THE EFFECT OF A PARTNER'S WORK SUCCESS ON EMOTIONS AND MOTIVATION: A SOCIAL COMPARISON PROCESS

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ABSTRACT

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Crossover refers to how one romantic partner's experiences and feeling states at work transfer over to the other in the home domain. However, the processes through which crossover occurs are not well understood, particularly concerning the impact of the cognitive evaluation of a partner's work events on the focal employee's emotions, as well as how these emotions influence work behaviors. This research draws upon social comparison theory to predict reactions to a romantic partner's work achievement. Specifically, a partner's work success was postulated to result in increased (assimilation) or decreased (contrast) self-esteem and self-evaluations in work performance. To predict who will be more likely to experience an increase or decrease in self-evaluations, the individual and relational self-concept levels, work and family centrality, and work and relationship contingent self-esteem were proposed as moderators. This research also considers the impact of social comparison outcomes on emotions (specifically, envy and pride), and the effect of these emotions on performance in an effort-driven task. This study was a survey experiment with full-time employees in romantic partnerships testing a moderated mediation model. Although predictions about emotions and task motivation were not supported, results suggest that the individual self-concept level predisposes individuals to feel lower self-esteem in response to their partner's work failure. Moreover, individual self-concept level moderated the mediated effect of a partner's work success/failure on pride, through self-esteem. Findings help further understanding within the work-family literature of how one partner's work experiences affect the other.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

What happens at the office does not stay in the office, and the same is true for what occurs in the home. Work experiences and/or duties may influence family well-being and obligations, and vice versa. The work-family literature broadly concerns the interplay between variables related to work and variables related to family life and nonwork activities (Eby et al., 2005; Parasuraman & Greenhaus, 2002). The work-family interface therefore holds important implications for organizational effectiveness as well as family well-being. A critical point within this literature is that individuals are situated within social systems, and the experiences that people have at their job will influence others in their social milieu (Barnett, 1998).

Within the work-family field, a sizeable body of research has been dedicated to understanding how one person may be affected by their partner's work experiences. *Crossover* refers to the phenomenon in which one person's experiences and attitudes at work transfer over to their romantic partner in the home sphere (Westman, 2001). For example, the spouse of a focal employee may experience greater work engagement as a result of "catching" these experiences from the employee at home. Research indicates that states such as positive mood (Westman, Shadach, Keinan, 2013; Munyon, Breaux, Rogers, Perrewe, & Hochwarter, 2009), work engagement (Bakker, Demerouti, & Schaufeli, 2005; Tian et al., 2017), and well-being (Sanz-Vergel & Rodríguez-Muñoz, 2013) may transfer from one partner to the other.

However, the actual mechanisms through which crossover occurs are not well understood. Knowledge of the mechanisms through which one partner's work experiences affect the other is hampered by several limitations of how this process is studied within the work-family literature. For one, research examining the effects of one partner's work on the other has not ventured to examine how couples cognitively appraise each other's work experiences and

how these appraisals may shape their own affective responses and attitudes. Rather, the dominant conceptualization of the avenue through which direct crossover occurs is nonconscious emotional contagion when partners interact (Steiner & Krings, 2017). Emotional contagion refers to when someone unconsciously adopts another person's emotional state due to mimicking their facial expressions and movements (Hatfield, Cacioppo, & Rapson, 1994).

Research on direct crossover has found that after spouses come home from work and interact with one another, they are more likely to share the other's emotions and work-related states (Bakker et al., 2005; Tian et al., 2017; Xin, Chen, Kwan, Chiu, & Yim, 2018). Oftentimes, studies that examined direct crossover between spouses only assess that crossover has occurred by showing that couples shared similar affective states after spending some time with one another. For instance, Rodríguez-Muñoz, Sanz-Vergel, Demerouti, and Bakker (2014) found that on days where employees experienced higher work vigor and dedication, they were also happier—and so were their partners. In this case, spouses came to experience the same positive mood as the focal employees after being in contact with them.

This affect-driven perspective is certainly valuable, yet it is limited when it comes to understanding the effects of particular work events and not simply outcomes of partner interactions. The overemphasis on a nonconscious affective process overlooks other more conscious routes, which may lend greater comprehension into how people may be affected by a close other's work experiences. For example, reaching a sales goal and winning a promotion are both positive events theorized to beget the crossover of positive mood between couples (Westman, 2013). Yet when their partners do achieve in these fashions, rather than solely being passive recipients of their partner's ensuing mood, people are likely to demonstrate more active processing—by cognitively appraising their partner's achievement and determining its

implications for themselves. Reactions to a partner's success will very likely take the form of people comparing their own work success and standing to their partner's. Indeed, such social comparisons arise habitually in daily life (Buunk & Gibbons, 2007).

Theoretical as well as empirical evidence also indicates that cognitive reactions to a partner's work event (and not simply nonconscious emotional contagion) are important for understanding how one partner's work experiences affect the other. For one, the crossover process is theorized to be driven by cognitions as well as emotions (Westman, 2001). Specifically, the empathic reaction assumed to spur crossover is postulated to take the form of conscious "information processing", in which imagining the feelings and experiences of one's partner triggers similar emotions in oneself (Bakker, Westman, & Emmerik, 2009). Evidence for the role of cognition also comes from recent work suggesting that crossover may occur through cognitive reflection on a partner's experiences more so than the tendency to feel care for them (Bakker & Demerouti, 2009).

Studying the means by which individuals are affected by their partner's work events through the lens of a social comparison process also affords the opportunity to predict when couples will not display a one-to-one correspondence in their affective states. Within the work-family literature, the experiences of one partner are only ever theorized to elicit corresponding states in the other. Overwhelmingly, isomorphic relationships, wherein one person's work experience and feeling states are assumed to evoke the exact same emotions and attitudes in the other person, are hypothesized and studied (Westman, 2013). This is despite research suggesting that crossover does not always occur when couples interact, and instead they might display differing emotions as a result of their interaction (Roberts & Levenson, 2001). In particular, a social comparison between oneself and one's partner is likely to induce differing emotional

responses in different individuals. The present research therefore seeks to more directly examine the process through which individuals are affected by their partners' work. Specifically, an employee's positive work event may trigger a social comparison process in her or his spouse, and the outcome of which will result in different emotions—which in turn will have consequences for the spouse's own work behavior.

Accordingly, to further the understanding of crossover mechanisms, the present research draws upon social comparison theory as a basis for investigating how the cognitive evaluation of one's partner's work event may influence one's own emotional states. Research indicates that social comparisons are prevalent between coworkers in the work domain (Brown, Ferris, Heller, & Keeping, 2007; Spence, Ferris, Brown, & Heller, 2011). Comparisons are also common between romantic partners (Pinkus, Lockwood, & Schimmack, 2005). A frequent reaction to another person's achievement is to also compare oneself against him or her—and this often spurs differing emotional reactions (Collins, 1996). Social comparison theory is therefore uniquely relevant for examining how the cognitive appraisal of a partner's work experience can cause differing emotional reactions.

This work contributes to the work-family literature by drawing upon social comparison theory to test an unexplored mechanism through which one partner's work event may be related to differing affective states in the other. The present research expands the existing conception of how couples may respond to each other's work experiences by theorizing and testing the possibility of differing reactions to the work success of one's partner. Moreover, various affective reactions to a partner's work experiences will likely lead to different behaviors relevant for one's own work. Therefore, predicting *who* will experience certain affective responses to a partner's work experience, as well as the behavioral *outcomes* of distinct emotional reactions,

holds the potential to broaden the existing body of knowledge on the effects of spouses' work events on one another in the work-family literature. This research therefore also examines moderators, in the form of self-concept levels and work and family centrality, to predict how individuals may differ in social comparison outcomes and emotions.

Another contribution is to examine the effects of emotions resulting from comparison between oneself and one's partner on work motivation. In doing so, this work answers recent calls to further examine the influence of self-concept and emotions (Kanfer, Frese, & Johnson, 2017) and nonwork events (Diefendorff & Chandler, 2011) on work motivation. Considering the effects of social comparisons on motivation also benefits the literature on comparisons, which tends to focus more on self-perceptions and attitudes as outcomes. In particular, the current research furthers understanding of the behavioral outcomes of comparisons between couples, a knowledge base that is admittedly sparse (Lockwood & Pinkus, 2014). Pride and envy are likely outcomes of comparisons, and these emotions have been uniquely connected to motivation and task performance (Herrald & Tomaka, 2002; van de Ven, Zeelenberg, & Pieters, 2011).

Finally, assessing the effects of one partner's work event on the other's work motivation, along with the process through which this relationship occurs, benefits the work-family literature. Crossover research generally concerns the transfer of states between couples, and studies rarely venture to then observe how these states may influence the other partner's work. The impact of experiences in the home domain on work has received far less attention than the impact of work on the home (Steiner & Krings, 2017). The present research concerns both domains and expands understanding of how partners may influence not only each other's feeling states, but motivation as well.

Crossover Research: Evidence that Individuals are Affected by a Partner's Work Events

Research has found that the work experiences of a person's romantic partner may affect their own attitudes (see Bakker & Demerouti, 2013, and Westman, 2006, for reviews). Crossover occurs when one individual's experiences in a domain (typically work or home) transfer over to a close other. For example, the partner of an individual who receives a promotion might experience higher levels of positive affect and engagement at home as well. In this way, experiences in a domain may be transmitted between individuals.

Research has tended to focus on deleterious instances of crossover between interaction partners, including the crossover of burnout (Bakker & Schaufeli, 2000), stress and strain (Westman, 2006), stress and exhaustion (Roberts & Levenson, 2001), distress (Song, Foo, Uy, & Sun, 2011), family-to-work conflict (Shimazu, Demerouti, Bakker, Shimada, & Kawakami, 2011), and job tension and work-to-family conflict (Steiner & Krings, 2017; Xin et al., 2018). However, a burgeoning literature has also examined the crossover of positive feeling states between couples (Westman, 2013). Positive mood (Westman et al., 2013; Munyon et al., 2009), work engagement (Bakker et al., 2005; Tian et al., 2017), job resources (Demerouti, 2012), and well-being (Sanz-Vergel & Rodríguez-Muñoz, 2013), may be transmitted between close others. The crossover literature provides substantial evidence that individuals in romantic partnerships are themselves affected by their partner's work events and experiences.

Westman (2001) proposed three mechanisms through which crossover may occur. In direct crossover, one partner's reactions are transmitted to the other due to the other's empathic response. In this view, recognizing one's partner's emotional state and imagining how it feels leads to a corresponding emotional experience. Alternately, in indirect crossover, one partner's feeling states are transferred to the other through mediating variables such as coping strategies

and social support. For instance, an employee who experiences a positive job event might come home with greater energy to invest in taking care of the household, and the results of her efforts would cause positive feelings in her spouse. Finally, crossover effects may occur because spouses actually face the same events that provoke similar reactions in both of them. For example, partners are both exposed to the positive and negative events associated with their children and living situation, and this shared experience may result in the observed crossover effects. It is important to note that in the last case, the observed crossover effect is explained by the shared experiences of partners and therefore does not represent a true crossover.

Returning to direct crossover, the empirical literature overwhelmingly examines affective states, yet not the processes assumed to give rise to these states. This research gap necessitates greater attention, especially given findings that more cognitive processes, rather than strictly emotional, may be driving crossover effects. Research utilizing measures of empathy indicates that the crossover of feelings may be due to cognitive information processing more so than emotional reactions. In a sample of Dutch dual-income couples, Bakker and Demerouti (2009) found that perspective-taking moderated the crossover of engagement from females to their male partners. Men who scored higher in perspective-taking experienced higher work engagement when their partners reported high engagement. However, levels of empathic concern did not moderate this crossover effect of engagement, nor its indirect effect on performance. Empathic concern is considered to be the "emotional" form of empathy, defined as the tendency to feel compassion towards others, whereas perspective-taking is the "cognitive" form, described as the tendency to imagine others' experiences (Davis, 1983).

Similarly, in a sample of Japanese couples the crossover of work engagement was stronger between spouses who scored high in perspective-taking (Bakker, Shimazu, Demerouti,

Shimada, & Kawakami, 2011). Wives' perspective-taking moderated the crossover of their husband's work engagement to themselves, such that this crossover occurred for those higher in perspective-taking. Even more, the crossover of work engagement between couples was strongest when both husbands and wives reported high levels of perspective-taking. Finally, Rodríguez-Muñoz and colleagues (2014) found that a focal partner's emotion (specifically, happiness) did not mediate the crossover effect of that partner's work engagement to the other's emotional state. This suggested that emotional contagion was not the only driving force behind affective crossover. In sum, studies that attempted to probe the mechanisms behind crossover indicate that the cognitive evaluation of one's partner's experiences may also have an effect on the focal employee. The affective approach to crossover, whereby witnessing one's partner's emotions is understood to prompt emotional contagion, has found meaningful success. However, a cognitive approach to theorizing based on social comparisons between oneself and one's partner may be more advantageous when it comes to understanding the effects of a partner's specific work events (aside from typical, nonspecific work states).

An unintended consequence of overlooking the cognition-based processes underlying the crossover effect is that the extant literature has not addressed the potential for couples to have divergent reactions to one another's work experiences. As discussed, the field has instead focused on emotional contagion as the key mechanism to potentiate crossover, and this mechanism should only confer the same emotions between couples. Yet research indicates that emotions experienced by one spouse may not necessarily relate to those experienced by the other, even following their interactions (Kim, 2007). In fact, one partner's emotions may even spark different feelings in the other in response. In one study, on days in which police officer husbands experienced higher levels of job stress, their wives, after interacting with their

husbands, reported different patterns of emotions from their husbands (Roberts & Levenson, 2001). In this case, although husbands reported higher negative and lower positive emotions after a stressful workday, wives reported less emotions overall. These results suggested that emotional contagion may not fully account for the myriad ways in which people may react to their partners' work experiences—and particularly, events.

Instead, a relevant question is how the appraisal of a partner's work event itself, aside from taking his or her perspective, influences employees. A clear avenue for this process is to examine the effects of comparisons that people make between their partners and themselves. For example, different people will have different reactions to their partner's work accomplishment. In response to her partner's achievement, a wife whose sense of self is closely aligned with that of her spouse is likely to react positively, and even feel more confident in her own abilities. By contrast, someone who defines her sense of self more so through her own work achievements may instead be more likely to react with the uncomfortable sense that her partner might be outclassing her in an area that is important to her, and thus feel more negatively about herself. This is likely to bring about negative emotions. Social comparison theory provides a lens through which we can understand how couples may react to each other's work events not solely as recipients of their partner's emotional states but instead as more conscious actors. Social comparison theory can therefore serve as a basis for differentiating how the evaluation of one's partner's work experience may elicit varying reactions.

Social Comparisons between Partners

Social comparison is the ubiquitous phenomenon wherein individuals compare their own standing in a domain to that of someone with a lower or higher standing than themselves (Buunk & Gibbons, 2007). Comparisons in which the target is at a higher level than the focal individual

are referred to as upwards comparisons, and those where the target is at a lower level are downwards comparisons. For example, people compare their athletic (Duda, 1989; Gotwals & Wayment, 2002), academic, (Gibbons, Blanton, Gerrard, Buunk, & Eggleston, 2000; Tian, Yu, & Huebner, 2017; Wolff, Helm, Zimmermann, Nagy & Möller, 2018) and job (Brown et al., 2007; Spence et al., 2011) performance to that of others. These comparisons seem to occur automatically and unintentionally (Gilbert, Giesler, & Morris, 1995), and on a routine, daily basis (Wheeler & Miyake, 1992). Because the present study concerns responses to a partner's work success, this research focuses on upwards comparisons.

Researchers have identified three main factors promoting the likelihood that people will engage in social comparisons. Specifically, individuals are more likely to compare themselves to another when a) the target person is close to them, b) when they view the target as similar to them, and c) when the domain for comparison is relevant to their self-concept (Garcia, Tor, & Schiff, 2013). By definition, romantic partners tend to share a close relationship. Unsurprisingly, people overwhelmingly tend to view their partners as similar to themselves on a wide variety of dimensions, including attitudes, personality, interests, and backgrounds (Baxter & West, 2003; Byrne & Blaylock, 1963; Montoya, Horton, & Kirchner, 2008). These considerations suggest that social comparisons should be prevalent between couples. Indeed, research has found that comparisons (both upwards and downwards) between spouses are common (Pinkus et al., 2005).

Given that comparisons occur more readily in areas that are relevant for a person's sense of self, the work domain may also be an important source of comparisons between working couples. Specifically, people are more likely to compare themselves to a superior other when they care about the comparison topic and desire to improve their performance in it (Smith & Sachs, 1997; Ybema, & Buunk, 1993). According to a recent Gallup poll Americans are more

likely than not to agree that they derive a sense of identity from their job (55%), and this is especially true for those who have earned a college degree (70%) (Riffkin, 2014). Empirical research also supports this conclusion. In a study of married couples, Pinkus, Lockwood, Schimmack, and Fournier (2008) found that the most substantial social comparison that people reported making between themselves and their partner in a week was in the work or academic domain.

Taken together, these lines of inquiry suggest that people are likely to compare themselves to their partner in response to their partner's work achievement. Although downwards comparisons may result just as readily in the case that their partner experiences a work failure, the current research concerns reactions to a partner's positive work accomplishment, which will relate to upwards comparisons.

Upward comparisons (wherein one compares oneself to another who is succeeding within the particular domain) are generally understood to cause either a higher or lower perception of one's own standing in the comparison area and self-esteem or self-worth (Collins, 1996). Assimilation is typified by social comparison scholars as an increase in the evaluation of one's own performance or standing on the comparison dimension as a result of a comparison to a high-achieving other, whereas contrast represents a decrease in self-evaluation (Wheeler & Suls, 2007). For example, employees who experience greater self-esteem and increased feelings of their own capacities following the promotion of their comparison targets can be said to have experienced assimilation through the social comparison process. Alternately, if the employees instead felt more negatively about themselves and their abilities in response to their comparison target's promotion, then they have experienced contrast.

Social comparisons have also been closely linked to emotions. In general, the lower self-evaluation referred to as contrast has overwhelmingly been associated with negative emotions, and the higher self-evaluation known as assimilation has been associated with positive emotions, even to the degree that emotional reactions were commonly measured as indicators that contrast or assimilation had occurred (see Collins, 1996, for a review). However, it is important to note that in empirical research, affective responses are separable from self-evaluations in social comparisons. In one study, married women exposed to an example of a strong marital relationship had lower evaluations of the quality of their own marriage (i.e., contrast in upwards comparison) than those exposed to a weak marriage (Buunk & Ybema, 2003). Yet those who made upwards comparisons (and, again, had lower evaluations of their own marriages) still had a more positive mood compared to those who made downwards comparisons. In sum, although contrast is more likely to beget negative emotions, and assimilation positive, this is not always the case. It is thus critical to measure both self-evaluations (in terms of standing on a domain and self-worth) and emotions.

Predictors of Assimilation and Contrast in Social Comparison

Scholars have established a number of factors that influence whether assimilation or contrast is more likely to occur in an upwards comparison. Research suggests that upwards comparisons between couples may more likely engender assimilation (Groothof Siero, & Buunk, 2007; Pinkus, Lockwood, Marshall, & Yoon, 2012). However, upwards comparisons made in domains relevant to the self-concept are more likely to lead to contrast (Tsai, 2010). These lines of research suggest that people may be likely to experience either an increase or decrease in their own self-evaluations in reaction to a partner's work accomplishment.

On the one hand, assimilation may be an expected outcome from the success of one's spouse. Research has shown that perceived similarity between oneself and the superior other and identification with the superior other potentiate assimilation and positive feelings over contrast and negative reactions (Collins, 1996; Groothof et al., 2007; Mussweiler, 2001). In the case of couples, research has supported that individuals tend to view themselves as similar to their partners (Baxter & West, 2003). Although they did not measure self-evaluations, Pinkus et al.(2012) found that people who made upwards comparisons to their partners reported feeling greater positive affect than when they made a downwards comparison. However, given that positive affect is not an indicator of assimilation (though they are often associated; Buunk & Gibbons, 2007), it is difficult to ascertain precisely why this was the case. These individuals may have felt positive emotions due to assimilation, or they may have still experienced positive emotions due to their partner's success, even if their own perception of their abilities was lower. It is, however, important to consider as well that a partner's work achievement is unlikely to represent an objective case of being outperformed in the work domain. Unless partners work together and both were being considered for the same promotion, an upwards comparison to one's partner, who is likely to be in a different workplace and field, is likely to have less damaging implications for the self. Comparisons to a successful romantic partner may therefore be more likely to result in assimilation.

On the other hand, another line of research suggests that an upwards comparisons in the work domain, even to a partner, will lead to negative outcomes. Specifically, research suggests that an upwards comparison in a domain relevant to one's self-concept may result in contrast effects. In four studies Beach et al. (1998)) invited college students (studies 1, 2, and 3) and dual-earner married couples (study 4) to first recall instances in which they either outperformed

their partner or their partner outperformed them, and then rate the emotions that they experienced in response. Being outdone by one's partner in a task relevant to one's self-concept resulted in significantly less positive, and more negative, emotions compared to being outperformed in an area that was not relevant to the self. However, participants also reported more negative affective reactions when outperformed by strangers compared to their partners.

Tesser and Collins (1988) compared the emotions that college students recalled experiencing in situations where they were outperformed by versus when they outperformed another person. These scholars considered also evaluated individuals' closeness with their target and the relevance of the task to their self-concept as moderators. People felt more envy when outclassed in domains that they viewed as important to their identity, compared to those with little bearing on the self. Moreover, when they were outperformed in domains relevant to the self-concept, people reported feeling less pride in the other who outperformed them when the task in question was self-relevant. The jealousy and sadness felt when outperformed were also rated as more intense for tasks that were self-relevant. Notably, relationship closeness did not have a main effect on ratings of jealousy/sadness. However, when their performance was exceeded, people did report feeling more pride for the other when that person was close to them.

Unfortunately, the tendency for research to measure only affective responses following comparisons occludes clear understanding of how reactions to a partner's high performance in the work domain may instigate an increase, or decrease, in one's own self-evaluation. These studies indicate that although the affective consequences of being outdone by one's partner in an area relevant to the self may not be as adverse as when this occurs with a stranger, people still report negative feelings. Although negative emotions were postulated to arise from the decreased self-evaluation in upwards comparison, the actual self-appraisals were not measured. More

recent research measuring attitudes about the self can provide somewhat greater credence for this assumed process. For example, Tsai (2010) demonstrated more clearly that high self-relevance comparisons lead to contrast, whereas low relevance comparisons lead to assimilation. Specifically, in this study, business students who learned about a high-performing student rated their own academic performance lower when the other student was in their same major, but higher when the student was in a different major. However, Tsai did not examine comparisons in close relationships.

Overall, reactions to making an upwards comparison to one's partner have been found to inspire positive and negative emotions. It remains unclear what, exactly, may influence some to experience a greater sense of their own capacity in reaction to a partner's work achievement, and others a lower evaluation of themselves. Existing theory and research evidence surrounding social comparisons indicate that whether one assimilates or contrasts oneself to a high performer revolves around the implications of the other's success for one's self-concept. What determines responses to a comparison, then, may be driven by where an individual's self-concept is rooted. The framework of self-concept levels has had noteworthy applications to social comparison theory (Gardner, Gabriel, & Hochschild, 2002) and may be especially useful for predicting reactions to a partner's work success. Specifically, levels of self-concept may affect the comparison outcomes by making the similarity between partners more or less salient to the focal individual. Moreover, someone's relative orientation towards the work versus family sphere, which has implications for the extent to which work is central to their identity, may also be an important factor in determining the reaction to an upwards comparison concerning a romantic partner's work achievement.

Individual and Relational Self-Concept Levels

According to the Tripartite Model of the Self, the self consists of individual, relational, and collective levels (Sedikides, Gaertner, & O'Mara, 2011). The individual self encompasses the unique aspects of an individual that distinguishes her from any other person, the relational self is defined by close relationships, and the collective self by important group memberships (Gaertner, et al., 2012). These different levels of the self are assumed to differ in terms of "affective, motivational, self-regulatory, and behavioral responses" (Chen, Boucher, & Tapias, 2006). Each level of the self can be conceptualized at the state and trait level; although any level may be temporarily activated, one level is chronically active. Of particular interest for the present study are the chronic levels of the individual and relational self-concept.

Research indicates that a relational, also referred to as interdependent, self-concept increases the likelihood of positive over negative reactions in response to upwards comparisons. When primed to activate the interdependent self, people appear to be less threatened by a close other's performance (Gardner et al., 2002; Schmitt, Branscombe, Silvia, Garcia, & Spears, 2006). Research also suggests that these effects hold for assimilation and contrast effects—that is, the self-assessment of one's own standing in the comparison domain, as well. For example, adopting a cooperative mindset may lead to assimilation, whereas a competitive mindset to contrast (Colpaert, Muller, Fayant, & Butera, 2015).

Similarly, Kemmelmeier and Oyserman (2001) examined students' reactions to other high-achieving students. When rating their own academic performance, those with high interdependence exhibited assimilation, whereas those with low interdependence exhibited contrast. Interestingly, however, there was no effect observed for high compared to low levels of the independent self-concept. Alternately, Cheng and Lam (2007) found the hypothesized effect

of the independent self-concept on self-evaluations. Chinese junior high students had higher evaluations of their own abilities when their interdependent self-construal was salient, with the reverse effect found when the independent self was active. In several related studies, students primed with "we" pronouns, which is expected to activate their interdependent self-concept, had higher generalized evaluations of themselves following upwards versus downwards comparisons. On the other hand, the opposite effect emerged for those primed with "I" pronouns, which is expected to activate participants' independent self-concept (Stapel & Koomen, 2001, studies 1, 2, and 5).

However, it is unclear how effects might hold for such comparisons within romantic relationships in particular. Lockwood and Pinkus (2014) posit that for comparisons within romantic partnerships the interdependent self may be continually activated. However, this may not necessarily stand for comparisons in domains that are highly self-relevant. Kemmelmeier and Oyserman (2001) tasked students with generating their upwards comparison target themselves, leaving the nature of their relationship and closeness with their targets unclear, and in the other studies reviewed participants were exposed to vignettes of similar strangers.

This being said, along with research, theory on these levels of the self suggests that contrast should be especially likely for those with an individual self-concept, and assimilation for those with a relational self-concept. The individual self is defined through the aspects of a person that differentiate him or her from others. These individuals should therefore be more likely to focus on differences between themselves and their high-achieving partner, which would more likely result in contrast. Moreover, someone else's achievement should be more likely to be perceived of as threatening to their personal sense of desirable uniqueness. The opposite should be true for those with a relational self-concept. This identity level is characterized through

attributes shared with others who are close to the focal individual as well as roles enacted in interpersonal relationships (Sedikides et al., 2011). People with a chronically activated relational self should therefore be more likely to emphasize similarities between themselves and their successful partners, which would prompt assimilation. Even further, given that the self partially consists of the overlap between themselves with their partner, their partner's achievement may be experienced as if it was *their own*.

In essence, following from past research and theory, someone with a chronically-active individual identity level may be more likely to evaluate the work success of her partner in relation to her own, independent work identity and accomplishments. Alternately, someone with a relational self-identity may be less likely to react to his partner's accomplishments by contrasting them with his own, but rather by further identifying himself with his partner—this may more likely lead to assimilation.

Hypothesis 1a: Those with a higher individual self-concept will be more likely to experience lower self-evaluations in work performance and self-esteem in response to their partner's work accomplishment, compared to those with a lower individual self-concept.

Hypothesis 1b: Those with a higher relational self-concept will be more likely to experience higher self-evaluations in work performance and self-esteem in response to their partner's work accomplishment, compared to those with a lower relational self-concept.

Work and Family Centrality and Contingent Self-Esteem

Given the importance of the relevance of a comparison domain to one's self-concept, one potentially critical factor may be work and family centrality. Work centrality refers to how

important work is to an individual (Paullay, Alliger, & Stone-Romero, 1994). That is, how central is work within a person's life, and how keenly one identifies oneself with one's job (Hirschfeld & Feild, 2000). People who view their work role as central to them consider this domain highly relevant to their sense of self. On the other hand, family centrality refers to the extent to which an individual perceives family as important to life (Carr, Boyar, & Gregory, 2008). People with high family centrality view their family as a central aspect of their life, and place high value upon family. Such individuals will likely view their family role as more impactful for their sense of self.

For example, Carr and colleagues (2008) found that the negative impact of work interfering with family on job retention and satisfaction was stronger for employees who had higher family centrality than for those with greater work centrality. Workers with greater family centrality prioritize the family domain over work, suggesting that they should derive a greater sense of their self from this area. Likewise, Carlson and Kacmar (2000) found that the relationships between family role ambiguity with family interference with work and family satisfaction, as well as between family role conflict and family satisfaction, were stronger for those with higher work centrality. Individuals who view their work role as more central to themselves may instead be more likely to have more negative attitudes towards the family domain when sources of conflict originate in this domain. This also indicates that those with greater work centrality may prioritize the family less and will be less likely to define themselves through it.

Research suggests that these individual differences reflect the degree to which individuals prioritize work over family (or vice versa), and theoretical definitions hold that these variables represent how central, important, and valued either domain is to an individual. Essentially, work

and family centrality should intimate the degree to which the work versus family domains are (or are not) relevant to their sense of self.

A related concept is contingent self-esteem, which reflects the degree to which an individual's self-regard is tied to their goals in a certain area (Crocker, 2002). Succeeding or failing to succeed in a domain upon which one's self-esteem is dependent therefore results in an increase or decrease in self-worth. In this way, self-esteem contingent upon work performance and achievement is conceptually similar to work centrality, and self-esteem contingent upon family and relationships is similar to family centrality.

Therefore, based on findings from social comparison research that the self-relevance of a comparison area predisposes individuals to experience contrast, I predict the following:

Hypothesis 2a. In response to their partner's work accomplishment, those with higher work centrality and work-contingent self-esteem will report lower self-evaluations in work performance and self-esteem compared to those with lower work centrality and work-contingent self-esteem.

Hypothesis 2b. In response to their partner's work accomplishment, those with higher family centrality and family-contingent self-esteem will report higher self-evaluations in work performance and self-esteem compared to those with lower family centrality and family-contingent self-esteem.

Assimilation, Contrast, and Emotion

The increase or decrease in a person's self-evaluated abilities and worth in response to her partner's work success is also very likely to spur an emotional reaction. Social comparisons in general are known to yield varied emotional outcomes (Smith, 2000), both positive and negative (Buunk, Collins, Taylor, VanYperen, & Dakof, 1990). As noted, an upwards

comparison to one's partner may spur more positive over negative affective responses (Pinkus, et al., 2012), although the relevance of the comparison domain to the self also corresponds to more negative affect (Beach, et al., 1988).

More specifically, assimilation is likely to spur pride, and contrast envy. This point is supported by research investigating the affective outcomes of comparisons. Tesser and Collins (1988) examined emotional reactions to being outperformed by others and found that pride (in the other) and jealousy were two of the most likely reported responses. In open-ended responses, people commonly mentioned jealousy in cases in which they were outperformed in an area relevant to the self; pride, meanwhile, was the only positive emotion noted in instances of being outperformed.

Research similarly indicates that people associate vicarious pride, felt on behalf of another, with communal personality traits (Ritzenhöfer, Brosi, & Welpe, 2018). These communal traits included being sensitive, supportive, and caring, which are conceptually similar to the relational self. Contrast, meanwhile, has been linked with the experience of envy (Tsay-Vogel & Krakowiak, 2019), and people are particularly likely to experience envy when outperformed by someone in an area relevant to their self-concept (Lange & Crusius, 2015a; Salovey, & Rodin, 1984; van de Ven, Zeelenberg, & Pieters, 2012).

Theoretical understanding of envy and pride also provides credence to the proposition that upwards comparisons will cause the expression of these emotions. Pride is fundamentally conceived of as a "self-conscious" emotion (Lewis, 1993; Tagney & Fischer, 1995; Tagney, 1999; Tracy & Robins, 2004). The emotion of pride in particular is postulated to be evoked in response to positive information relevant to one's self, or due to the sense that one is viewed positively by others. In this way, both the outcomes of social comparisons and pride are

connected to one's view of the self. Given that the process of assimilation in social comparison is understood to also generate a positive rise in one's self-evaluation, this process should result in feelings of pride.

Envy is similarly associated with the self. Envy is postulated to arise in circumstances in which individuals view themselves as lacking or inferior in an area that is relevant to their sense of self (Parrot & Smith, 1993). Moreover, people are particularly likely to be envious of others who they view as similar to them, who outdo them in domains that are relevant to the self-concept (Lange & Crusius, 2015a). Envy is therefore a likely outcome of contrast. Importantly, envy may still exist within close relationships—the dual conception that envy may take a benign or malicious form allows for envying another without bearing ill-will towards him or her (van de Ven, 2016; van de Ven, Zeelenberg, & Pieters, 2009). Whereas malicious envy is characterized by negative thoughts about the person who was the target of the social comparison that inspired the emotion, benign envy is characterized by more positive thoughts about the target individual, with greater focus on the performance outcome (Lange & Crusius, 2015a). The decrease in one's self-evaluation following one's partner's high achievement should therefore spur benign envy.

Hypothesis 3a: Self-evaluated work performance and self-esteem will be negatively related to envy.

Hypothesis 3b: Self-evaluated work performance and self-esteem will be positively related to pride.

Emotions and Motivation in Social Comparisons

Differing emotional responses following social comparison with a partner will have implications for an individual's own work behavior. Work motivation is a relevant outcome for broadening understanding of the effects of one person's work experiences on their spouse. Role

model theory, closely linked to assimilation, proposes that assimilation will increase achievement motivation (Lockwood & Kunda, 1997; Morgenroth, Ryan, & Peters, 2015). However, the alternate viewpoint suggested by self-regulation theories posits that this may not uniformly be the case (Lord, Diefendorff, Schmidt, & Hall, 2010). As supported by research as well as theory, the different emotions experienced following an upwards comparison may themselves lead to different degrees of motivation.

Role model theory and motivation through assimilation. Assimilation has long been proposed as a key element for motivation. According to research and theorizing on the effects of role models in social comparison, assimilation with a successful other is likely to boost one's motivation and inspiration to achieve in a similar fashion (Lockwood & Kunda, 1997). A range of studies on the influence of role models also assessed how participants' reported motivation changes following exposure to high performers. Following upwards comparison to a similar, successful other, people report higher motivation and greater intentions to engage in proactive behaviors in their academics (Brothers, 2014; Fortune, 2012; Lockwood, Jordan, & Kunda, 2002), health (Lockwood, Wong, McShane, & Dolderman, 2005; Schokker et al., 2010), and career (Buunk, Peiró, & Griffioen, 2007).

A limitation of this literature, however, is that motivation is assessed by means of self-reports of feeling motivated or of intentions to engage in behaviors, without testing an actual opportunity for work or task performance. This is problematic given that scholars have postulated that as opposed to serving as a means for development, assimilation in upwards comparison may be driven instead by the desire for self-enhancement (Suls, Martin, & Wheeler, 2002). Self-reported motivation measured in these studies may therefore only represent greater confidence in one's capacity to achieve or inflated positive feelings about future work—which is

unlikely to translate into greater motivation and effort in an actual task scenario. After all, rating one's motivation is more abstract as compared to actually engaging in a concrete task; and considering future behaviors also implies a degree of temporal distance. When actions are viewed as more abstract and distant, people are actually more likely to procrastinate on them (McCrea, Liberman, Trope, & Sherman, 2008).

Self-regulation and motivation. In stark contrast to theory on role models, viewed through the lens of self-regulation assimilation may more likely engender lower, and contrast higher, motivation and effort within the comparison domain. Theories of self-regulation attempt to describe and model the internal processes governing goal pursuit (see Lord et al., 2010, and Neal, Ballard, & Vancouver, 2017, for reviews). Whereas the role model literature characterizes assimilation as a motivating force, the framework of self-regulation suggests that it could have the *opposite* effect. Focusing on the differences between one's accomplishments and the achieving party may be a potent motivator by reminding individuals of the discrepancy between their current and desired states (Bandura, 1988). The experience of contrast effectively serves to signal discrepancy—after witnessing a high-performer, people are forced to confront the fact that their level of achievement is lower than what they had previously envisioned. On the other hand, attending to the similarities between oneself and the achiever, the hallmark of assimilation, provides no such reminder. Rather, the increased self-regard and identification with the successful other characteristic of assimilation could serve to signal the nearness, and therefore lack of discrepancy, between current and goal states. In this way, contrast in upwards comparison might be particularly motivating. Assimilation, meanwhile, would not.

According to Carver and Scheier's (2001, 2004, 2013) Control Theory (also situated within the self-regulatory perspective), the differing affective responses experienced with

contrast and assimilation should themselves animate different degrees of motivation for one's own work. In this view, the emotions experienced drive greater (or lesser) effort to be put in in the process of goal-striving. Negative emotions will propel greater motivation within goal pursuit. However, positive emotions experienced in response to goal progress may lead to coasting—that is, less effort put forth in subsequent goal pursuit.

Work on control theory has not addressed pride nor envy in particular. Still, other lines of evidence also lend support to the viewpoint suggested by control theory. For example, research has found that the experience of benign envy can lead to higher motivation and performance in a task than feelings of admiration and malicious envy (van de Ven et al., 2011). Malicious envy is associated with a negative focus on the target of envy, but experiencing benign envy appears to motivate people to focus on achievement outcomes and ways in which they might achieve in the way that the envy target has (Crusius & Lange, 2014; Lange & Crusius, 2015a). This suggests that benign envy should engender greater motivation. Moreover, benign (as opposed to malicious) envy is more likely to be experienced when individuals believe that the target of envy is deserving of his or her success (van de Ven et al., 2012). This is also more likely to be the case for social comparisons between romantic partners.

In contrast to the self-regulatory perspective, Herrald and Tomaka (2002) and Williams and DeSteno (2008) found that the experience of pride for one's own performance, manipulated through positive feedback, led to increased motivation for future task performance. However, in Herrald and Tomaka's study participants completed an undemanding task in which they shared their opinions on aspects of college life, such as whether a small or large class size is preferable. Pride might lead to greater effort for tasks that are not effortful, and even enjoyable; yet this may be less likely to hold for demanding task work that may not be intrinsically interesting. Williams

and DeSteno manipulated pride via "social acclaim", positive feedback given for task performance. Given that participants subsequently engaged in another round of the same task, they may have been motivated to perform well out of the desire for further rewarding positive remarks, rather than due to the experience of pride.

Intriguingly, physiological evidence indicates that there may be no difference in bodily arousal associated with behavioral activation when people experience pride compared to neutral affect (Fourie et al., 2011). When it comes to more onerous and less pleasant task work in which individuals do not hold the expectation for immediate social reward for performance (e.g., most work scenarios), an initial experience of pride may therefore be more likely to engender feelings of calmness and the tendency to decrease efforts. Indeed, overall pride may not function as well as negative emotions for motivating actions, as found with voting behavior (Panagopoulos, 2010).

Hypothesis 4a: Those who experience higher levels of envy will perform better in an effort-driven task than those who experience lower levels of envy.

Hypothesis 4b: Those who experience higher levels of pride will perform worse in an effort-driven task than those who experience lower levels of pride.

Moreover, certain individual differences in motivational tendencies may be able to provide a more fine-grained understanding of the effects of envy and pride on motivation. The approach temperament represents the tendency to be motivated by desirable outcomes, and is contrasted with the avoidance temperament, which reflects the tendency for people to be spurred into action more by negative outcomes (Elliot, 2006). Whereas the avoidance temperament is correlated with neuroticism, negative emotionality, and the behavioral inhibitions system, the approach temperament is correlated with extraversion, positive emotionality, and the behavioral

activation system (Elliot & Thrash, 2002). Findings suggest that when people are attuned more to the possibility of failure, they may display greater avoidance motivation, but when attuned more so to the possibility of success, they display more approach motivation (Förster, Grant, Idson, & Higgins, 2001). Specifically, Förster et al. (2001) found that people put greater effort into avoiding failing a task when they were given instructions that they would lose potential earnings. Alternately, they shifted greater effort into reaching a goal and succeeding in a task when told that they could gain rewards.

Both research and theory therefore indicate that these dispositional tendencies have important implications for motivation. In particular, these temperaments may lend further insight into who will be motivated when experiencing pride or envy. For example, given that those experiencing envy are more likely to construe their situations as similar to failure, as their partner has "outdone" them, individuals with high trait avoidance may be more motivated to perform in a task—the motivating force of failure has already been made salient for these individuals. On the other hand, people with a high approach disposition are geared towards success. Because the potential for success will have already been made active for those experiencing pride on behalf of their partner, those with higher trait approach tendency experiencing success could be more motivated than those with a lower approach disposition.

Research Question 1: Will approach/avoidance temperament moderate the effect of (a) pride and (b) envy on task performance?

Hypothesis 5: Envy and pride will mediate the relationship between self-evaluations and task performance following exposure to a partner's work success.

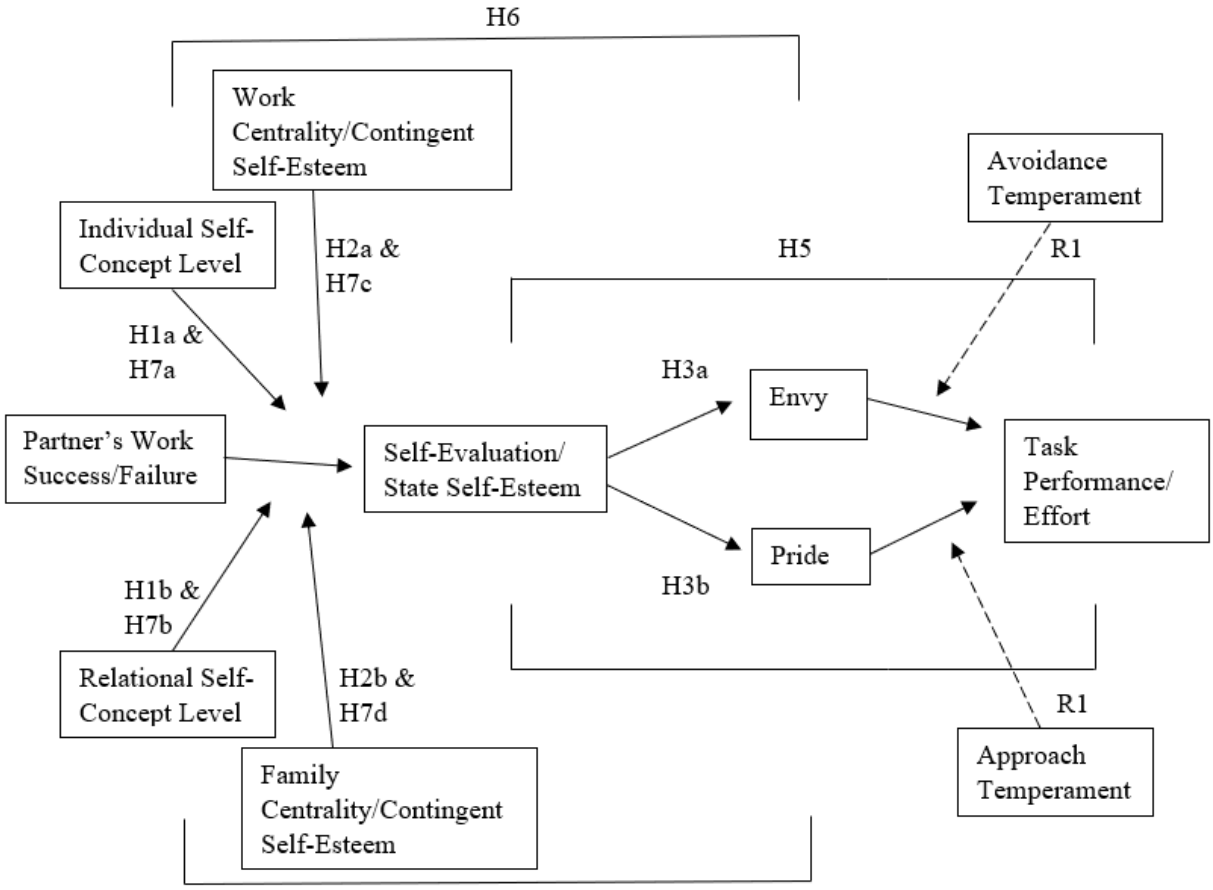
Finally, I propose a sequence of moderated mediation hypotheses linking a partner's work success to individuals' emotions. The full research model is illustrated in Figure 1.

Hypothesis 6: Self-evaluations/state self-esteem will mediate the relationship between a partner's work success and envy and pride.

Hypotheses 7a-d: the (a) individual self-concept, (b) relational self-concept, (c) work centrality/competence contingent self-esteem, and (d) family centrality/partner contingent self-esteem will moderate these mediated relationships.

Figure 1.

Model of Study Hypotheses



METHOD

Pilot Test

Prior to collecting data from working adults, the study materials were pilot tested to ensure that there was variance in scores and time spent on the RAT, and that the experimental condition recall prompts were suitable (i.e., that people understood them and were generally able to recall and describe memories that satisfied the prompts). The pilot test was conducted with a sample of 66 undergraduate psychology students who completed the survey in exchange for course credit. Although some students did not have applicable experiences to draw from, the majority were able to recall and describe relevant instances in which their romantic partner experienced either a work- or school-related success (e.g., receiving a high grade on an exam) or failure (e.g., not being selected after applying for a job) and were able to describe their most recent memory with their partner (e.g., watching tv together) when asked. There was also variability in scores on the Remote Associates Task (ranging from 0-20+ items correct, out of 30, $M = 5.34$, $SD = 7.16$) and time spent on the task (ranging from less than one minute, to more than 20 minutes, $M = 4.28$, $SD = 5.28$ minutes). These pilot results indicated that the RAT generated variability in responses and thus may adequately measure differences in task motivation and effort.

Primary Study Participants

Participants were 343 English speaking adults in a committed romantic partnership. Participants were recruited through the research site Prolific. In terms of features and data quality, Prolific has been deemed equal or superior to more widely used subject pool sites (e.g., Amazon's Mechanical Turk) (Palan & Schitter, 2018). Participants were compensated with $3.25 for completing the study.

Ten participants either failed attention check items or did not provide a response when asked to describe a memory with their partner, resulting in a sample of 333 (109 in the partner success condition, 106 in the partner failure condition, and 118 in the control condition) usable responses. This was a multinational sample, with 16.40% of participants residing in Canada, 15.20% in Mexico, 14.60% in the U.S., and 13.10% in the U.K., with the remaining 40.7% hailing from assorted countries in Europe, and a few participants residing in Australia, Southeast Asia, the Middle East, and Southern Africa. These country of residence percentages are approximately equal to those reported by participants to describe their nationality.

All participants identified as either male (54.70% of the sample) or female (45.30%). Participants ranged in age from 19 to 67 years old (M = 31.97, SD = 8.79). The majority of participants were White (60.40%), and a smaller percentage identified as Hispanic (16.80%) and Asian (9.90%). Fewer than 5% of participants identified as African American, Bi- or Multi-racial, Native American, Pacific Islander, Middle Eastern, or Other. The sample was also fairly educated; 43.20% of participants had a four-year bachelor's degree, and 17.10% had a master's degree. Less than one percent (.60%) of participants had less than a high school degree, 7.80% were high school graduates, 15.90% had completed some college, 8.70% had an associate's degree, and 6.60% had either a doctoral or professional (JD or MD) degree.

Participants worked in a variety of different fields, with the plurality being professional, scientific, or technical services (16.2%), and health care and social services (11.10%). Fields from construction, retail trade, manufacturing, educational services, and information were represented in the sample. On average, participants had worked 5 years (M = 4.99, SD = 5.18), with a minimum of less than one year to a maximum of 36 years. They reported working an average of 38.28 hours per week (SD = 10.87). Participants reported very similar demographics

(in terms of race/ethnicity, highest level of education obtained, field of work, hours worked per week, etc.) for their partners.

Procedure

All participants gave their informed consent to participate in the study; consent forms may be found in Appendix A. This study was advertised with a cover story that the purpose of the study was to examine judgments. Participants first completed a set of measures, including self-evaluated performance in their work role and state self-esteem, as well as measures of their individual and relational self-concept level, work and family centrality, work competence- and partner support-contingent self-esteem, and approach and avoidance temperament.

Participants were then randomly assigned to one of three experimental conditions. Those in the partner success condition were asked to recall a time in which their partner experienced an important or meaningful success in his or her work, with the examples of gaining a promotion or meeting a major work goal. They were then asked to write about the memory and attempt to relive it. For the two comparison conditions, participants in the partner failure condition were instead tasked with recalling an instance in which their partner experienced some failure related to his or her job, with examples of missing an important work deadline or making an important error in his or her job. Those in the neutral condition were asked to recall and reexperience the last memory that they have with their partner. The partner success, failure, and neutral experience prompts may be found in Appendix F.

Participants next reported their self-evaluated work performance and state self-esteem again and rated their emotions. They were then told that they were transitioning to the second phase of the study. Given research indicating that engaging in cognitive task work may actively

dampen existing negative emotions (Kim & Kanfer, 2009), emotion ratings were collected prior to task performance.

Participants then completed the Remote Associates Task (RAT) as the dependent measure of performance (McFarlin, & Blascovich, 1984). Performance on the RAT is contingent upon effort and motivation, and this task has successfully been used as a measure of motivation (e.g., van de Ven et al., 2011). Items were displayed together on a single page. Time spent on the screen (i.e., time spent on the questions) was recorded through Qualtrics. Performance was operationalized as the number of items correct, and effort as the cumulative amount of time spent on all items. The RAT with instructions may be found in Appendix J. Participants were also asked to provide ratings of their intended effort to put into work and their relationship.

Finally, participants rated their closeness with their partner, their trait capitalization, and how similar they view their job to be to their partner's. They were asked to provide demographic information and complete a manipulation check. Following these last items, participants were asked to volunteer what they believed that the study was about, in order to monitor for possible demand characteristics. Finally, they were thanked for their participation and debriefed in full about the true hypotheses of the study.

Measures

Self-evaluation. Self-evaluations were operationalized through ratings of work performance as well as state self-esteem. Participants' self-evaluation of their work performance (i.e., the measure of assimilation and contrast) was calculated from the Job Performance Measure (adapted from Onwezen, van Veldhoven, & Biron, 2014). Participants were asked to rate the degree to which 9 statements describe them in their work role (see Appendix B for items). A sample item is "I achieve the objectives of my job". Participants rated their self-evaluation on a

5-point Likert scale (1 = totally not applicable; 5 = totally applicable). Cronbach's alpha for this scale measured prior to the manipulation was .87, and the alpha for the scale post-manipulation was .85.

Global self-evaluations were operationalized using the 7-item performance and 7-item social subdimensions of the State Self-Esteem Scale (SSES, Heatherton & Polivy, 1991). All items are rated on 5-point Likert scales (1 = Not at all, 2 = A little Bit, 3 = Somewhat, 4 = Very Much, 5 = Extremely). A sample item for the performance dimension is "I feel confident about my abilities", and a sample item for the social dimension is "I am worried about whether I am regarded as a success or failure." The alpha for this measure at Time 1 was .88, and the alpha at Time 2 was .87. Items may be found in Appendix B. Assimilation and contrast were operationalized through change in self-evaluated ratings of work performance and change in state self-esteem, defined by scores following the study manipulation controlling for baseline scores.

Individual and Relational Self-Concept Levels. Individual and relational self-concept levels were assessed with the Levels of Self-Concept Scale (Johnson, Selenta, & Lord, 2006). The individual and relational self-concept measures are both 5-item scales using 5-point ratings (1 = Strongly disagree to 5 = Strongly Agree). An example item from the individual self-concept measure is "I often compete with my friends." A sample item from the relational self-concept measure is "I value friends who are caring, empathic individuals." Cronbach's alpha was .79 for the individual self-concept measure, and .75 for the relational self-concept measure. These measures may be found in Appendix C.

Work-Family Centrality. Work-family centrality was assessed with scales from Carlson and Kacmar (2010) adapted from Whitley and England (1977). This measure asks respondents to

distribute points in different domains (leisure, community, work, religion, and family) to represent their present lives. Respondents are allotted 100 points to designate. The order in which each domain is listed was be randomized. More points assigned to an area indicates greater centrality of that domain.

Work- and Relationship-Contingent Self-Esteem. Work-contingent self-esteem and relationship-contingent self-esteem were measured with adapted academic competence and family support scales from the Contingencies of Self-Worth Scale (Crocker, Luhtanen, Cooper, & Bouvrette, 2003). The work competence subscale consists of 5 items, all rated on 7-point scales (1 = Strongly Disagree, 4 = Neutral, 7 = Strongly Agree). One item is "My self-esteem is influenced by my work performance." The alpha for this measure was .80. The partner support scale also consists of 5 items and utilizes the same rating format. A sample item is "It is important to my self-respect that I have a partner that cares about me." Cronbach's alpha for this scale was .76. Centrality and contingent self-esteem scales are listed in Appendix D.

Approach and Avoidance Tendencies. Approach and avoidance dispositions were assessed with the Approach-Avoidance Temperament Questionnaire (ATQ, Elliot & Thrash, 2002). This is a 12-item scale using a 7-point response format (1 = Strongly Disagree, 4 = Neither Agree nor Disagree, 7 = Strongly Agree). A sample avoidance item is "By nature, I am a very nervous person". A sample approach item is "Thinking about the things I want really energizes me". The alpha for the avoidance measure was .88, and .85 for the approach measure. This scale is located in Appendix E.

Envy and Pride. Envy was operationalized by scores on the 5-item Benign Envy Scale (adapted from Lange & Crusius, 2015b). A sample item is "I am focused on how I can become equally successful to my partner in the future." Ratings were made on 6-point scales, from 1

(strongly disagree) to 6 (strongly agree). Cronbach's alpha for this measure was .79. This scale is displayed in Appendix H. State pride was measured with the Authentic Pride Scale (Tracy & Robins, 2007). Respondents rated the extent to which they are currently experiencing 7 feelings (e.g., "Accomplished") on a scale from 1 (not at all) to 5 (extremely). The alpha for this measure was .92. This scale is depicted in Appendix G. To diminish potential demand characteristics and ensure that pride and envy in particular (and not simply positive or negative motions) are responsible for any effects, overall positive and negative affect were also measured. Affect was assessed using the International Positive and Negative Affect Schedule—Short Form (Thompson, 2007). Ten emotions were rated on 5-point scales, with 1 indicating a weaker and 5 indicating a stronger experience of the emotion. The alpha for the positive affect items was .74, and the alpha for negative affect was .84. This scale may be found in Appendix I.

Self-Rated Work and Relationship Motivation. To capture participants' self-reported intentions to devote effort into their work and romantic relationship, ratings of behavioral intentions for their work and relationship were also collected. These ratings were adapted from a motivational scale developed by Lockwood et al. (2002). Self-reported motivation in one's work and romantic relationship are both comprised of 7 items, rated on 7-point scales (1 = Not at all true, 7 = Very true). A sample work motivation item is "I plan to put more time into my work." A sample relationship motivation item is "I plan to put more time into my romantic relationship." The alpha for the work motivation scale was .84, and the alpha for the relationship motivation scale was .83. These measures may be found in Appendix K.

Control Variables (Relationship closeness, capitalization, and job similarity). The closeness of participants' romantic relationships was measured with the Unidimensional Relationship Closeness Scale (URCS) (Dibble, Levine, & Park, 2012). This is an 11-item

measure using a rating scale with points ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). A sample item is "My relationship with my romantic partner is close." Cronbach's alpha for these items was .95. The tendency to capitalize on positive work events by sharing with a romantic partner was measured with the adapted Work–Family Interpersonal Capitalization Measure (Ilies, Liu, Liu, & Zheng, 2017). This scale consists of three items, all rated on 7-point Likert scales, from 1 (Strongly Disagree) to 7 (Strongly Agree). A sample item reads "I tell my spouse about happy events at work." The alpha for this measure was .85. Job similarity was assessed with 3 items adapted from prior research (Pinder & Schroeder, 1987; Schaubroeck & Lam, 2004; Stone & Gueutal, 1985). A sample item reads "Overall, the work that I perform in my job is similar compared to the work that my romantic partner performs in his/her job." Items were rated on 7-point scales (1 = Strongly Disagree, 7 = Strongly Agree). The alpha for these items was .93. These three scales may be found in Appendix L.

Demographics. Demographic information was captured by including questions on participants' age, sex, race/ethnicity, education level, field of work, average hours worked per week, and tenure in their current organization. Participants were asked to provide this information for their partner as well, along with the length of time that they have been in a relationship with their partner. These items are listed in Appendix M.

Manipulation and Attention Checks. To ensure the efficacy of the manipulation, participants completed a manipulation check. They were asked to label the type of memory that they recalled. Participants who fail to identify the correct memory prompt given in their condition will not be included in analyses. This item is presented in Appendix N. To further assess the efficacy of the manipulation, participants' written responses describing their thoughts and feelings experienced in their memory will also be assessed for content related to their own

self-evaluations and comparison between themselves and their partner. Attention check items instructing participants to select a given response (e.g., for this question, please mark “strongly disagree” in order to show that you are paying attention) were interspersed throughout measures.

RESULTS

Unexpectedly, participants in the control condition reported overwhelmingly positive memories and feelings about their partners when asked to describe the most recent memory that they had involving their partner. Two responses below are given to illustrate:

> "Yesterday morning I woke up cuddled under the blankets, air conditioner blasting, and the body heat of my mate curled into me, waking me lightly to tell me he was going to the store to get milk. We had run out the day before and I had expressed how much I wanted cereal. I tried really hard to keep my grasp on sleep, but I absolutely love the feeling of waking up in my mate's arms, with both of us still hazy from sleep, the morning sun a pinkish glow from behind the red velvety curtain, at least 2 cats nearby. Nothing beats it. The only thing that comes close is falling asleep In his arms. I wouldnt trade those feelings for pretty much anything. There's nothing like the security of coming out of a totally defenseless state into feelings of absolute peace, safety, and belonging. It makes me feel loved and cherished and precious and cared for, like an heirloom ring or something along those lines. Like I'm irreplaceable, and the feelings are completely mutual, which makes for even nicer feelings. Its lovely all around, and I had a lovely morning, even though he ended up getting the wrong kind of cereal lol."

> "I was sitting at the dining table with my significant other. I could not stop looking at him. I was mesmerised by his beauty. He is the most polite person ever. Even when he eats. He never rushes. He's well mannered and gentle. Every bite of his is adorable to watch. Especially when he glances at me after each bite, and smiles at me. I remember

feeling so in awe about how lucky I was to be in that very moment with him. I was very happy. I felt super content. I felt warm. I felt safe. I love eating with him."

Participants in the control condition in the pilot test were not so effusive about their partners, however the full sample of working adults were in longer, and therefore likely more committed, relationships. Another reason for this positivity may have been due to the fact that data were collected in summer 2020 during international lockdown procedures enforced to limit the spread of COVID-19. These abnormal circumstances may have led participants to prioritize their social relationships more and to devote more time to their families, as well as to generally feel more sentimental. Several participants mentioned that conditions under COVID-19 had impacted either the time spent with their families or the activity that they took part in with their partner in the memory that they described. Two examples are below:

"I spent last night with my wife. We built a tend out of cushions and sheets, set up small lamp inside and watched a movie on a laptop with our daughter. We did this because we can't leave the house due to covid, and we figured making a little "escape" or safe place inside our home was the second best option. It was amazing. It felt like we were in completely different place. Safe from the dangers of the outside world. Our daughter loved it as well. She called it her castle and she has been playing in the tent ever since."

"A recent memory I have with my partner was when we were cooking together. In our typical lives (pre-covid) our schedules rarely synced up enough for us to be able to cook and enjoy an actual homecooked meal that we made with one another. It was during this past weekend and our daughter was visiting her parents as they haven't seen her much at all during this quarantine time. This allowed my partner and I several hours to cook a

full-on meal and just relax with one another at home by ourselves. During our regular day-to-day it's usually one or the other that prepares dinner, as we're both pretty busy at different times especially since our daughter has come into the picture. Food is something that we both bonded over and a big part of our relationship, so being able to cook with her again reminded me of earlier times in our relationship. It reaffirmed feelings and was just a great way to de-stress from the ongoing onslaught of reality that is 2020 so far. It was a nice reprieve and the perfect day."

Participants in the partner success condition described instances in which their partner received a promotion, completed some milestone (such as obtaining an educational degree), received a job offer, or performed well in some objective. Participants in the partner failure condition recalled varied instances in which their partner made a mistake in their work, had a period of low performance, or did not receive a job or internship offer.

The unexpectedly positive feelings reported in the control condition responses do not provide a neutral contrast to the partner success and failure conditions as desired. Indeed, the control condition and partner success conditions did not significantly differ on either feelings of pride $t(224) = .85$, 95% CI [-.14, .35], $p=.40$ or positive affect, $t(224)=-.99$, 95% CI [-.31, .10], $p=.32$. Therefore only responses provided by the partner success and failure conditions are included in hypothesized analyses.

Confirmatory Factor Analyses

All measures used in this study are either established scales or are adapted from developed scales. However, I conducted confirmatory factor analyses (CFA) using Mplus version 8 (Muthén & Muthén, 2017) to ensure that the data collected in measures meant to capture a particular variable are indeed best represented by single-factor models. I conducted a

CFA using maximum likelihood estimation. Because of the larger number of items and scales relative to the sample size, I created parcels for all measures save for those with only three items (job similarity and Work-Family Capitalization). I averaged 2 or 3 items per scale depending on the number of items, resulting in 2 to 5 parcels per construct. Items and parcels were loaded onto their respective latent factors. Overall, across 15 latent factors, fit statistics suggest that the data conforms acceptably to represent the underlying 15-factor structure: the comparative fit index (CFI) = .89, the root mean square error of approximation (RMSEA) = .05, the standardized root mean square residual (SRMR) = .07, and the chi-square test of fit = $\chi 2(1119) = 2109.56$, $p < .001$. All factor loadings were significant and >.40.

I conducted a separate CFA for the Time 1 self-evaluated performance and state self-esteem measures (separate from the Time 2 items modeled in the first CFA), using maximum likelihood estimation. I again created parcels by averaging items. The CFI for this CFA = .93, RMSEA = .11, SRMR = .08, and $\chi 2(19) = 100.71$, $p < .001$. All factor loadings were >.50 and were significant.

I also tested a single-factor model in the 30 dichotomous (correct or incorrect response) questions composing the Remote Associates Task. This CFA analysis ran with weighted least square mean and variance adjusted (WLSMV) estimation. Fit statistics indicate that a one-factor model was a good fit for the data. Although the chi-square test for fit was significant, $\chi 2(405) = 535.27$, $p < .001$, the CFI = .99, the RMSEA = .03, and the weighted root mean square residual (WRMR) = .90. All factor loadings were significant and >.60

Descriptive Results

Means and standard deviations for all measures, split by condition (partner success, partner failure, control), are presented in Table 1. Participants evaluated their work performance very favorably and had somewhat low levels of envy with higher levels of pride. The means for self-evaluated work performance as well as state self-esteem measured prior to and immediately following the recall manipulation are also very similar.

Table 1.

Means and Standard Deviations for Measures by Condition

Measure	Partner Failure		Partner Success		Control	
	M	*SD*	*M*	*SD*	*M*	*SD*
Job Similarity	3.46	1.99	3.02	1.90	3.46	2.05
Relationship Closeness	6.24	.85	6.08	1.07	6.23	.88
Work-Family Capitalization	6.25	.86	5.88	1.18	6.04	1.05
Relationship Length	7.24	5.94	6.99	6.66	7.14	7.13
Self-Evaluated Work Performance T1	4.16	.57	4.19	.51	4.17	.48
Self-Evaluated Work Performance T2	4.17	.54	4.16	.54	4.17	.53
State Self-Esteem T1	3.73	.68	3.73	.67	3.75	.65
State Self-Esteem T2	3.73	.67	3.74	.66	3.75	.65
Individual Self-Concept	3.24	.89	3.07	.89	3.22	.89
Relational Self-Concept	4.39	.50	4.46	.43	4.39	.54
Work Centrality	23.41	12.11	23.63	12.67	24.22	11.73
Family Centrality	44.66	18.39	41.50	18.63	41.73	16.88
Avoidance Temperament	4.31	1.39	4.18	1.58	4.32	1.47
Approach Temperament	5.51	.91	5.34	1.01	5.32	.99
Envy	3.52	1.03	3.59	1.16	3.69	1.11
Pride	3.21	.86	3.14	.95	3.23	.91
Negative Affect	2.04	1.01	1.97	.86	1.88	.81

Table 1. (cont'd)

Positive Affect	3.54	.69	3.62	.75	3.51	.83
RAT Score	5.58	22.61	6.84	16.20	10.56	9.17
Time on RAT (minutes)	10.95	8.18	10.82	6.95	10.96	8.08

Note. N = 106 for the partner failure condition, N = 109 for the partner success condition, and N = 118 for the control condition. All values are rounded to the second decimal place. The Work- and Family-Centrality scores come from single item ratings, out of 100 points, of the importance of each domain. T1 = measured prior to the recall manipulation, T2 = measured after the manipulation.

There was no significant difference in levels of any of the trait-level or emotion variables between the partner success and failure conditions, with the sole exceptions of work-family interpersonal capitalization. Participants in the partner failure condition had a greater tendency to capitalize ($M = 6.25$, $SD = .86$) compared to those in the partner success condition ($M = 5.88$, $SD = 1.18$), $t(198) = 2.59$, $p = .01$. There was also a main effect of condition on scores on the Remote Associates Task $t(213) = 2.12$, $p = .035$. Those in the partner success condition had significantly higher RAT scores ($M = 10.56$, $SD = 9.17$) than those who recalled a time in which their partner experienced a work failure ($M = 5.58$, $SD = 22.61$).

Zero-order correlations between variables (with the overall means and standard deviations across both the partner success and failure conditions) are reported in Table 2. Relational self-concept level, family centrality, approach temperament, and pride were all positively related to self-evaluated work performance and state self-esteem measured post-manipulation, whereas avoidance temperament was negatively related to these self-evaluations. Both individual self-concept and approach temperament were positively associated with envy, as

was pride. Pride was also positively associated with relational self-concept level, family centrality, and approach temperament. Score on the RAT was only related to time spent on the task (r = .34). Relational self-concept level was also positively related to time spent on the RAT (r = .17).

Table 2.

Correlations Between Study Variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1. Job Similarity	*.93*												
2. Relationship Closeness	.11	*.95*											
3. Capitalization	.18*	.47*	*.85*										
4. Relationship Length	-.01	.04	.10										
5. Condition	-.11	-.08	-.17*	-.06									
6. Performance	.01	.21*	.27*	.08	-.01	*.88*							
7. Self-Esteem	-.07	.26*	.17*	.08	.01	.38*	*.88*						
8. Individual SC	.20*	-.01	.05	-.07	-.10	.13	-.24*	*.79*					
9. Relational SC	-.01	.30*	.29*	-.03	.08	.28*	.23*	-.06	*.75*				
10. Work Centrality	-.00	-.18*	.01	-.14*	.01	-.07	-.21*	.13	-.10				
11. Family Centrality	-.02	.21*	.02	.18*	-.09	.17*	.34*	-.23*	.16*	-.55*			
12. Envy	.24*	.14*	-.03	-.22*	.04	.02	-.09	.28*	-.00	.04	-.06	*.79*	
13. Pride	.11	.23*	.11	-.01	-.04	.42*	.51*	.00	.16*	-.07	.23*	.16*	*.92*

Note. N = 215. * $p < .05$. Capitalization = Work-Family Integration Capitalization, Length = Relationship Length, Condition = Dummy code for condition; partner failure was coded as 0 and partner success as 1. Performance = self-evaluated work performance post-manipulation. Self-Esteem = state self-esteem post-manipulation. Cronbach's alphas are reported along the diagonal.

Hypothesized Results

Hypotheses 1a, 1b, 2a, and 2b were tested through hierarchical regression in SPSS 26.0. Hypothesis 1a predicted that those with higher levels of the individual self-concept would have lower self-evaluations of their own work performance in response to their partner's work success, and Hypothesis 1b predicted that those with a relational self-concept would instead have higher self-evaluations. Of note, there was no significant difference in either self-evaluated work performance, $t(332) = .37$, $p = .71$, or self-esteem, $t(332) = -.30$, $p = .76$ measured prior to and following the recall manipulation (and this was the case for all conditions). Both the Time 1 and Time 2 self-evaluated work performance ($r = .88$) and state self-esteem ($r = .99$) measures were very strongly correlated. Because there was little-to-no change in self-evaluation and state self-esteem scores pre- compared to post-recall manipulation, I did not include Time 1 scores as a control variable in any analyses. In effect, controlling for Time 1 self-evaluated performance/self-esteem in analyses may represent an overcorrection.

To test Hypotheses 1a-b, I entered the control variables of job similarity, relationship closeness, relationship length, and work-family interpersonal capitalization in Step 1 of the regression analysis with self-evaluated performance as the dependent variable. In Step 2, I entered the centered individual and relational self-concept variables, in Step 3 I entered a dummy code for condition (partner success vs. failure), and in Step 4 I entered the interaction terms for individual self-concept and condition and relational self-concept and condition.

The F-test for the change in R^2 for including the interaction terms in the model was not significant, $F(2,204) = .19$, $p = .83$. Results therefore do not support Hypotheses 1a or 1b. The full model accounted for 14.60% ($R^2_{\text{adjusted}} = 10.08\%$) of the variance in self-evaluated work performance (T2), $F(9,213) = 3.88$, $p < .001$. The only significant predictors in the full model

were capitalization, t(213) = 2.16, β = .17, b = .09, 95% CI [.01, .17], p = .03, and relational self-concept level, t(213) = 2.11, β = .19, b = .22, 95% CI [.01, .42], p = .04. The results for the full model from this analysis may be found in Table 3. Running this model without control variables did not substantially alter these results.

Table 3.

Regression Results for Self-Concept Variables with Self-Evaluated Work Performance as Outcome

Coefficient	b	*SE*	b 95% CI	β	t
(Intercept)	3.41	.28	2.86, 3.96		12.18*
Relationship Length	.01	.01	-.01, .02	.06	.93
Relationship Closeness	.04	.04	-.05, .12	.07	.89
Capitalization	.09	.04	.01, .17	.17	2.16*
Job Similarity	-.01	.02	-.05, .02	-.05	-.74
Individual SC	.08	.06	-.04, .19	.12	1.34
Relational SC	.22	.10	.01, .42	.19	2.011*
Condition	.02	.07	-.12, .17	.02	.33
Individual SC X Condition	.03	.08	-.13, .19	.04	.38
Relational SC X Condition	.08	.15	-.23, .38	.04	.50

Note. N = 215. * p < .05. For the condition dummy code, partner failure was coded as 0 and partner success was coded as 1. Results from the full model after all predictors entered are shown.

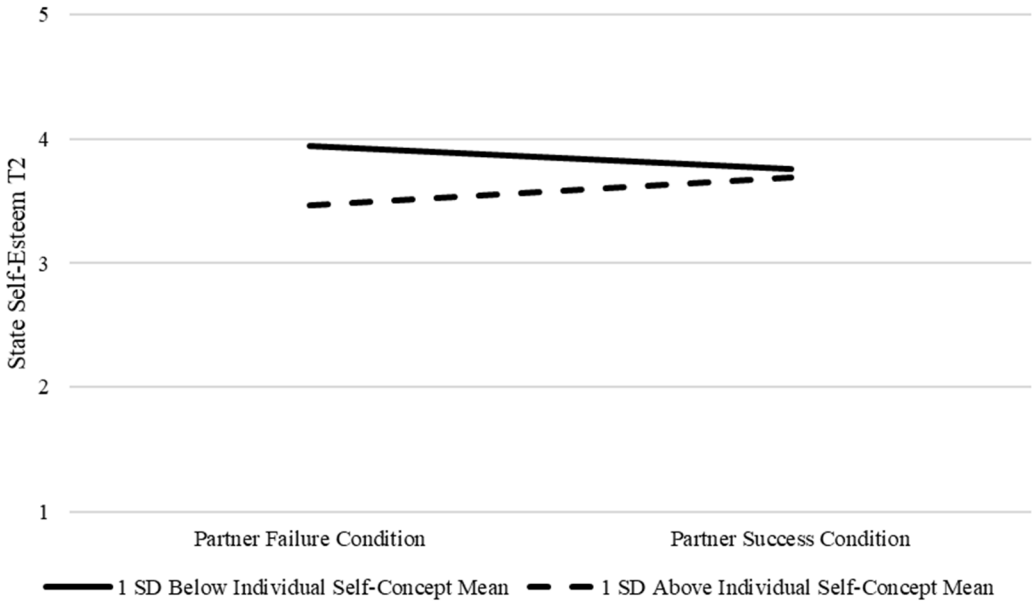
As an alternative to self-evaluated work performance, I ran this hierarchical regression analysis with state self-esteem (T2) as the dependent variable. Results are summarized in Table

4. The change in R^2 for the interaction term for relational self-concept and condition was not significant, $R^2_{change} = .00$, $F(1,206) = .10$, $p = .75$. However, the interaction term for individual self-concept and condition did reach significance, $R^2_{change} = .022$, $F(1,206) = 5.66$, $p = .018$. To interpret this interaction, I plotted the simple slopes for this interaction at 1 standard deviation below the mean for individual self-concept and 1 standard deviation above the mean (Aiken & West, 1991). The simple slopes for this interaction are shown in Figure 2. Whereas the slope for those with high levels of the individual self-concept was positive from the partner failure to success conditions ($b = .22$), for those with low levels of the individual self-concept it was negative ($b = -.18$). Furthermore, a simple slope test indicated that the slopes at one standard deviation above and below the mean of individual self-concept in the failure condition were significant; for the slope one standard deviation below the mean, $t(215) = 2.42$, $p = .016$; for the slope at one standard deviation above the mean $t(215) = 2.40$, $p = .017$.

As can be seen in Figure 2, this moderation effect takes the form of a fan; there is a much greater discrepancy in self-esteem felt by those with high versus low individual self-concept levels in the partner failure condition than there is between these individuals in the success condition. In response to their partner's work failure, people with a greater individual self-concept level felt worse about themselves than did those with a lower individual self-concept level. Accordingly, results do not find support for Hypotheses 1a-b. Only one proposed interaction was found, and the slope of this interaction term was more negative for those with higher levels of the individual self-concept in the partner failure group compared to the success group, opposite to the relationship predicted.

Figure 2.

Simple Slopes for the Interaction Between Individual Self-Concept and Condition



Moreover, in the full model including both self-concept levels and their interaction terms as predictors, the main effect of individual self-concept level was also significant, $t(213) = -3.91$, $\beta = -.36$, b = -.26, 95% CI [-.40, -.13], $p < .001$. The control variables partner closeness, $t(213) = 2.66$, $\beta = .13$, b = .19, 95% CI [.03, .23], $p = .009$, and relationship length, $t(213) = 2.84$, $\beta = .02$, b = .18, 95% CI [.01, .03], $p = .005$, were also significant coefficients. Although comparatively, the positive effect of relationship length is quite small. Results for the full model are in Table 4. Again, running the regression analysis sans control variables did not result in any different relationships between the variables of interest.

Table 4.

Regression Results for Self-Concept Variables with Self-Esteem as Outcome

Coefficient	b	*SE*	b 95% CI	β	t
(Intercept)	2.81	.33	2.16, 3.46		8.49*

Table 4. (cont'd)

Relationship Length	.02	.01	.01, .03	.18	2.84*
Relationship Closeness	.13	.05	.03, .23	.19	2.66*
Capitalization	.00	.05	-.09, .10	.01	.09
Job Similarity	-.02	.02	-.06, .03	-.05	-.77
Individual SC	-.26	.07	-.40, -.13	-.36	-3.91*
Relational SC	.17	.12	-.07, .41	.12	1.38
Condition	-.01	.09	-.17, .16	-.01	-.09
Individual SC X Condition	.23	.09	.05, .42	.23	2.48*
Relational SC X Condition	.08	.18	-.28, .44	.04	.44

Note. N = 215. * $p < .05$. For the condition dummy code, partner failure was coded as 0 and partner success was coded as 1. Results from the full model after all predictors entered are shown.

Hypothesis 2a held that a higher degree of work centrality and work-contingent self-esteem would predict lower self-evaluations in work performance and self-esteem in response to a partner's work success. Hypothesis 2b was that greater levels of family centrality and family-contingent self-esteem would predict higher self-evaluated work performance and self-esteem in reaction to a partner's work success. To test Hypothesis 2a, in Step 1 of the regression analysis I entered the four control variables, then entered centered work centrality scores in Step 2, the dummy code for condition in step 3, and the interaction term between work centrality and the dummy code as well as family centrality and the dummy code in Step 4. The F-test for the change in R^2 for including the interaction terms was not significant, $R^2_{change} = .02$, $F(2,204) = 1,71$, $p = .18$. This model did account for a significant amount of the variance in self-evaluated

performance, however, $R^2 = .12$, $R^2_{adjusted} = .09$, $F(9,213) = 3.19$, $p = .001$. The coefficients in this full model are listed in Table 5.

Table 5.

Regression Results for Centrality Variables with Self-Evaluated Work Performance as Outcome

Coefficient	b	*SE*	b 95% CI	β	t
(Intercept)	4.13	.05	4.03, 4.23		80.59*
Relationship Length	.00	.02	-.05, .03	-.04	-.52
Relationship Closeness	.05	.04	-.04, .13	.08	1.07
Capitalization	.12	.04	.04, .20	.24	3.08*
Job Similarity	-.01	.02	-.05, .03	-.04	-.52
Work Centrality	-.01	.01	-.02, .01	-.11	-.91
Family Centrality	.00	.00	-.01, .01	.05	.41
Condition	.06	.07	-.08, .20	.06	.83
Work Cent. X Condition	.01	.01	-.00, .03	.20	1.73
Family Cent. X Condition	.01	.01	-.00, .02	.17	1.50

Note. N = 215. * $p < .05$. For the condition dummy code, partner failure was coded as 0 and partner success was coded as 1. Results from the full model after all predictors entered are shown.

The model with contingent self-esteem variables explained 9.90% of the variance in self-evaluated performance, $R^2_{adjusted} = .06$, $F(9,213) = 2.50$, $p = .01$; regression results are displayed in Table 6. Testing the contingent self-esteem variables in this hierarchical regression instead of the centrality variables proffered similar results for the interaction term between condition and

work- and relationship-contingent self-esteem, $R^2_{change} = .01$, $F(2,204) = 1.26$, $p = .29$. Results therefore do not find support for Hypothesis 2a or 2b. Running these models without the control variables did not change any of the relationships between the centrality or contingent self-esteem variables with self-evaluated work performance. The interaction terms between work centrality and condition and work contingent self-esteem and condition did were not significant when testing state self-esteem as the outcome either, $R^2_{change} = .00$, $F(2,204) = .48$, $p = .62$.

Table 6.

Regression Results for Contingent Self-Esteem Variables with Self-Evaluated Work Performance as Outcome

Coefficient	b	*SE*	b 95% CI	β	t
(Intercept)	4.13	.05	4.03, 4.24		79.11*
Relationship Length	.00	.01	-.01, .02	.04	.62
Relationship Closeness	.06	.05	-.03, .15	.10	1.25
Capitalization	.13	.04	.04, .21	.24	3.00*
Job Similarity	-.01	.02	-.05, .02	-.05	-.68
Work-Contingent SE	.05	.06	-.06, .17	.10	.90
Relationship-Contingent SE	-.01	.05	-.11, .10	-.01	-.10
Condition	.05	.07	-.09, .20	.05	.70
Work SE X Condition	-.11	.08	-.27, .05	-.15	-1.41
Relationship SE X Condition	-.03	.08	-.17, .12	-.03	-.35

Note. N = 215. *$p < .05$. For the condition dummy code, partner failure was coded as 0 and partner success was coded as 1. Results from the full model after all predictors entered are shown.

The remaining hypotheses were tested in a path analysis model using maximum likelihood estimation in Mplus version 8 (Muthén & Muthén, 2017). Hypothesis 3a predicted that self-evaluated work performance and self-esteem would be negatively related to state envy, whereas Hypothesis 3b predicted that these variables would be positively related to state pride. Self-evaluated work performance was not a significant predictor of envy, $\beta = .02$, b = .05, 95% CI [-.24, .36], $p = .76$. Alternately, self-evaluated performance did predict pride, $\beta = .42$, b = .71, 95% CI [.50, .91], $p < .001$. Higher evaluations of one's work performance also predicted higher scores on the RAT, $\beta = .17$, b = 2.88, 95% CI [.47, 5.42], $p = .023$. A similar pattern of results emerged in a model testing self-esteem as an alternate for self-evaluated work performance. Self-esteem was not significantly related to envy, $\beta = -.10$, b = -.17, 95% CI [-.37, .03], $p = .10$, but was related to pride, $\beta = .51$, b = .69, 95% CI [.53, .85], $p < .001$. Results provide partial support for Hypothesis 3.

Hypothesis 4a was that higher levels of envy would predict higher scores on the RAT, and Hypothesis 4b was that pride would be negatively related to RAT scores. Neither envy, $\beta = -.10$, b = -.80, 95% CI [-1.85, .33], $p = .15$, nor pride, $\beta = .06$, b = .55, 95% CI [-.91, 2.07], $p = .47$, was a significant predictor of score on the RAT. Instead, self-evaluated work performance predicted RAT score, $\beta = .17$, b = 2.88, 95% CI [.47, 5.42], $p = .02$. By comparison, the confidence interval for self-esteem instead included zero; $\beta = .11$, b = 1.53, 95% CI [-.73, 3.62], $p = .17$. Accordingly, findings do not show support for Hypothesis 4.

Research Question 1 queried whether approach/avoidance temperament would moderate the relationships between pride and envy with performance on the RAT. I tested these research questions in a regression analysis with the centered approach, avoidance, envy, and pride variables entered as predictors of RAT score along with their interaction terms (envy with

approach and with avoidance, and pride with approach and with avoidance). This model did not explain a significant amount of the variance in score on the RAT, $R^2 = .07$, $R^2_{adjusted} = .03$, $F(8,214) = 1.86$, $p = .07$. No interaction effects were detected. The coefficient for the envy-approach interaction term was not significant, b = -.95, *SE* = .61, *t* = -1.56, 95% CI [-2.15, .25], *p* = .12, and neither was the coefficient for the envy-avoidance interaction, b = -.47, *SE* = .40, *t* = -1.18, 95% CI [-1.25, .32], *p* = .24. Likewise, the interaction term for pride-approach was not significant, b = .88, *SE* = .64, *t* = 1.38, 95% CI [-.38, 2.14], *p* = .17, nor was the interaction term for pride-avoidance, b = -.20, *SE* = .48, *t* = -.42, 95% CI [-1.15, .74], *p* = .67. Results indicate that neither approach nor avoidance motivation moderated the relationship between envy and pride with performance.

Hypotheses 5 and 6 predicted mediation effects for the self-evaluated performance-RAT score and condition-emotion relationships, respectively. These hypotheses were analyzed in the path analysis, testing partial mediation with bootstrapped confidence intervals. This model tested one variable (self-evaluated work performance) predicting two parallel mediators (envy and pride) in series (Stride, Gardner, Catley, & Thomas, 2015). Fit statistics for the model suggest good fit. The chi-square fit statistic = $\chi 2(13) = 4.16$, $p = .99$, RMSEA = .00, SRMR = .05. Coefficients for the mediation analysis are presented in Table 7.

Table 7.

Path Analysis Mediation Results

Predictor	Outcome	Parameter	b	*SE*	b 95% CI	*p*
Condition	Self-Evaluated Performance	a_1	.02	.04	-.05, .09	.56
	Envy	a_2	.03	.10	-.16, .23	.77

Table 7. (cont'd)

	Pride	a_3	-.04	.06	-.17, .09	.55
	RAT Score	c'	.59	.86	-3.47, 1.18	.50
Self-Evaluated	Envy	d_1	.05	.15	-.24, .36	.76
Performance	Pride	d_2	.71	.11	.50, .91	.00*
	RAT Score	b_1	2.88	1.27	.47, 5.42	.023*
Envy	RAT Score	b_2	-.80	.55	-1.85, .33	.15
Pride	RAT Score	b_3	.55	.76	-.91, 2.07	.47

Note. N = 214. *p < .05. For the condition dummy code, partner failure was coded as 0 and partner success was coded as 1. This model also included the control variables job similarity, relationship closeness, capitalization, and relationship length as predictors of self-evaluated performance.

Hypothesis 5 posited that envy and pride would mediate the relationship between self-evaluated work performance and performance on the RAT. The significance of the indirect effect of self-evaluated performance on RAT score (tested through both envy and pride as parallel mediators) is calculated based on a 95% confidence interval around all of the indirect effects computed within 10,000 bootstrapped samples. The bootstrapped unstandardized indirect effect of self-evaluated work performance on RAT score through envy was -.04, p = .81, 95% CI [-.53, .17]. The unstandardized indirect effect of self-evaluated performance on RAT score through pride was .03, p = .86, 95% CI [-.15, .58]. Thus, results do not provide support for Hypothesis 5.

Hypothesis 6 proposed that self-evaluated work performance (or alternately, state self-esteem) would mediate the relationship between condition (partner's work success or failure) and both envy and pride. The unstandardized indirect effect of condition on envy was not significant,

b = -.00, p = .88, 95% CI [-.05, .01], and neither was the indirect effect of condition on pride, b = -.03, p = .57, 95% CI [-.13, .07]. (A similar pattern was detected for the indirect effect of condition on envy, b = .01, p = .77, 95% CI [-.02, .05], and pride, b = -.02, p = .74, 95% CI [-.14, .10], tested through self-esteem as the mediating variable). In fact, the total indirect effect of condition on RAT score through the three mediators (self-evaluated performance, envy, and pride) was not significant, b = -.01, p = .93, 95% CI [-.37, .33]; and neither was the total effect of condition on RAT score, b = -.60, p = .49, 95% CI [-2.32, 1.06]. Findings therefore do not provide support for Hypothesis 6. Although I also ran these models with the variable time spent on the RAT instead of RAT score as a measure of effort, time spent on the RAT was not related to any of these hypothesized variables.

Finally, Hypothesis 7 held that the self-concept, centrality, and contingent self-esteem variables would moderate the mediated relationship of condition on envy and pride. Results only found evidence for the moderating effect of individual self-concept level on the effect of condition on self-esteem, but a conditional indirect effect may still be present even in the absence of a significant interaction effect between the independent variable and the moderator (Wegener & Fabrigar, 2000). To test first-stage moderated mediation, I ran models calculating the indirect effect of condition on both pride and envy through self-evaluated performance (and alternately, self-esteem), at the level of one standard deviation below the mean, at the mean, and at one standard deviation above the mean of the hypothesized moderator (Preacher, Rucker, & Hayes, 2007; Stride et al., 2015). The significance of the conditional indirect effect at each level of the moderator is determined by whether the bootstrapped confidence interval for the effect contains 0. The tested models were identical to the mediation models reported, save for the new inclusion of a moderator of the emotion mediators of the condition-self-evaluation relationships.

The bootstrapped conditional indirect effects of condition on pride as well as envy via self-evaluated performance were not significant for any low or high values of the self-concept, centrality, or contingent self-esteem variables (all *p*s>.05). This was also the case when testing self-esteem as an alternate mediator for almost all of the potential moderators.

Conversely, the effect of condition through self-esteem on pride (but not envy) was significant at one standard deviation below the mean (b = .36, *SE* = .17), at the mean (b = .50, *SE* = .23), and at one standard deviation above the mean (b = .64, *SE* = .29) of individual self-concept level. Figure 3 presents a loop plot with the indirect effect at varying levels of the individual self-concept with the partner failure condition dummy code (failure condition coded as 0, success as 1) used as the independent variable.

Figure 3.

Mediated Effect of Condition on Pride Through Self-Esteem Moderated by Individual Self-Concept Level for Partner Success

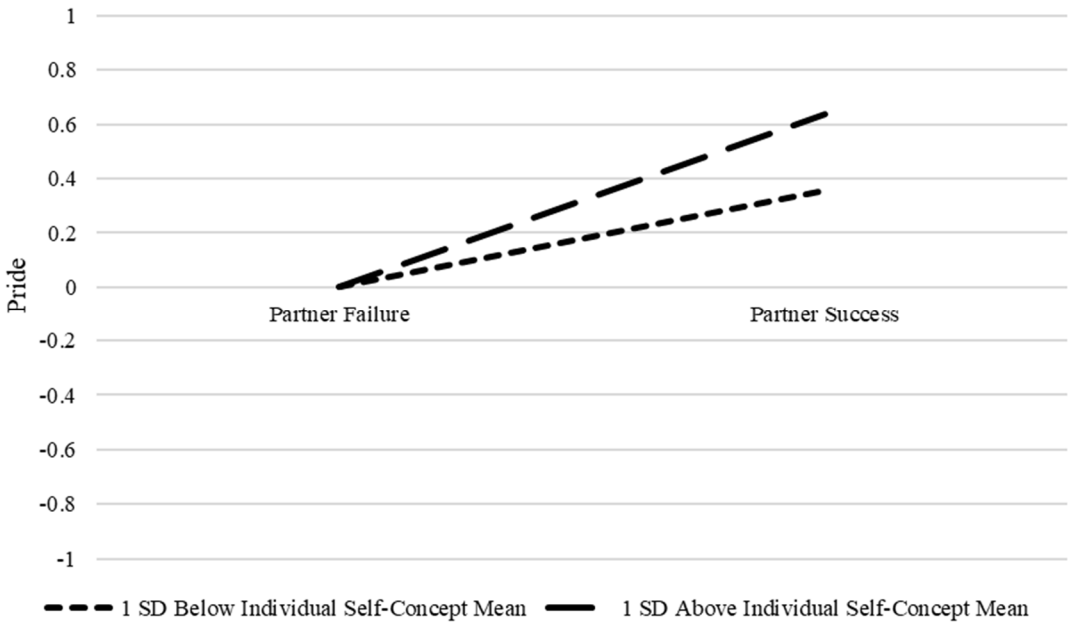


Figure 3. (cont'd)

Note. The partner failure dummy code (partner failure condition coded as 0, partner success coded as 1) was used for this model.

As can be seen, the indirect effect of recalling a partner's work success on experienced pride, through self-esteem, is increasingly positive at increasing levels of individual self-concept. With this relationship, results provide slight support for Hypothesis 7.

Exploratory Analyses

The proposed study model (in Figure 1) predicts multiple moderators of the condition – self-evaluated work performance/self-esteem relationships. Although not formally proposed in this thesis, there may be three-way interactions between the orthogonal self-concept variables with condition, as well as the centrality and contingent self-esteem variables. I analyzed these potential relationships as supplementary results to those hypothesized.

To start, I entered control variables, centered individual and relational self-concept variables, condition dummy code, the three possible interaction terms between the self-concept variables and condition, and finally the three-way interaction term, in a hierarchical regression. The change in R^2 for self-evaluated work performance for the three-way interaction term was not significant, $F(1,202) = .44$, $p = .44$, $R^2_{change} = .003$. Neither was the three-way interaction term for condition and work and family centrality, $F(1,202) = .03$, $p = .86$, $R^2_{change} = .00$. These coefficients are presented in Tables 8 and 9, respectively.

Table 8.

Regression Results for Self-Concept Variables with Self-Evaluated Work Performance as Outcome

Coefficient	b	*SE*	b 95% CI	β	t
(Intercept)	3.39	.28	2.84, 3.94		12.12*
Relationship Length	.01	.01	-.01, .02	.06	.97
Relationship Closeness	.05	.04	-.04, .13	.08	1.09
Capitalization	.08	.04	.00, .16	.15	1.96
Job Similarity	-.01	.02	-.05, .02	-.05	-.68
Individual SC	.08	.06	-.03, .19	.13	1.39
Relational SC	.21	.10	.01, .42	.18	2.07*
Condition	.02	.07	-.12, .17	.02	.33
Individual SC X Condition	.07	.09	-.10, .23	.08	.79
Relational SC X Condition	.08	.15	-.23, .38	.04	.49
Individual SC X Relational SC	-.08	.10	-.28, .12	-.06	-.75
Individual SC X Relational SC X Condition	-.14	.18	-.51, .22	-.07	-.78

Note. N = 215. *$p < .05$. R^2 for model = .16, R^2change for the three-way interaction term = .003. For the condition dummy code, partner failure was coded as 0 and partner success was coded as 1. All regression coefficients are from the final step in the test with all predictors entered.

Table 9.

Regression Results for Centrality Variables with Self-Evaluated Work Performance as Outcome

Coefficient	b	*SE*	b 95% CI	β	t
(Intercept)	3.08	.27	2.54, 3.62		11.28*
Relationship Length	.00	.01	-.01, .01	.00	.06
Relationship Closeness	.05	.04	-.04, .14	.09	1.18
Capitalization	.12	.04	.05, .20	.24	3.07*
Job Similarity	-.01	.02	-.05, .03	-.04	-.51
Work Centrality	-.01	.01	-.02, .00	-.14	-1.14
Family Centrality	.00	.00	-.01, .01	-.01	-.05
Condition	.06	.08	-.10, .22	.06	.77
Work Cent. X Condition	.01	.01	-.00, .02	.17	1.35
Family Cent. X Condition	.01	.01	-.00, .03	.20	1.61
Work Cent. X Family Cent.	.00	.00	-.00, .00	-.11	-1.06
Work Cent. X Family Cent. X Condition	.00	.00	.00, .00	.02	.18

Note. N = 215. *$p < .05$. R^2 for model = .13, R^2change for the three-way interaction term = .00. For the condition dummy code, partner failure was coded as 0 and partner success was coded as 1. All regression coefficients are from the final step in the test with all predictors entered.

Alternately, there was a significant three-way interaction between condition and work and relationship-contingent self-esteem, $F(1,202) = 5.40$, $p = .02$, $R^2_{change} = .02$. The results from

the hierarchical regression analysis for the full model are in Table 10. The relationships between levels of work- with relationship-contingent self-esteem at one standard deviation below and above the mean of each variable are plotted by condition in Figure 4.

Table 10.

Regression Results for Contingent Self-Esteem Variables with Self-Evaluated Work Performance as Outcome

Coefficient	b	*SE*	b 95% CI	β	t
(Intercept)	2.97	.28	2.42, 3.52		10.63*
Relationship Length	.00	.01	-.01, .01	.03	.41
Relationship Closeness	.06	.04	.06, .22	.27	3.31*
Capitalization	.14	.02	-.05, .02	-.05	-.71
Job Similarity	-.01	.05	-.03, .15	.10	1.24
Work-Contingent SE	.05	.06	-.07, .16	.08	.78
Relationship-Contingent SE	-.02	.05	-.12, .09	-.03	-.32
Condition	.09	.08	-.06, .24	.09	1.24
Work SE X Condition	-.09	.05	-.01, .20	.17	1.76
Relationship SE X Condition	-.02	.08	-.25, .06	-.12	-1.17
Work SE X Relationship SE	.09	.08	-.17, .12	-.03	-.31
Work SE X Relationship SE X Condition	-.17	.07	-.31, -.03	-.23	-2.32*

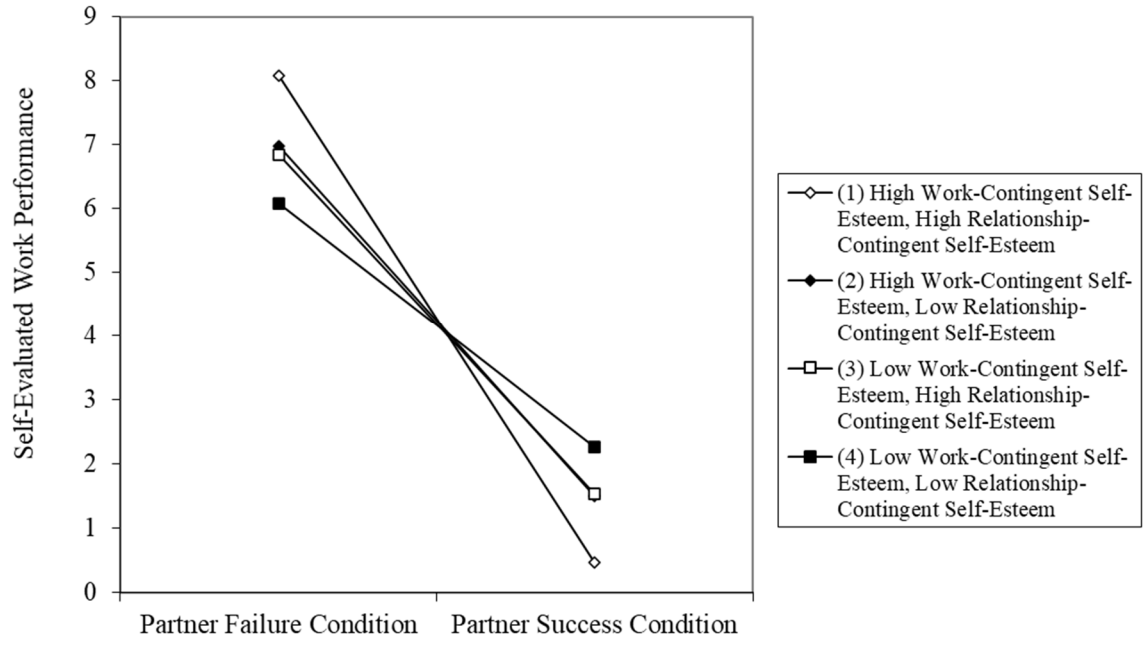
Note. N = 215. *$p < .05$. R^2 for model = .12, R^2change for the three-way interaction term = .02. For the condition dummy code, partner failure was coded as 0 and partner success was

Table 10. (cont'd)

coded as 1. All regression coefficients are from the final step in the test with all predictors entered.

Figure 4.

Three-Way Interaction Between Condition and Work- and Relationship-Contingent Self-Esteem



I calculated simple slopes and slope difference tests for the three-way interaction (Dawson, 2014; Dawson, & Richter, 2006). Save for slopes 2 and 3 (representing high work- and low relationship-contingent self-esteem, and vice versa), all slopes were significantly different from one another. People with higher levels of both work- and relationship-contingent self-esteem experienced the greatest magnitude of difference in self-evaluated work performance based on condition. By counterpoint, the drop in reported work performance compared between the partner failure and success conditions is the least steep for those with low levels of both work- and relationship-contingent self-esteem. The simple slopes at high and low levels of each

contingent self-esteem variable are presented in Table 11 and the slope difference tests are in Table 12.

Table 11.

Slope Difference Tests for Three-Way Interaction Between Condition and Work- and Relationship-Contingent Self-Esteem

Slope Comparison	Slope Difference	t	95% CI
1 vs. 2	-2.15	-2.35*	-3.94, -.35
1 vs. 3	-2.30	-2.53*	-4.09, -.52
1 vs. 4	-3.81	-2.48*	-6.82, -.80
2 vs. 3	-.16	-.65	-.62, .31
2 vs. 4	-1.66	-2.59*	-2.92, -.41
3 vs. 4	-1.51	-2.34*	-2.77, -.24

Note. N = 214. *$p < .05$. 1 = High Work-Contingent Self-Esteem (WCSE), High Relationship-Contingent Self-Esteem (RCSE), 2 = High WCSE, Low RCSE, 3 = Low WCSE, High RCSE, 4 = Low WCSE, High RCSE.

Table 12.

Simple Slope Tests for Three-Way Condition and Work- and Relationship-Contingent Self-Esteem Interaction

Slope	Gradient of Simple Slope	t
1. High WCSE, High RCSE	-7.61	-2.55*
2. High WCSE, Low RCSE	-5.46	-2.62*
3. Low WCSE, High RCSE	-5.30	-2.54*
4. High WCSE, Low RCSE	-3.80	-2.61*

Table 12. (cont'd)

Note. N = 214. * $p < .05$. WCSE = Work-Contingent Self-Esteem, RCSE = Relationship-Contingent Self-Esteem.

I likewise probed for three-way interactions between condition and self-concept, centrality, and contingent self-esteem variables with self-esteem as the dependent variable. The results of the complete model with predictors from all steps entered are displayed in Table 14 for centrality variables with self-evaluated performance as the outcome, and However, F-test results indicated that none of the terms for these three-way interactions resulted in a significant change in the variance explained (all *p*s>.05). This was also the case evaluating pride, envy, and score on the RAT as the outcome.

DISCUSSION

This thesis was conducted with the goal of building upon and extending the literature on crossover between couples by exploring a novel, cognitive, process through which one partner's work experiences may influence the other. Westman (2001, 2013) has theorized about various mechanisms through which crossover may occur yet processes underlying crossover have rarely been studied empirically. I hypothesized a moderated mediation model through which levels of individual and relational self-concept, work and family centrality, and work- and relationship-contingent self-esteem would shape reactions to a partner's work success/failure, which in turn may be related to their self-evaluations, emotions, and task motivation. Results showed limited support for the majority of these hypotheses, although analyses did detect a single moderated mediation relationship.

Main Findings

To gain a better sense of what factors might engender people to better or worse about themselves following their partner's work coup or defeat, I hypothesized several traits as moderators of the partner success/failure and self-evaluated performance/self-esteem relationship. I predicted that the individual self-concept and work centrality would be negatively related to self-evaluated performance and self-esteem in the partner success condition, whereas the relational self-concept and family centrality would be positively related to self-evaluations.

However, the only interaction effect found was between the condition and individual self-concept; the individual self-concept had a more negative relationship with state self-esteem for those in the partner failure condition. There was also a negative main effect of individual self-concept on self-esteem. Contrary to predictions, there were no interaction effects between

condition and work- or family-centrality, relational self-concept, or work- or relationship-contingent self-esteem.

In the next spate of hypotheses, I predicted that self-evaluated work performance/self-esteem would be negatively related to envy but positively related to pride, and that these emotions would have an effect on task performance. Support for these predictions was mixed. No effects were found for envy, although both self-evaluated performance and self-esteem were positively related to state pride. Of course, this could have been due to the fact that asking participants to consider their evaluations of themselves caused those who held themselves in high regard to experience pride. In any case, neither pride nor envy had an effect on scores on the Remote Associates Task, and no evidence was found in support of either approach or avoidance temperament as a moderator of these effects, as queried in Research Question 1. Self-evaluated performance was positively related to RAT score, however this also might be expected as people who are actually high performers may tend to have high cognitive ability and motivation for cognitive tasks (Van Iddekinge, Aguinis, Mackey, & DeOrtentiis, 2018).

Results generally did not show support for an indirect effect of condition on emotions through self-evaluations. However, there was a conditional indirect effect of condition on pride, through self-evaluated performance, that varied at levels of individual self-concept. This finding does align more with expectations. Reflecting upon one's partner's work failure had a negative effect on pride through decreased state self-esteem for individuals with higher levels of the individual self-concept. Alternately, reflecting upon a partner's work triumph had a positive effect on pride through increased self-esteem for those with higher individual self-concept levels. When confronted with their partner's positive or negative work experiences, people whose identity is oriented more around themselves as unique individuals may be more likely to be

emotionally impacted, possibly because they tend to consider the ramifications of their partner's standing for their own self-evaluations.

Participant perceptions of job similarity with their partner, the length and closeness of their relationship, and trait capitalization (the tendency to share their work experiences with their partner), were all included as control variables. Capitalization consistently emerged as a significant predictor of self-evaluated work performance. This may be expected, as workers who are more likely to share their positive work experiences with their partners may also be more invested and likely to feel positively about their work. Capitalization is positively related to job satisfaction (Ilies, Keeney, & Scott, 2011). These individuals may feel positively about their work in part be due to their competence; and if work is important to them, they may also be more likely to perceive themselves as high performers.

Of course, those who capitalize may also tend to have more conversations with their partners in general about each other's work events. It may therefore be more likely that these people spent more time discussing the incident of their partner's work success/failure that they described in their prompt with their partner. In essence, greater capitalization scores may represent that workers had a conversation with their partners about their work event, which could mean that they experienced direct transfer of their partners' states through emotional contagion and then recalled these feelings.

Lastly, a set of exploratory analyses probing for interactions between proposed moderators and condition did not find any three-way interactions between centrality or self-concept variables. However, there was a three-way interaction between condition and work- and relationship-contingent self-esteem, such that those with high levels of both self-esteem variables showed the steepest decline in self-evaluated performance in the partner success compared to

failure condition. Conversely, self-evaluated performance of those with a lower standing in both contingent self-esteem variables were less affected by recalling partner success versus failure.

Theoretical Implications

This work draws from several distinct literatures from research and theory on crossover, social comparisons, role models, and envy. Many study hypotheses were not supported, leaving many of the initial questions motivating this research inconclusive. For example, pride was not inversely associated with task performance as predicted. It may be that, even as a positive emotion that tends to arise as a result of goal progress, pride differs from other positive emotions theorized to actuate coasting in goal-pursuit (e.g., relief; Carver, & Scheier, 2004). Yet pride did not have a discernible positive effect on motivation either, as suggested by others (Herrald & Tomaka, 2002; Williams & DeSteno, 2008). Further research can investigate the effects of pride on motivation further by drawing from alternate taxonomies to categorize specific emotions and their effects (e.g., in terms of approach – avoidance, Elliot, Eder, & Harmon-Jones, 2013).

Findings do converge with theoretical understanding of the individual self-concept level and may provide additional insight into this construct. For one, contrary to expectations, the negative association between individual self-concept level and self-esteem was stronger for those who recalled an instance in which their partner failed at work. This effect suggests that perhaps these people perceived that their partner's problems reflected poorly upon themselves because of their close association. If this is the case, these individuals might be expected to "cut off reflected failure", or distance themselves from their partners so as to maintain their own self-esteem (Snyder, Lassegard, & Ford, 1986). Similar effects did not emerge for the relational self-concept. It may be interesting to test whether the domain (e.g., effort in the relationship, as opposed to

work events) may be more important in provoking reactions to a partner's experiences, or whether the individual self-concept promotes comparisons more generally, across domains.

Self-esteem also had an effect on pride for those in the partner failure condition, and this effect was stronger with higher individual self-concept levels. These findings suggest that people with greater individual self-concepts may feel slightly more negatively about themselves in comparison to those with lower individual self-concept levels on occasions when their partner performs very well, in keeping with the reasoning that these individuals will contrast their partner with themselves. However, they are likely to feel even worse when their partner does poorly, perhaps because their partner's poor performance reflects negatively upon them as individuals connected to this struggling individual. Of course, a more prosocial interpretation may be that these people felt badly about themselves because they did not feel able to help their partner with their work issues—though this is explanation does not explain why this effect emerged for those with high individual, and not relational, self-concept levels. Scholars who have considered the effects of comparisons in romantic partnerships have concluded that a common response is for individuals to prioritize "protecting the relationship over the self" (Pinkus et al., 2012). Interestingly, the self may instead be more strongly affected for those whose sense of self revolves around their unique attributes. Further work might investigate the implications of the individual self-concept for reactions to one's partner as well.

Similarly, findings regarding the conditional indirect effects of condition on pride through self-esteem are consistent with theoretical understanding of social comparisons. People whose sense of self is determined more strongly by their unique attributes are more emotionally affected by considering their partner's work successes or failures–likely because they are more prone to engage in a comparison between their partner and themselves. This work also provides

some more novel contributions to the literature on comparisons between couples. For one, although long-standing findings suggest that pride and envy are dominant reactions to another's strong performance (Tesser & Collins, 1988), this study suggests that envy may be less likely for comparisons in partnerships compared to pride. Findings also align with recent work suggesting that people are more likely to experience positive affect when making upwards comparisons rather than downwards comparisons to their partner (Pinkus et al., 2012; Pinkus et al., 2008). The present study extends this literature by providing evidence that the individual self-concept level may drive reactions to a partner's experiences, and even more will impact evaluations of oneself and pride in oneself. Future studies can examine whether these effects extend to other emotions, perhaps most likely other self-referential emotions (e.g., shame, Wolf, Cohen, Panter, & Insko, 2010). Likewise, another route may be to study whether envy may be more likely to arise in relationships that are not as closely linked as partnerships, such as coworkers or teammates.

An unexpected exploratory finding was the three-way interaction between condition and work- and relationship-contingent self-esteem predicting self-evaluated performance. The most negative slope in the partner success condition was for people with higher levels of both contingent self-esteem variables. This might be expected for those with high work-contingent self-esteem, yet it may be more counterintuitive for those with relationship-contingent self-esteem. Possibly, these relationship-oriented individuals may be more attuned to their partners and may thus factor their partner's experiences in to their judgments about themselves more heavily, if indeed their romantic partnership is a meaningful determinant of their feelings about themselves. Those whose self-esteem is neither derived from their own work or from their partnership may thus be less impacted by their partner's work events and may weigh them less in judging their evaluations of themselves. Instead these individuals will rely on information that

they deem more relevant to their sense of self-worth. Research has evaluated the effects of relationship closeness (Lockwood et al., 2004) and empathy and shared outcomes (Pinkus et al., 2012; Pinkus et al., 2008) on affective reactions to upwards and downwards comparisons with a partner, as well as perceptions of one's partner (Thai & Sabrina, 2015). This study demonstrates that not only may the relevance of a comparison domain (i.e., work-contingent self-esteem for work comparisons) still impact comparison outcomes in relationships, it may also do so by interacting with the importance of the relationship itself, to inform evaluations of *oneself*.

In all, these findings lend support to the takeaway that having a strong sense of individual identity may engender people to interpret their partner's work successes and failures in light of how these events reflect upon themselves. This grants some initial evidence to the notion that some romantic partners may be influenced by one another's work events, at least in part, through their interpretation of the implications of this event for themselves. Future studies can also examine whether individual self-concept level may predispose crossover effects in more naturalistic study designs (e.g., experience sampling research with working partners).

Practical Implications

Those who recalled a time in which their partner experienced success at work scored significantly higher on a task compared to those who recalled a time in which their partner made a blunder at work. There was no evidence to support that this effect was driven by either pride or envy. However, workers may find that reflecting upon close others' accomplishments may inspire can motivate themselves as well. Further work should be undertaken to understand the mechanisms behind this process.

There was a general pattern that people with higher levels of an individual self-concept had lower state self-esteem in reaction to their partner's work failure, whereas those with a higher degree of both work- and relationship-contingent self-esteem had lower evaluations of their work-performance when they considered their partner's work success. Beyond replication, further research can attempt to explore other potential affective and behavioral outcomes of these effects, at work as well as the home. If workers with higher levels of these traits find themselves feeling negatively about themselves, potentially following either a close other's work achievement or error, they (and their relationships) may be better served by recognizing this tendency and attempting to focus on other aspects of their self or work to curb negative reactions. Although the implications of these effects for relationships needs greater study, this could potentially be useful information for relationship therapists as well for dual earner partners to be aware of.

Limitations and Recommendations for Future Research

Scholars have voiced that it is difficult to measure the outcomes of social comparisons (Wheeler & Suls, 2007). Researchers have often asked participants to directly indicate whether they have compared themselves to their partner (e.g., Lockwood & Pinkus, 2014; Pinkus et al., 2008; Thai & Sabrina, 2015), although some studies have also branched out to behavioral and even physiological indicators and outcomes of comparisons (Buunk & Gibbons, 2007). In this study I attempted to measure social comparison outcomes somewhat more subtly as the change in self-evaluated performance/self-esteem following recall of a partner's work success or failure. This approach did not prove to be successful; there was no change between self-evaluated performance or self-esteem scores measured before and after the manipulation in any of the conditions.

A second major limitation of the methodology was that participants in the control condition were exceedingly affectionate and positive in describing their last interaction with their partner, as opposed to more neutral as expected. This may have been due to the wording of the prompt not being specific enough, but also to the impact of lockdown mandates due to the coronavirus (which many participants noted in describing changes in their time spent with their partners). This resulted in the control condition responses being less neutral, and not particularly useful as a baseline comparison to the partner success/failure conditions. It could be that some participants did compare themselves to their partner and others did not, obscuring any possible social comparison effects that may have been present.

Relatedly, participants' reactions to their partners' work success or failure may have differed due to the fact that many people were living under lockdown mandates. The threat of the global pandemic and potentially greater time spent with their families might have led participants

to deemphasize the importance of work success and instead emphasize relationships. This could have also made them more likely to react with sympathy when considering their partner's failure at work. It would be interesting to see whether any relationships between variables differ when tested in a less dramatic time in history.

Future work may be better served with direct measures of social comparison occurrence (e.g., asking participants whether they compared themselves to their partner) for greater clarity, and should continue to study what factors predict whether people will make a social comparison. For example, it could be that the individual self-concept level influences whether people will tend to compare themselves to others in the first place. An interesting factor to explore in the tendency to make comparisons in close relationships may be the degree of perceived similarity along other dimensions (e.g., rates of social comparisons in same-sex compared to opposite-sex partnerships, or in friendships with and without an age difference).

Another direction for further study would be to evaluate the effects of relationship partners' work successes/failures on each other in a dyadic research design. The present study focused on a single partner's own perceptions and emotions in response to reflecting upon their partner's work event, however dyadic research can shed more light onto the more complex processes through which couples may be influenced by each other's work experiences. For example, workers' evaluations of their partner's experiences (and the subsequent impact of these evaluations on their psychological states) might be influenced by their own work events (van Steenbergen, Kluwer, & Karney, 2014). Dyadic research may also be used to examine the effects of a couple's work experiences on one another's emotional experiences, as well as how these emotions influence their relationship behavior and relationship strain (Wofford, Defever, & Chopik, 2019). For instance, if an employee feels negatively about herself in response to her

partner's work failure, she might respond by pulling away from her partner to protect her sense of self, or she might draw closer to her partner in commiseration. These responses are likely to have very different consequences for her partner's self-esteem and emotions, not to mention their relationship.

This research offered a unique approach to the crossover literature with an experimental design; but of course, there are several methodological limitations to consider as well. For one, this survey asked participants to recall a memory concerning their partner. This manipulation may have been too weak to approximate the "in the moment" processes that occur when people react to their partner's work events. The behavioral indicators of motivation (RAT score and time spent) were also not directly related to participants' actual jobs, meaning that they may not have viewed their score as relevant. Likewise, participants were recruited from a research platform and thus may have been more motivated to complete the study quickly in order to receive payment from as many surveys as possible. Future studies can implement behavioral measures that have some bearing on people's own work standing, if possible.

Conclusion

This thesis set out to examine a more cognitive, reflective process that may in part underly crossover effects between couples. Grounded in research and theory on social comparisons, I predicted that the individual and relational self-concept levels, work and family centrality, and work- and relationship-contingent self-esteem would be differentially related to self-evaluations in response to a partner's work event. I conducted an online experiment in which working adults recalled an instance of their partner's work failure or work success. Although neither pride nor envy was related to task performance, there was a conditional indirect effect of the condition on pride, via self-esteem, that varied at levels of the individual self-concept. Findings suggest that those with greater levels of the individual self-concept may be more personally affected by their partner's work successes or failures, potentially because these people may be more likely to interpret the relevance of their partner's standing for themselves as individuals.

APPENDICES

APPENDIX A:

Research Participant Information and Consent Form

You are being asked to participate in a research study of emotions, judgments, and task performance. The purpose of this research study is to examine different factors that influence how people are motivated. These include the effects of other people and their own values and emotions.

Your participation is voluntary. You can skip any question you do not wish to answer or withdraw at any time. You may also request that your responses not be included in analyses following your completion of the study. You must be 18 or older to participate. If you have any questions please contact J. A. Van Fossen, at vanfos10@msu.edu. You indicate that you voluntarily agree to participate in this research study by submitting the survey.

Your participation in this study will take about 20 minutes. You will be compensated $1.00 for your participation, which you will receive through Amazon Mechanical Turk. You will be asked to respond to several questionnaires about yourself and your feelings, write about a memory that you have, and complete a task.

There are no foreseeable risks to participating in this study. Any potential risks of participating are no greater than those routinely encountered in daily life. We hope that by participating in this study you will help further understanding of human motivation processes.

WHAT YOU WILL BE ASKED TO DO

In this study, you will be asked to complete several questionnaires about yourself and what you value. You will be asked to recall and write about a memory that you have that involves another person. You will also answer questions about your emotions and perception of your own job performance. Following these portions of the study, you will be asked to complete a word task. Finally, you will be asked to provide information about your demographics. You are free to skip any questions that you would prefer not to answer.

PRIVACY AND CONFIDENTIALITY

Your responses to all portions of the study will be kept confidential. This study will not ask you to provide your name. Any potentially identifying information (such as your IP address, if applicable) will be removed from the data file used for analyses, and if needed will be replaced with a nonidentifiable number. All data will be stored on a secure computer, and will only be evaluated by researchers.

CONTACT INFORMATION

If you have concerns or questions about this study, such as scientific issues, how to do any part of it, or to report an injury, please contact J. A. Van Fossen (mailing address: 316 Physics Rd #262, East Lansing, MI 48824, email address: vanfos10@msu.edu, MSU Psychology Dept. phone number: (517) 355-9562).

By clicking on the button below, you indicate your voluntary agreement to participate in this online survey.

APPENDIX B:

Self-Evaluated Work Performance Measure

Please rate the extent to which you agree with the following statements on a scale from 1 (totally not applicable) to 5 (totally applicable).

1. I achieve the objectives of my job.
2. I meet my criteria for job performance.
3. I demonstrate expertise in all job-related tasks.
4. I fulfill all the requirements of my job.
5. I could manage more responsibility than typically assigned to me.
6. I appear to be suitable for a higher level role.
7. I am competent in all areas of the job, and handle tasks with proficiency.
8. I perform well in the overall job by carrying out tasks as expected.
9. I plan and organize to achieve objectives of the job and meet deadlines.

State Self-Esteem Scale

Please rate the degree to which each of the following statements describes you using the following scale 1=Not at all; 2=A little Bit; 3=Somewhat; 4=Very Much; and 5= Extremely.

1. I feel confident about my abilities.
2. I feel frustrated or rattled about my performance. (R)
3. I feel that I am having trouble understanding things that I read. (R)
4. I feel as smart as others.
5. I feel confident that I understand things.
6. I feel that I have less scholastic ability right now than others. (R)
7. I feel like I'm not doing well. (R)
8. I am worried about whether I am regarded as a success or failure. (R)
9. I feel self-conscious. (R)
10. I feel displeased with myself. (R)
11. I am worried about what other people think of me. (R)
12. I feel inferior to others at this moment. (R)
13. I feel concerned about the impression I am making. (R)
14. I am worried about looking foolish. (R)

Note. (R) denotes reverse scoring. The first seven items comprise the performance dimension and the last seven comprise the social dimension.

APPENDIX C:

Self-Concept Measures

Individual Self-Concept Measure

Please rate the extent to which you agree with the following statements on a scale from 1 (strongly disagree) to 5 (strongly agree).

1. I thrive on opportunities to demonstrate that my abilities or talents are better than those of other people.
2. I have a strong need to know how I stand in comparison to my coworkers.
3. I often compete with my friends.
4. I feel best about myself when I perform better than others.
5. I often find myself pondering over the ways that I am better or worse off than other people around me.

Relational Self-Concept Measure

Please rate the extent to which you agree with the following statements on a scale from 1 (strongly disagree) to 5 (strongly agree).

1. If a friend was having a personal problem, I would help him/her even if it meant sacrificing my time or money.
2. I value friends who are caring, empathic individuals.
3. It is important to me that I uphold my commitments to significant people in my life.
4. Caring deeply about another person such as a close friend or relative is important to me.
5. Knowing that a close other acknowledges and values the role that I play in their life makes me feel like a worthwhile person.

APPENDIX D:

Centrality and Contingent Self-Esteem Measures

Work and Family Centrality Measure

Out of 100 total points, please assign points to the following 5 areas to represent how important each area is to your current life.

For example, if someone assigns 100 points to a single area, this means that this area is the most important to their life (and all other areas may only have 0 points). Alternately, if someone assigns 20 points to each area, this means that all areas are equally important in their life. Distribute these points however you see fit to best represent your current life. The total points assigned must exactly add up to equal 100.

Work = points.
Family = points.
Leisure = points.
Community = points.
Religion = points.

Contingent Self-Esteem: Work Competence Scale

Please rate the degree to which each of the following statements describes you, using a scale from 1=Strongly Disagree, 4=Neutral, and 7=Strongly Agree.

1. My self-esteem is influenced by my work performance.
2. I feel better about myself when I know I'm doing well in my job.
3. Doing well in work gives me a sense of self-respect.
4. I feel bad about myself whenever my work performance is lacking.
5. My opinion about myself isn't tied to how well I do in my job.

Contingent Self-Esteem: Partner Support Scale

Please rate the degree to which each of the following statements describes you, using a scale from 1=Strongly Disagree, 4=Neutral, and 7=Strongly Agree.

1. It is important to my self-respect that I have a romantic partner that cares about me.
2. When my romantic partner is proud of me, my sense of self-worth increases.
3. Knowing that my romantic partner loves me makes me feel good about myself.
4. When I don't feel loved by my romantic partner, my self-esteem goes down.
5. My self-worth is not influenced by the quality of my relationship with my romantic partner.

APPENDIX E:

Approach-Avoidance Temperament Questionnaire

Please indicate how much you agree or disagree with each of the following statements by indicating your agreement on the response scale (1=Strongly Disagree, 2, 3, 4=Neither Agree nor Disagree, 5, 6, 7=Strongly Agree) below each statement.

1. By nature, I am a very nervous person.
2. It doesn't take much to make me worry.
3. I feel anxiety and fear very deeply.
4. I react very strongly to bad experiences.
5. When it looks like something bad could happen, I have a strong urge to escape.
6. It is easy for me to imagine bad things that might happen to me.
7. Thinking about the things I want really energizes me.
8. When I see an opportunity for something I like, I immediately get excited.
9. It doesn't take a lot to get me excited and motivated.
10. I'm always on the lookout for positive opportunities and experiences.
11. When good things happen to me, it affects me very strongly.
12. When I want something, I feel a strong desire to go after it.

Note. The first six items comprise the avoidance temperament score, the last six sum to represent the approach temperament score.

APPENDIX F:

Experimental and Control Condition Prompts

Partner Success Prompt

Please recall a time in which your romantic partner experienced an important or meaningful success in his or her work. For example, he or she may have received a promotion, or met a major work goal. Take your time and try to recall all of the details of this occasion. Even try to relive how you felt at the time.

Please write about your memory of your partner's work accomplishment below, and your experiences and feelings in response to it.

Partner Failure Prompt

Please recall a time in which your romantic partner experienced an important or meaningful failure in his or her work. For example, he or she may have missed an important work deadline or made an error in his or her job. Take your time and try to recall all of the details of this occasion. Even try to relive how you felt at the time.

Please write about your memory of your partner's work failure below, and your experiences and feelings in response to it.

Neutral Memory with Partner Prompt

Please recall the last time that you spent with your romantic partner. It does not matter what you were doing together. For example, you may have been engaging in a specific activity, such as eating a meal, or simply talking with your partner. Take your time and try to recall all of the details of this occasion. Even try to relive how you felt at the time.

Please write about your memory of your recent time spent with your partner below, and your experiences and feelings in response to it.

APPENDIX G:

Authentic Pride Scale

Below are a number of words and phrases that describe different feelings and emotions. Read each item and then indicate the extent to which you would use each of the following words to describe yourself and your feelings right now, using the scale below:

1 = not at all
2 = somewhat
3 = moderately
4 = very much
5 = extremely

1. Accomplished ___
2. Like I am Achieving
3. Confident
4. Fulfilled
5. Productive ___
6. Like I have self-worth
7. Successful _

APPENDIX H:

Benign Envy Scale

Please rate the extent to which you are currently experiencing each of the following feelings on a scale from 1 (strongly disagree) to 6 (strongly agree).

Benign Envy

1. I am focused on how I can become equally successful to my partner in the future.
2. I will try to improve myself.
3. Envying my partner is motivating me to accomplish my goals.
4. I will strive to reach my partner's achievements.
5. I will try to attain my partner's achievements for myself.

APPENDIX I:

International Positive and Negative Affect Schedule—Short Form

Please rate the degree to which you are currently experiencing the following emotions on a 1 to 5 scale. 1 = strongly disagree, 5 = strongly agree.

Upset:
Hostile:
Alert:
Ashamed:
Inspired:
Nervous:
Determined:
Attentive:
Afraid:
Active:

APPENDIX J:

Remote Associates Task

You will be given sets of three words. Each of these three words are related to a fourth word—your task is to correctly write in this fourth word. For example, for the three words “elephant," "lapse," and "vivid," the correct fourth word is “memory”. Some word associations are more challenging than others.

Each set of three words will be displayed together on a single page. You may click through pages to work on later sets, and you may also return to earlier pages to work on earlier word sets. Take as much time as you would like to complete as many of the sets of words as you can.

1. Athletes-Web-Rabbit
2. Shelf-Read-End
3. Sea-Home-Stomach
4. Car-Swimming-Cue
5. Board-Magic-Death
6. Walker-Main-Sweeper
7. Cookies-Sixteen-Heart
8. Chocolate-Fortune-Tin
9. Lounge-Hour-Drink
10. Keel-Show-Row
11. Bass-Complex-Sleep
12. Chamber-Staff-Box
13. Desert-Ice-Spell
14. Base-Show-Dance
15. Inch-Deal-Peg
16. Soap-Shoe-Tissue
17. Blood-Music-Cheese
18. Skunk-Kings-Boiled
19. Jump-Kill-Bliss
20. Shopping-Washer-Picture
21. Hot-Butterflies-Pump
22. Head-Street-Dark
23. Stalk-Trainer-King
24. Bald-Screech-Emblem
25. Room-Saturday-Salts
26. Surprise-Line-Birthday
27. Widow-Bite-Monkey
28. Red-Go-Car
29. Mouse-Sharp-Blue
30. Cherry-Time-Smell

Answers: 1. Foot, 2. Book, 3. Sick, 4. Pool, 5. Black, 6. Street, 7. Sweet, 8. Cookie, 9. Cocktail, 10. Boat, 11. Deep, 12. Music, 13. Dry, 14. Ball, 15. Square, 16. Box, 17. Blue, 18. Cabbage, 19. Joy, 20. Window, 21. Stomach, 22. Light, 23. Lion, 24. Eagle, 25. Bath, 26. Party, 27. Spider, 28. Stop, 29. Cheese, 30. Blossom

APPENDIX K:

Motivation Towards Work and Relationship Scales

Self-Reported Motivation towards Work

Using the scale provided below each statement (1=Not at all true, 7=Very true), rate your agreement with the statements.

1. I plan to put more time into my work.
2. I plan to put extra effort into my work.
3. I plan to keep up with work assignments.
4. I plan to engage less in activities that interfere with my work.
5. I plan to avoid wasting time in my work.
6. I plan to be less casual about my work.
7. I plan to focus more on my work.

Self-Reported Motivation towards Romantic Relationship

Using the scale provided below each statement (1=Not at all true, 7=Very true), rate your agreement with the statements.

8. I plan to put more time into my romantic relationship.
9. I plan to put extra effort into my romantic relationship.
10. I plan to keep up with activities relevant to my romantic relationship.
11. I plan to engage less in activities that interfere with my romantic relationship.
12. I plan to avoid wasting time in my romantic relationship.
13. I plan to be less casual about my romantic relationship.
14. I plan to focus more on my romantic relationship.

APPENDIX L:

Control Variable Scales

Unidimensional Relationship Closeness Scale
URCS

Instructions: The following questions refer to your relationship with your romantic partner. Please think about your relationship with your romantic partner when responding to the following questions. Please rate the degree to which you agree with the following statements on a 7-point scale. 1=strongly disagree, 7=strongly agree.

1. My relationship with my romantic partner is close.
2. When we are apart, I miss my romantic partner a great deal.
3. My romantic partner and I disclose important personal things to each other.
4. My romantic partner and I have a strong connection.
5. My romantic partner and I want to spend time together.
6. My romantic partner is a priority in my life.
7. My romantic partner and I do a lot of things together.
8. When I have free time I choose to spend it alone with my romantic partner.
9. I think about my romantic partner a lot.
10. My relationship with my romantic partner is important in my life.
11. I consider my romantic partner when making important decisions.

Work–Family Interpersonal Capitalization Measure

Please rate the degree to which the following statements generally describe your daily life with your partner on a scale from 1 to 7. 1=strongly disagree, 7=strongly agree.

1. I share interesting work events with my partner.
2. I tell my partner about happy events at work.
3. I share my work progress with my partner.

Job Similarity

Please rate the extent to which you agree with the following statements on a scale from 1 to 7. 1=strongly disagree, 7=strongly agree.

1. Overall, the work that I perform in my job is similar compared to the work that my romantic partner performs in his/her job.
2. My romantic partner and I have a similar work experience.
3. My romantic partner and I have similar work activities in performing our jobs.

APPENDIX M:

Demographic Questions

What is your age?
___ years.

What is your sex?
A. Male
B. Female
C. Other

What is your race/ethnicity?
A. African-American
B. Hispanic
C. Asian (including Indian)
D. Native American
E. Pacific Islander
F. Middle Eastern
G. White
H. Bi-racial or Multi-racial
I. Other

What is your level of education?
A. Less than high school degree
B. High school graduate (high school diploma or equivalent including GED)
C. Some college but no degree
D. Associate degree in college (2-year)
E. Bachelor's degree in college (4-year)
F. Master's degree
G. Doctoral degree
H. Professional degree (JD, MD)

What is your field of work?
A. Forestry, fishing, hunting or agriculture support
B. Real estate or rental and leasing
C. Mining
D. Professional, scientific or technical services
E. Utilities
F. Management of companies or enterprises
G. Construction
H. Admin, support, waste management or remediation services
I. Manufacturing
J. Educational services
K. Wholesale trade
L. Health care or social assistance

M. Retail trade
N. Arts, entertainment or recreation
O. Transportation or warehousing
P. Accommodation or food services
Q. Information
R. Other services (except public administration)
S. Finance or insurance
T. Other (please specify): _____

How long have you worked at your current job?
___ years.

On average, how many hours do you work per week?
___ hours.

What is your partner's age?
___ years.

What is your partner's sex?
A. Male
B. Female
C. Other

What is your partner's race/ethnicity?
A. African-American
B. Hispanic
C. Asian (including Indian)
D. Native American
E. Pacific Islander
F. Middle Eastern
G. White
H. Bi-racial or Multi-racial
I. Other

What is your partner's level of education?
I. Less than high school degree
J. High school graduate (high school diploma or equivalent including GED)
K. Some college but no degree
L. Associate degree in college (2-year)
M. Bachelor's degree in college (4-year)
N. Master's degree
O. Doctoral degree
P. Professional degree (JD, MD)

What is your partner's field of work?
A. Forestry, fishing, hunting or agriculture support

B. Real estate or rental and leasing
C. Mining
D. Professional, scientific or technical services
E. Utilities
F. Management of companies or enterprises
G. Construction
H. Admin, support, waste management or remediation services
I. Manufacturing
J. Educational services
K. Wholesale trade
L. Health care or social assistance
M. Retail trade
N. Arts, entertainment or recreation
O. Transportation or warehousing
P. Accommodation or food services
Q. Information
R. Other services (except public administration)
S. Finance or insurance
T. Other (please specify): _____

How long has your partner worked at their current job?
___ years.

On average, how many hours does your partner work per week?
___ hours.

How long have you been in a relationship with your current partner?
___ years.

APPENDIX N:

Manipulation Check

You will now be asked to answer a question about what you did in an earlier part of this study.

At the start of this study, you wrote about a memory that involved your romantic partner. What describes the memory that you wrote about?

A. A time in which your partner experienced some work success or achievement.
B. A time in which you had a pleasant experience with your partner.
C. Other (please specify): ___.

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