotion and prevention. *Journal of Personality and Social Psychology, 80,* 693–705.

Shah, J., Higgins, E. T., & Friedman, R. S. (1998). Performance incentives and means: How regulatory focus influences goal attainment. *Journal of Personality and Social Psychology, 74,* 285-293.

Simpson, J. A., Rholes, W. S., & Nelligan, J. S. (1992). Support-seeking and support-giving within couple members in an anxiety-provoking situation: The role of attachment styles. *Journal of Personality and Social Psychology, 62,* 434-446.

Simpson, J. A., Rholes, S. W., & Phillips, D. (1996). Conflict in close relationships: An attachment perspective. *Journal of Personality and Social Psychology, 71,* 899-914.

Simpson, J. A., Winterheld, H. A., & Chen, J. Y. (2006): Personality and relationships: A temperament perspective. In A. Vangelisti, & D. Perlman (Eds.), *The Cambridge handbook of personal relationships* (pp. 231-250). NY: Cambridge University Press.

Simpson, J. A., Winterheld, H. A., Rholes, W. S., & Oriña, M. M. (2007). Working models of attachment and reactions to different forms of caregiving from romantic partners. *Journal of Personality and Social Psychology, 93,* 466-477.

Silverstein, M., & Chen, X. (1996). Too much of a good thing? Intergenerational social support and the psychological well-being of older persons. *Journal of Marriage and Family, 58,* 970-982.

Sobotka, S. S., Davidson, R. J., & Senulis, J. A. (1992). Anterior brain electrical

asymmetries in response to reward and punishment. *Electroencephalography and Clinical Neurophysiology, 83*, 236-247.

Suitor, J. J., & Pillemer, K. (1994). Family caregiving and marital satisfaction: Findings from a 1-year panel study of women caring for parents with dementia. *Journal* of *Marriage and the Family, 56*, 681-690.

Sumemrville, A., & Roese, N. J. (2007). Self-report measures of individual differences in regulatory focus: A cautionary note. *Journal of Research in Personality, 42*, 247-254.

Sutton, S. K., & Davidson, R. J. (1997). Prefrontal brain asymmetry: A biological substrate of the behavioral approach and inhibition systems. *Psychological Science, 8*, 204-210.

Tardy, C. H. (1985). Social support measurement. *American Journal of Community Psychology, 13*, 187-202.

Taylor, S. (2007). Social support. In H. S. Friedman & R. Cohen Silver (Eds.), *Foundations of health psychology* (pp. 145–171). New York: Oxford University Press.

Thoits, P.A. (1986). Social support as coping assistance. *Journal of Consulting and Clinical Psychology, 154*, 416-423.

Uchino, B. N., Cacioppo, J. T., & Kiecolt-Glaser, J. K (1996). The relationship between social support and physiological processes: A review with emphasis on underlying mechanisms and implications for health. *Psychological Bulletin, 119*, 488-531.

Updegraff, J. A., Gable, S. L., & Taylor, S. E. (2004). What makes experiences

satisfying? The interaction of approach-avoidance motivations and emotions in well-being. J*ournal of Personality and Social Psychology, 86,* 496-504.

Vaux, A., Riedel, S., & Stewart, D. (1987). Modes of social support: The social support behaviors scale. *American Journal of Community Psychology, 15*, 209-237.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54,* 1063-1070.

Westmaas, J . L., & Jamner, L. D. (2006). Paradoxical effects of social support on blood pressure reactivity among defensive individuals. *Annals of Behavioral Medicine, 31*, 238-247.

Wethington, E., & Kessler, R. C. (1986). Perceived support, received support, and adjustment to stressful life events. *Journal of Health and Social Behavior, 27,* 78–89.

Winstead, B. A,, Derlega, V. J.. Lewis. R. J., Sanchez-Hucles, J., & Clarke, E. (1992). Friendship, social interaction, and coping with stress. *Communication Research, 19,* 193-211.

Winterheld, H. A., & Simpson, J. A. (2008). Seeking Security or Growth: A Regulatory Focus Perspective on Motivations in Romantic Relationships (under review).

APPENDIX A

Phase 1 Measures:

Regulatory Focus in Relationships Measure (adapted after Lockwood et al., 2002)

Instructions: When answering the following set of questions, please indicate how you typically feel in your **romantic relationships** in general. Keep in mind there are no right or wrong answers! Use the following scale to answer:

1	2	3	4	5	6	7	8	9
Not at all true of me				Neutral				Highly true of me

1. I often think about what I fear might happen to my romantic relationships in the future.
2. I am typically striving to fulfill the hopes and dreams I have for my relationships.
3. I am often anxious that I am falling short of my duties and obligations in my relationships.
4. I often worry that I will fail to accomplish my relationship goals.
5. I often imagine myself experiencing good things (e.g., intimacy, shared fun affection) that I hope will happen in my relationships.
6. In general, I am striving to nurture, grow, and enhance my relationships.
7. I often think about how I will achieve (or create) a successful relationship.
8. Overall, I want to feel inspired and uplifted by my romantic partners.
9. I often imagine myself experiencing bad things (e.g., rejection, betrayal, pain) that I fear might happen in my relationships.
10. I am primarily striving to make my relationships what they "ought" to be like – to fulfill my relationship duties and responsibilities.
11. Overall, I am more oriented toward preventing *negative outcomes* in my relationships than I am toward achieving positive outcomes.
12. I typically focus on the success (e.g., the happiness) I hope to achieve in my relationships.
13. I am primarily striving to create my "ideal relationships" - to fulfill my relationship dreams and aspirations.

Regulatory Focus Questionnaire (RFQ; Higgins et al., 2001)

INSTRUCTIONS: This set of questions asks you how frequently specific events occur or have occurred in your life. Please read each statement carefully. Using the scale below, indicate the number that best reflects your experience.

1	2	3	4	5
Never		Sometimes		Very often

1. Compared to most people, how often do you get what you want out of life?
2. Growing up, how often did you "cross the line" by doing things that your parents would not tolerate?
3. How often have you accomplished things that got you "psyched" (or inspired) to work even harder?
4. How often did you get on your parents' nerves when you were growing up?
5. How often did you obey rules and regulations that were made by your parents?
6. Growing up, how often did you act in ways that your parents thought were unacceptable?
7. How often do you do well at different things you try?
8. How often have you gotten into trouble because you were not careful enough?
9. When it comes to achieving things that are important to you, how often do you not perform as well as you ideally would like to?
10. How often do you feel like you have made progress toward being successful in your life?
11. How often have you found hobbies or activities in your life that have captured your interest or motivated you to put effort into them?

Behavioral Inhibition and Behavioral Activation Scales (BIS/BAS; Carver & White, 1994)

INSTRUCTIONS: Each item of the following questionnaire is a statement that a person may either agree with or disagree with. For each item, indicate how much you agree or disagree with what the item says. Please respond to all the items; do not leave any blank. Choose only one response to each statement. Please be as accurate and honest as you can be. Respond to each item as if it were the only item. That is, don't worry about being "consistent" in your responses. Choose from the following four response options:

1	2	3	4
Very true for me	Somewhat true for me	Somewhat false for me	Very false for me

1. Even if something bad is about to happen to me, I rarely experience fear or nervousness.
2. I go out of my way to get things I want.
3. When I'm doing well at something I love to keep at it.
4. I'm always willing to try something new if I think it will be fun.
5. When I get something I want, I feel excited and energized.
6. Criticism or scolding hurts me quite a bit.
7. When I want something I usually go all-out to get it.
8. I will often do things for no other reason than that they might be fun.
9. If I see a chance to get something I want I move on it right away.
10. I feel pretty worried or upset when I think or know somebody is angry at me.
11. When I see an opportunity for something I like I get excited right away.
12. I often act on the spur of the moment.
13. If I think something unpleasant is going to happen I usually get pretty "worked up."
14. When good things happen to me, it affects me strongly.
15. I feel worried when I think I have done poorly at something important.
16. I crave excitement and new sensations.
17. When I go after something I use a "no holds barred" approach.
18. I have very few fears compared to my friends.
19. It would excite me to win a contest.
20. I worry about making mistakes.

Social Approach and Avoidance Goals (Elliot et al., 2006)

INSTRUCTIONS: When answering the following questions, please focus on your typical goals for your romantic relationships, and use the scale below to indicate your answers:

1	2	3	4	5	6	7
Not at all true of me						Very true of me

I am typically….

1. trying to deepen my relationships with my romantic partners.
2. trying to make sure that nothing bad happens to my romantic relationships.
3. trying to avoid getting embarrassed, betrayed, or hurt by my romantic partners.
4. trying to move toward growth and development in my romantic relationships.
5. trying to share many fun and meaningful experiences with my romantic partners.
6. trying to avoid disagreements and conflicts with my romantic partners.
7. trying to stay away from situations that could harm my romantic relationships.
8. trying to enhance the bonding and intimacy with my romantic partners.

Adult Attachment Questionnaire (AAQ, Simpson et al., 1996)

INSTRUCTIONS: Please indicate how you typically feel toward **romantic (dating) partners** *in general*. Keep in mind that there are no right or wrong answers.

1 2 3 4 5 6 7

I strongly disagree — I strongly agree

1. I find it relatively easy to get close to others.
2. I'm not very comfortable having to depend on other people.
3. I'm comfortable having others depend on me.
4. I rarely worry about being abandoned by others.
5. I don't like people getting too close to me.
6. I'm somewhat uncomfortable being too close to others.
7. I find it difficult to trust others completely.
8. I'm nervous whenever anyone gets too close to me.
9. Others often want me to be more intimate than I feel comfortable being.
10. Others often are reluctant to get as close as I would like.
11. I often worry that my partner(s) don't really love me.
12. I rarely worry about my partner(s) leaving me.
13. I often want to merge completely with others, and this desire sometimes scares them away.
14. I'm confident others would never hurt me by suddenly ending our relationship.
15. I usually want more closeness and intimacy than others do.
16. The thought of being left by others rarely enters my mind.
17. I'm confident that my partner(s) love me just as much as I love them.

Big Five Scale (John et al., 1990)

INSTRUCTIONS: For each of the following items honestly indicate whether you agree or disagree that each statement applies to your personality. Use the following scale.

1	2	3	4	5
disagree strongly	disagree a little	neither agree nor disagree	agree a little	agree strongly

_____1. I am outgoing, sociable
_____2. I tend to find fault with others
_____3. I am a reliable worker
_____4. I remain calm in intense situations
_____5. I value artistic, aesthetic experiences
_____6. I am reserved
_____7. I am considerate and kind to almost everyone
_____8. I can be somewhat careless
_____9. I am relaxed, handle stress well
_____10. I prefer work that is routine and simple
_____11. I am full of energy
_____12. I can be cold and aloof
_____13. I do things efficiently
_____14. I get nervous easily
_____15. I have an active imagination
_____16. I am sometimes shy, inhibited
_____17. I like to cooperate with others
_____18. I tend to be disorganized
_____19 I am emotionally stable, not easily upset
_____20. I have few artistic interests
_____21. I am talkative
_____22. I am sometimes rude to others
_____23. I do a thorough job
_____24. I am depressed, blue
_____25. I am sophisticated in art, music, or literature
_____26. I tend to be quiet
_____27. I am generally trusting
_____28. I am lazy at times
_____29. I worry a lot
_____30. I am ingenious, a deep thinker
_____31. I generate a lot of enthusiasm
_____32. I have a forgiving nature
_____33. I am easily distracted
_____34. I can be tense
_____35. I am inventive

Perceived Relationship Quality Components Questionnaire (PRQC; Fletcher et al., 2000)

Please indicate what your **RELATIONSHIP WITH YOUR CURRENT PARTNER** is like, answering each question that follows. Use this scale when answering each question:

1 2 3 4 5 6 7

Not at all Extremely

1. How satisfied are you with your relationship? _____
2. How content are you with your relationship? _____
3. How happy are you with your relationship? _____
4. How committed are you to your relationship? _____
5. How dedicated are you to your relationship? _____
6. How devoted are you to your relationship? _____
7. How intimate is your relationship? _____
8. How close is your relationship? _____
9. How connected are you to your partner? _____
10. How much do you trust your partner? _____
11. How much can you count on your partner? _____
12. How dependable is your partner? _____
13. How passionate is your relationship? _____
14. How lustful is your relationship? _____
15. How sexually intense is your relationship? _____
16. How much do you love your partner? _____
17. How much do you adore your partner? _____
18. How much do you cherish your partner? _____

APPENDIX B

Phase 2 (Videotaped Interaction) Measures

Pre-Discussion Problem Form:

Briefly describe the <u>problem or stressor</u> that you would like to resolve:

_____

_____

_____

_____

1. How frequently have you tried to solve this problem before? (Check one)

   Never____ Once _____ Twice _____ 3-5 Times _____ 6-10 Times_____
   More than 10 Times _____

2. How successful were your attempts to solve this problem?

   1 2 3 4 5 6 7
   _____
   Not at all Successful Extremely Successful

3. How frequently have you discussed this problem with your partner in the recent past? (Check one)
   Never____ Once _____ Twice _____ 3-5 Times _____ 6-10 Times_____
   More than 10 Times _____

4. *Right now,* much **control** do you believe you have over solving this problem?

   1 2 3 4 5 6 7
   _____
   None A great deal

Pre-Discussion Goal Form:

Briefly describe the <u>goal or aspiration</u> that you would like to achieve:

_____

_____

_____

_____

1. How frequently have you tried to achieve this goal before? (Check one)

   Never____ Once _____ Twice _____ 3-5 Times _____ 6-10 Times_____
   More than 10 Times _____

2. How successful were your attempts to achieve this goal?

   1 2 3 4 5 6 7

   _____

   Not at all Successful — Extremely Successful

3. How frequently have you discussed this goal with your partner in the recent past? (Check one)
   Never____ Once _____ Twice _____ 3-5 Times _____ 6-10 Times_____
   More than 10 Times _____

4. *Right now,* much **control** do you believe you have achieving this goal?

   1 2 3 4 5 6 7

   _____

   None — A great deal

Pre-and Post Discussion Measures:

Perceived Self-Efficacy (Bandura, 2000) – Problem Condition:

Regarding the problem you are about to discuss, please rate how **confident** you are *right now* that you can solve the problem. Please circle your answer:

0	1	2	3	4	5	6	7	8	9	10
Cannot do at all					Moderately certain that I can do it					Highly certain that I can do it

Perceived Self-Efficacy (Bandura, 2000) – Goal Condition:

Regarding the goal you are about to discuss, please rate how **confident** you are *right now* that you can achieve this goal. Please circle your answer:

0	1	2	3	4	5	6	7	8	9	10
Cannot do at all					Moderately certain that I can do it					Highly certain that I can do it

Relationship Mood (Brunstein et al., 1996)

Please indicate the extent to which you are experiencing the following emotions **in your relationship** *right now*:

1 2 3 4 5 6 7

Not at all A great deal

1. Happy
2. Sad
3. Pleased
4. Depressed
5. Fearful
6. Harmonious
7. Confident
8. Loved
9. Tense
10. Disappointed
11. Hurt
12. Accepted
13. Acknowledged
14. Secure
15. Betrayed
16. Suppressed

PANAS (Watson et al., 1988):

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. **Indicate the extent you feel this way right now, that is, at the present moment.** Use the following scale to record your answers:

1	2	3	4	5
Very slightly	A little	Moderately	Quite a bit	Extremely

_____interested	_____irritable
_____distressed	_____alert
_____excited	_____ashamed
_____upset	_____inspired
_____strong	_____nervous
_____guilty	_____determined
_____scared	_____attentive
_____hostile	_____jittery
_____enthusiastic	_____active
_____proud	_____afraid
_____happy	_____disappointed
_____thrilled	_____dejected
_____ satisfied	_____sad

Post Discussion Measures (Support Recipient):

Perceived Partner's Support Motivation and Support:

(1) How **motivated** to support you was your partner during the discussion you just had?

1 2 3 4 5 6 7

Not at all A great deal

(2) **Reis's (2003) Responsiveness Scale:**

Please answer the following questions about your current romantic partner using the scale below:

1 2 3 4 5 6 7 8 9

Not at all True — Moderately True — Completely True

During the discussion that we just had, my partner…

1. saw the "real" me.
2. "got the facts right" about me.
3. focused on the "best side" of me.
4. was aware of what I was thinking and feeling.
5. understood me.
6. really listened to me.
7. expressed liking and encouragement for me.
8. valued my abilities and opinions.
9. respected me.
10. was responsive to my needs.

(3) **Perceived Positive and Negative Partner Support (adapted after Cutrona, 1996)**

Please answer the following questions **about your romantic partner** using the scale below:

1 2 3 4 5 6 7

Not at all A great deal

During the discussion that we just had, my partner….

1. was supportive of me. _____
2. was compassionate toward me. _____
3. was distracted. _____
4. was caring toward me. _____
5. was concerned about me. _____
6. was emotionally distant. _____
7. acknowledged my feelings. _____
8. disagreed with me. _____
9. changed the topic. _____
10. minimized my problem/goal. _____
11. inspired me. _____
12. assured me that I can deal with my problem/achieve my goal. _____
13. offered practical support. _____
14. was intrusive and interfering. _____
15. was overbearing and dominating. _____
16. expressed warmth and positive emotions. _____
17. expressed negative emotions. _____
18. criticized or blamed me. _____

Post Discussion Measures (Support Provider):

Perceived Self Support Motivation and Support:

(1) How **motivated** were you to support your partner during the discussion you just had?

1 2 3 4 5 6 7

Not at all A great deal

(2) **Reis's (2003) Responsiveness Scale:**

Please answer the following questions about yourself using the scale below:

1 2 3 4 5 6 7 8 9

Not at all True Moderately True Completely True

During the discussion that we just had, I….

1. saw my "real" partner.
2. "got the facts right" about my partner.
3. focused on the "best side" of my partner.
4. was aware of what my partner was thinking and feeling.
5. understood my partner.
6. really listened to my partner.
7. expressed liking and encouragement for my partner.
8. valued my partner's abilities and opinions.
9. respected my partner.
10. was responsive to my partner's needs.

(3) **Perceived Positive and Negative Self Support**:

Please answer the following questions **about yourself** using the scale below:

1 2 3 4 5 6 7

Not at all A great deal

During the discussion that we just had, I….

1. was supportive of my partner. _____
2. was compassionate toward my partner. _____
3. was distracted. _____
4. was caring toward my partner. _____
5. was concerned about my partner. _____
6. was emotionally distant. _____
7. acknowledged my partner's feelings. _____
8. disagreed with my partner. _____
9. changed the topic. _____
10. minimized my partner's problem/goal. _____
11. inspired my partner. _____
12. assured my partner that he/she can deal with his/her problem/achieve my goal.____
13. offered practical support. _____
14. was intrusive and interfering. _____
15. was overbearing and dominating. _____
16. expressed warmth and positive emotions. _____
17. expressed negative emotions. _____
18. criticized or blamed my partner. _____