The Role of Regulatory Focus Motivation in Experiencing Relationship Success

by

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# **Author's Declaration**

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

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#### Abstract

Successful close relationships lie at the heart of people's health and happiness. Relationship science has argued for several critical relationship qualities that are essential for the maintenance and well-being of romantic relationships. However, this research has largely adopted a "one size fits all" approach, and has mostly ignored the potential for variability in the relationship qualities that people value. This dissertation adopts insights from motivation science to unveil systematic variability in the extent to which two critical relationship qualities —security and growth enrich relationship well-being. The current research adopted Regulatory Focus Theory (Higgins, 1997) to examine the hypothesis that growth-related relationship qualities are essential for the experience of relationship success for promotion-focused individuals (those who value nurturance, the pursuit of ideals, and employ eager strategies), but not prevention-focused individuals (those who value safety, the pursuit of obligations, and employ vigilant strategies), and that security-related relationship qualities are essential for the experience of relationship success for prevention-focused individuals, but not promotion-focused individuals. Across 5 studies, I found that individuals in a promotion focus, whether chronic (Studies 1-3, 5) or temporarily induced (Study 4), rated and prioritized the importance of relationship growth versus security qualities (Studies 1-3), and rated their own relationship well-being higher when growth (but not security) qualities were more (versus less) present (Study 4). Promotion-focused people also reported higher relationship well-being when induced to experience their relationship as being represented by growth qualities than when induced to experience their relationship as being represented by security qualities (Study 5). In contrast, prevention-focused individuals showed a preference for security-related relationship qualities under more nuanced circumstances—when examining the relative weighting of security versus growth (Studies 1, 4),

when security was pitted directly against growth (Studies 2, 3), and when in a vigilant-framed context (Study 3). Although prevention focus did not predict relationship well-being when assessing or manipulating the absolute value of security presence (Study 4, 5), it did when the presence of security was examined in relation to growth (Study 4). This research contributes to relationship science by providing a theoretical framework that integrates rich insights from motivation science to systematically understand how relationship qualities contribute to experiencing relationship success.

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#### Introduction

"Shared joy is a double joy; shared sorrow is half a sorrow."

— Swedish Proverb

Relationships are an incredibly powerful source of health and happiness. If you ask someone what the best part of their day was, you will likely get an answer involving interactions with friends and family (Gable & Reis, 2010; see also Gabriel & Gardner, 1999). Ask someone about the last bad thing that happened to them, and you will likely get an answer involving other people (e.g., a death of a loved one, an argument with a friend; Veroff, Douvan & Kulka, 1981). In 2005, TIME magazine took a poll asking readers about the one thing in life that has brought them the greatest happiness. Almost everyone referenced their relationships with others: their kids, grandkids, spouses, and God ("What Makes us Happy," 2005). Scientific evidence corroborates people's intuitions. In an effort to determine the characteristics associated with the happiest people, Diener and Seligman (2002) found that the happiest people were those who had good, satisfying interpersonal relationships. In addition to happiness, successful social relationships predict various aspects of personal well-being such as physical health (Cohen, Kessler, & Gordon, 1997; Cohen, 2004; Coyne et al., 2001), mental health (Pinsker, Nepps, Redfield, & Winston, 1985), meaning in life (Klinger, 1977), work productivity (Chiaburu & Harrison, 2008), stress-resiliency (Falk, Hanson, Isacsson, & Ostergren, 1992), and even lifespan (Holt-Lunstad, Smith, & Layton, 2010; King & Reis, 2012; see Umberson & Montez, 2010 for a review).

It is clear that successful relationships have significant and far-reaching effects for both individuals and society in general. What, then, leads people to experience their romantic relationships as successful? Although past research has examined factors that predict people's

feelings of relationship well-being, much of this work has adopted a "one size fits all" approach, examining variables that weakly or strongly predict better relationships in general. However, people's desires and needs within and outside of their relationships are strongly driven by what motivates them at a fundamental, basic level, and there is significant variation in what people find motivating in the first place.

To examine what it is that makes people happiest in their relationships, I argue that it is important to consider people's general motivational orientations, as these shape what types of experiences individuals are sensitive to, find important, problematic, and fulfilling. This thesis integrates motivational and relationship science, showcasing how broader, non-relationship specific motivational orientations impact how people experience relationship success. I examine how two fundamental relationship characteristics—security and growth—contribute to relationship success. Using insights from Regulatory Focus Theory (Higgins, 1997), I argue that there is important and systematic individual variability—captured by people's motivational orientations—in how security and growth contribute to relationship success.

# **Security as the Cornerstone of Relationship Success**

Existing theorizing in close relationships has long emphasized the importance of maintaining security for the success and well-being of relationships. Feeling a sense of security involves trusting in a partner's care and love and feeling that one's relationship is stable—that is, consistent, predictable, and dependable (Holmes & Rempel, 1989; Rempel, Holmes, & Zanna, 1985). For example, attachment theory posits that experiencing a sense of security and trust with early caregivers fosters the formation of secure attachment, which in turn engenders interpersonal well-being with other relationship partners across the lifespan (e.g., Ainsworth, 1979; Bowlby, 1969; Brennan & Shaver, 1995; Feeney, 1996; Hazan & Shaver, 1987; Kobak &

Hazan, 1991). Feeling secure in one's relationships facilitates intimacy, interdependence, and viewing both others and the self in a positive light. Indeed, insecurely-attached people (i.e., those high in anxious or avoidant attachment) tend to experience relationship hardships such as increased conflict, engagement in maladaptive conflict behaviors, and shorter relationship longevity (Cortes & Wilson, 2016; Feeney & Noller, 1992; Shi, 2003; Simpson, Rholes, & Phillips, 1996).

Risk-Regulation Theory (Murray, Holmes, & Collins, 2006; Cavallo, Murray, & Holmes, 2013) also emphasizes the importance of felt security in close relationships. In particular, this program of research highlights the negative downstream consequences of experiencing threats to relationship security (Cavallo, Fitzsimons, & Holmes, 2009; Cavallo, Holmes, Fitzsimons, Murray, & Wood, 2012; Murray, 2005; Murray, Rose, Bellavia, Holmes, & Kusche, 2002), particularly for those who are chronically prone to distrusting others. When people with chronic relational insecurities experience situated relationship threats, they often behave in self-protective ways by cognitively and behaviorally distancing themselves from their partners (Murray, Derrick, Leder, & Holmes, 2008). This pattern of self-protective behavior ironically undermines relationship satisfaction and results in greater conflict between partners, enhancing the likelihood of the relationship ending (Murray et al., 2002; 2013; Murray, Holmes, & Griffin, 1996).

The emphasis on the importance of security in promoting and maintaining relationship well-being can also be seen in interventions used to enhance security with the goal of improving relationship health (e.g., see Murray, 2005 for a review). For example, various security-enhancing primes have been used to increase relationship security in the long-term (see Gillath, Selcuk & Shaver, 2008). Increases in relationship security have been shown to improve

relationship outcomes such as compassionate responding, empathic behavior, and cognitive openness (Marigold, Holmes & Ross, 2010; Mikulincer et al., 2001; Mikulincer, Shaver, Gillath, & Nitzberg, 2005). Taken together, the overarching theme of many past research programs is that the presence of security-related relationship qualities is critical for maintaining high quality, long-lasting relationships.

# Is Security Always Enough? A New(er) Emphasis on Growth-Related Characteristics

It is clear that security is a critical component of relationship success. However, less attention has been paid historically to the powerful role that *growth*, in its own right, has in fostering relationship success. Growth-related relationship qualities represent states of advancement in relationships. They are conceptualized as the presence of positive characteristics such as fun and excitement that facilitate connection as well as relationship and personal development. Although security and stability are required at some minimum level to maintain a relationship, growth-related qualities capture the need for progress and gains (including adopting new values, standards and experiences) within a relationship. There is a growing body of research highlighting the critical role of growth-related qualities in enhancing relationship well-being (e.g., Aron, Aron, & Smollan, 1992; Gable, Gonzaga, & Strachman, 2006; MacDonald, Locke, Spielmann, & Joel, 2013; Spielmann, MacDonald, & Tackett, 2012).

For example, the underlying assumption of self-expansion theory is that continued growth is integral to relationship success (Aron & Aron, 1986; Aron, Aron, Tudor, & Nelson, 1991). A central tenet of this model is that people are motivated to broaden their sense of self by adopting others' traits and values and developing new perspectives (Mattingly & Lewondowski, 2014). This pursuit of self-expansion is driven by the desire to utilize the skills, traits, and perspectives of close others to increase one's own self-efficacy and ability to accomplish goals

(Aron, Norman, & Aron, 1998; Aron, Lewandowski, Mashek, & Aron, 2013; Mattingly & Lewondowski, 2014; Tsapelas, Aron, & Orbuch, 2009). Self-expansion can be accomplished through both including the other in the self (as described above), as well as by engaging in novel and arousing activities with a partner (Aron, Norman, Aron, McKenna, & Heyman, 2000; Reissman, Aron, & Bergen, 1993). For example, one lab study found that couples who engaged in a novel exciting activity together—navigating through a maze while attached together by Velcro—versus a mundane task (rolling a ball across the room individually), experienced enhanced relationship satisfaction (Aron et al., 2000). Other research has shown that engaging in novel and exciting experiences has many benefits for romantic relationships, including greater satisfaction and commitment (Aron, Norman, Aron, & Lewandowski, 2002), higher sexual desire (Muise et al., 2019), lower likelihood of relationship dissolution (Aron et al., 1992; Le, Dove, Agnew, Korn, & Mutso, 2010; Tsapelas et al., 2009), and overall improvement in relationship quality (Aron et al., 2000; Reissman et al., 1993). Consistent with these findings, playfulness in romantic relationships (e.g., having fun and acting silly with a partner) is also positively linked to relationship satisfaction (Aune & Wong, 2002).

The positive effects of growth-related relationship qualities for relationship well-being can also be seen in research examining the effects of "capitalizing" in relationships. When a person discloses positive news to his/her partner, an enthusiastic response by his/her partner promotes connection and in turn heightens relationship well-being (Gable & Reis, 2010; Gable, Reis, Impett, & Asher, 2004; Langston, 1994). These findings demonstrate that support for positive events, which are not directly related to threat but rather are growth-promoting, can also positively impact relationships (Gable, Gosnell, Maisel, & Strachman, 2012). In fact, supportive responses to disclosures of positive events have been found to be a stronger predictor of

relationship satisfaction than supportive responses to disclosures of negative events (Gable et al., 2006), suggesting that there may be times when the presence of growth is more important to relationship well-being than the presence or absence of security (see also Gere, MacDonald, Joel, Spielmann, & Impett, 2013). Taken together, this evidence establishes the unique importance of growth (above and beyond security) in fostering successful close relationships.

# Individual Differences in the Emphasis on Security versus Growth

It has been well established that security and growth experiences are critical components of fostering successful relationships. Although both security and growth are likely valued by most people to some extent, it remains unclear whether growth and security concerns within relationships are equally important to everyone. The presence of growth and security qualities within relationships are captured by fundamentally different experiences. The types of relationship experiences that signal the presence of growth are fun, excitement, adventure, passion, and novelty. When couples connect through new experiences together, and feel passion and arousal in their relationship, those couples are experiencing the presence of growth in their relationships. In contrast, the kinds of experiences that signal the absence of growth are boredom and stagnation (i.e., lacking the "spark" and feeling as though things are stagnant in the relationship).

The types of relationship experiences that signal the presence of security look different: Security experiences are captured by qualities such as stability and consistency. When there is an emphasis on partner reliance, relationship continuity, routine, and knowing what to expect from one day to the next, relationships have high a high presence of security-related experiences. In contrast, feeling as though the relationship is "rocky," undependable, and unpredictable signals an absence of security-related relationship qualities.

Although the presence of both growth and security experiences in relationships are arguably beneficial and adaptive, the meaning of these experiences—whether they are closely attended to, and whether they are likely to significantly enhance feelings of relationship well-being—will likely differ to the extent that people weigh security versus growth as critical. A person with strong advancement and growth concerns is likely to perceive the presence of growth-related relationship experiences as especially attractive, and may not be as satisfied in a relationship that feels stagnant, even if it is relatively stable. In contrast, a person with strong security concerns may find the presence of security-related relationship experiences as especially valuable, but feel dissatisfied if security is lacking in the relationship, even if there are growth experiences. In other words, for a person with strong growth concerns, the presence or absence of security may not affect their relationships in the same way it would for a person with strong security concerns. Similarly, for a person with strong security concerns, the presence or absence of growth is likely to feel less relevant for their relationship feelings.

Consistent with this general logic, the Ideal Standards Model (Fletcher & Simpson, 2000; Fletcher, Simpson, & Thomas, 2000a) posits that it is important that people's idiosyncratic ideal relationship traits correspond with the perceived presence of those traits. From an evolutionary perspective, which argues for different motivated routes to selecting mates (Gangestad & Simpson 2000), the Ideal Standards Model examines three categories of partner preferences: warmth-loyalty, vitality-attractiveness, and status-resources (Fletcher et al., 2000a; Fletcher, Simpson, Thomas, & Giles, 1999). Fletcher and colleagues (2000a) found that when people's ideal partner preferences (e.g., wanting a high-status partner) more closely aligned with their perception of their partner's traits (having a high-status partner), relationship well-being was higher and relationships lasted longer (Campbell, Simpson, Kashy, & Fletcher, 2001; Fletcher et

al., 2000a).

These findings support that idea that the more people's relationship and partner desires are met in their relationships, the more satisfied they feel in those relationships. In the current research, in contrast to examining specific idiosyncratic relationship preferences like status or attractiveness as examined in the Ideal Standard Model, I examine preferences with regard to broader, and arguably fundamental, relationship qualities—security and growth. I argue that whether the experience of growth or security in relationships contributes to the well-being of those relationships will depend on whether people prioritize growth or security concerns more generally. In addition, I predict that the source of these preferences are people's chronic or temporary motivational orientations, arguing that these are likely to arise as a function of differences in regulatory focus motivation.

Regulatory focus theory. I adopt a regulatory focus framework to examine motivational differences in perceptions of relationship success. Regulatory focus theory distinguishes between two co-existing self-regulatory systems—prevention and promotion—that serve critical, but distinct survival needs (Higgins, 1997). Because each system is important for successfully navigating through the world, people generally need both systems to be maximally effective. However, typically one system predominates and is chronically activated (i.e., predominantly promotion-focused or prevention-focused). Although people tend to have one chronic regulatory focus, one system can also be situationally induced (Freitas & Higgins, 2002; Higgins et al., 2001; Higgins, Roney, Crowe, & Hymes, 1994).

Each system contains separate valued end-states or goals ("standards"), as well as preferred strategies to attain such end-states (Higgins, 1997). The *prevention* system regulates security, safety, and responsibility needs. For prevention-focused people, goals are viewed as

duties and obligations. A person with chronic prevention concerns navigates the world by effortfully maintaining satisfactory states. In the prevention system, there is a both a sensitivity to and a strategic preference for approaching non-losses (the absence of negatives) and avoiding losses (the presence of negatives; Crowe & Higgins, 1997; Higgins et al., 2001). Prevention-focused people excel at maintaining their need for security and safety by adopting *vigilant* strategies (Crowe & Higgins, 1997; Higgins et al., 1994; Liberman, Molden, Idosn, & Higgins, 2001; Scholer & Higgins, 2012; Wang & Lee, 2006). Tactics and behaviours such as carefully considering alternatives (Liberman, et al., 2001) and prioritizing accuracy support prevention-focused people's vigilance (Förster, Higgins, & Bianco, 2003).

In contrast, the promotion system regulates nurturance needs and is concerned with the pursuit of hopes and dreams. A person with chronic promotion concerns navigates the world by effortfully advancing towards gain states. In the promotion system, goals are viewed as ideals and there is both a sensitivity to and a strategic preference for approaching gains (the presence of positives) and avoiding non-gains (the absence of positives; Higgins et al., 2001; Scholer & Higgins, 2013). Promotion-focused people excel at advancing towards their ideals by adopting *eager* strategies (e.g., Crowe & Higgins, 1997; Scholer & Higgins, 2012), such as considering multiple alternatives (Liberman et al., 2001) and prioritizing speed on tasks (Förster et al., 2003). While the promotion system emphasizes the need for growth to attain gains, the prevention system emphasizes the need for security to maintain a satisfactory non-loss state. As alluded to above, promotion and prevention focus are independent constructs; therefore, it is possible for people to be chronically high on both, low on both, or high on one and not the other.

Dozens of studies have tested the hypothesis that there are meaningful differences in promotion versus prevention concerns in predicting people's cognitions, attitudes, and

behaviours. For instance, one classic study found that when in a promotion motivational state, people preferred gain-related strategies over nonloss-related strategies to support friendship goals. Specifically, those in a promotion state preferred "be supportive to your friends" and "be loving and attentive" (gain-framed) over "stay in touch. Don't lose contact with friends" and "keep the secrets friends have told you and don't gossip about friends" (nonloss-framed) as strategies to fulfill friendship goals. The reverse was true for those in a prevention state (Higgins et al., 2004).

People also care more about, and work harder on, tasks that are framed to fit with their motivational orientation (Higgins, 2000; 2009). For instance, in another classic study, participants all had the same goal of completing 90% of an anagrams task correctly, and were given \$5 if they met that goal, or \$4 if they did not meet that goal. Promotion-focused participants performed better on the anagram task when they were told that they would earn an extra \$1 by solving 90% of the anagrams correctly (gain-framed) versus when they were told they would lose \$1 they already possessed by not missing more than 10% of the anagrams (loss-framed). Prevention-focused participants showed the opposite pattern—they performed better when given the loss-framed versus gain-framed feedback (Shah, Higgins, & Friedman, 1998).

Defining success and failure within each system. Critical to the current research, the distinct sensitivities and concerns of each system result in different definitions of success and failure (Scholer, Zou, Fujita, Stroessner, & Higgins, 2010; Scholer & Higgins, 2013; Zou, Scholer, & Higgins, 2014). Within the prevention system, success is characterized solely by the maintenance of security and safety, and upholding duties and responsibilities. Individuals with a prevention focus are concerned with the difference between "0"—the status quo (non-loss) and "-1"—a loss state (Brendl & Higgins, 1996; Higgins, 1997; Higgins & Tykocinski, 1992).

Prevention-focused people experience success when they are at "0", a satisfactory non-loss state, and experience failure when at "-1", a loss state. For prevention-focused people, the difference between "0" and "+1" (a gain state) is insignificant. That is, further gains are not necessary for the experience of success; it is enough to hold onto a satisfactory non-loss state (Freitas, Liberman & Higgins, 2002; Higgins, 1997; Scholer & Higgins, 2008; Scholer et al., 2010). Therefore, I propose that prevention-focused individuals are likely to experience relational success when safety and security needs are maintained within the relationship. That is, since the core concern in the prevention system is maintaining non-loss, maintaining a secure and stable relationship with little to no risk of loss (e.g., relationship dissolution) would be of utmost importance (Higgins, 1997; Keller, 2008; Wang & Lee, 2006; Scholer & Higgins, 2012). This may involve, for example, feeling like the relationship is safe, consistent, and reliable, with little room for instability.

Within the promotion system, on the other hand, success is characterized as positive deviations from the status quo—a "+1" state in which there are gains and growth toward positive change. Failure is characterized as remaining at the status quo or failing to advance (non-gains) (Zou et al., 2014). Notably, failure is characterized as remaining at "0"—even a satisfactory, maintenance state in not enough for people in a promotion state to feel success, despite its maximal success signal for people in a prevention focus. In other words, it is not enough in the promotion system to avoid loss; there must also be the presence of gains and progress. The difference between "-1" and "0" is equivalent in the promotion system; only the advancement from "0" to "+1" is relevant and motivating (Brendl & Higgins, 1996; Higgins, 1997; Higgins & Tykocinski, 1992). Therefore, in the promotion system, I reason that relationship success may be represented by a need for growth in relationships. Though I do not doubt that even primarily

promotion-focused people need a sense of security and stability to feel positively about their relationships (given its importance for sustaining relationships over time), I assert that the promotion system will uniquely prioritize a need for growth and advancement. Building on Aron et al.'s (2000) definition of growth in relationships, promotion-focused people may emphasize and prioritize the presence of relationship qualities such as fun and excitement. It may also be reflected in the need for novel experiences that contribute to a sense of positive progression toward relationship gains. Although research suggests that excitement and novelty can be beneficial qualities in all relationships (Aron et al., 1998; Aron et al., 2013; Tsapelas et al., 2009), I argue that promotion-focused individuals will be particularly likely to see these qualities as essential.

What promotion and prevention motivation are not. It is useful to distinguish the current framework from past work on how positive versus negative relationship factors contribute to relationship satisfaction (Elliot, Gable, & Mapes, 2006; Gable & Poore, 2008; Impett et al., 2010). This research has typically adopted an approach-avoidance framework and found that chronically approach-motivated people (those seeking positive end-states) are happiest in their relationships when positive thoughts and feelings are present (reward features), whereas chronically avoidance-motivated people (those avoiding negative end-states) are happiest in their relationships when negative feelings are absent (i.e., when they do not feel rejected; threat features). Researchers have concluded that approach-motivated relationship goals (approaching positive end-states) are generally adaptive, while avoidance-motivated relationship goals (avoiding negative end-states) are maladaptive (e.g., Gable, 2006; Impett, Peplau, & Gable, 2005; see Gable & Gosnell, 2013 for a review). Although there can be a temptation to view a) promotion motivation as synonymous with approach and prevention motivation as synonymous

with avoidance, and b) relationship rewards as synonymous with growth and relationship threats as synonymous with (in)security, I discuss important distinctions that help delineate why my current program of research is complementary to, not redundant with, this past work.

Distinguishing promotion and prevention from approach and avoidance. First, a promotion motivation is not the same as an approach motivation, and a prevention motivation is not the same as an avoidance motivation (Molden, Lee, & Higgins, 2008). Approach and avoidance motivation rests on the basic hedonic principle that people are motivated to seek pleasure and avoid pain (Atkinson, 1964; Carver & Scheier, 1990; Gray 1982; Hull 1952; Powers, 1973). Approach motivated people are those who tend to approach desired end states (rewards), while avoidance motivated people are those who tend to avoid undesired end-states (threats; Elliot et al., 2006). In contrast, Regulatory Focus Theory argues that there are different types of desired end-states that can be approached, and different types of undesired end-states than can be avoided (Higgins, 1997). The promotion system regulates behaviour to approach gains, ideals, and growth, and to avoid non-gains and nonfulfillment. The prevention system regulates behaviour to approach non-losses, oughts, and safety, and to avoid losses and danger (Higgins, 1997). Therefore, promotion and prevention focus each contain both approach and avoidance motives. Thus, when it comes to desired end states, regulatory focus is orthogonal to approach and avoidance (see Scholer, Cornwell, and Higgins, 2019 for a review).

Distinguishing reward and threat from growth and security. Second, reward is not the same as growth and threat is not the same as (in)security. In prior frameworks, relationship rewards are conceptualized as positive desired end states—relationship features that people generally want to approach, such as companionship, understanding, and intimacy (Gable, 2006). On the other hand, relationship threats are conceptualized as negative features that people want

to avoid, such as rejection, conflict, and breakup. In these studies, the presence of rewards, or adopting general approach goals in relationships, predicts a host of adaptive outcomes: less loneliness, more satisfaction with relationships, high sexual desire, and lower likelihood of relationship dissolution (Elliot et al., 2006; Gable, 2006; Impett et al., 2005; see Gable & Impett, 2012 for a review). Avoidance goals generally showed the opposite effect—when people had strong avoidance goals or motives in their relationships, negative outcomes accrued.

In contrast, both growth- and security-related relationship qualities are positive and adaptive relationship qualities that predict enhanced relationship well-being. Therefore, both growth and security experiences fall under the "reward" category. A fun and exciting (growth) experience, or an experience where partners worked together and deepened trust (security) are both rewarding and adaptive experiences. More broadly, growth and security concerns are orthogonal to approach and avoidance goal pursuit (Scholer & Higgins, 2008; 2013; Scholer, et al., 2019). For instance, people can approach a rewarding fun and exciting relationship (growth approach) or can approach a rewarding secure and stable relationship (security approach). Conversely, people can avoid a relationship that is boring and dull (growth avoid) or a relationship that is unstable and unreliable (security avoid). For some, lacking growth (i.e., experiencing boredom and stagnation) is threatening, whereas for others, lacking security (i.e., feeling a lack of trust or sending unpredictability) is threatening. Thus, the current research examines if there are differences in the particular kinds of positive, rewarding relationship experiences (growth verses security) that lead to perceptions of relationship success. This approach is in contrast to some motivational models that treat approaching reward and approaching non-punishment as equivalent (e.g., Carver & Scheier, 1990; Gray 1982).

It is also worth noting that unlike findings related to approach and avoidance motivation,

in which approach-motivated people had better relationships and avoidance-motivated people had worse ones (e.g., Gable, 2006), past work looking at regulatory focus in relationships has found that both promotion and prevention concerns foster relationship well-being (Molden & Finkel, 2010; Molden, Lucas, Finkel, Kumashiro, & Rusbult, 2009; Winterheld & Simpson, 2011). These comparisons showcase how approach and avoidance motivation in relationships is independent of promotion and prevention focus. If they were parallel, prevention-focused people should have worse relationships (like avoidance motivated people). Instead, prevention-focused people's relationship motivational strategies likely focus on maintaining security in addition to avoiding relationship threat. Similarly, promotion-focused people's relationship strategies likely focus on creating gains in addition to avoiding non-gains.

Regulatory focus in the social domain. Past studies have examined the role of regulatory focus in close relationship contexts, primarily in the relationship domains of support for one's personal goals and interpersonal forgiveness (see Molden & Winterhled, 2013, for a review). Together these findings support the idea that the promotion system's sensitivity to gains and the prevention system's sensitivity to losses are influential in relationship dynamics. First, several lines of research have shown how regulatory focus affects personal and interpersonal goal pursuit and goal support within relationships. For instance, one line of work found that when people were in a promotion-oriented relationship state (unmarried and therefore presumably attainment oriented), people felt most positively about their relationships when their partners supported their attainment (promotion-focused), but not maintenance (prevention-focused) goals. In contrast, for married couples, in which both attainment and maintenance are relevant, perceived support for both promotion and prevention goals predicted relationship well-being (Molden et al., 2009).

Past research has also found that perceived partner support for personal autonomyrelevant goals (e.g., feeling support for one's freedom of choice) predicts relationship well-being
for promotion-focused, but not prevention-focused individuals (Hui, Molden, & Finkel, 2013).

Given that autonomy goals support personal growth and advancement, partner support for these
goals is more relevant within the promotion versus prevention system. These findings highlight
how motivational concerns affect perceptions in relationships—receiving support for one's
motivationally relevant goals from a partner affects how satisfied people feel in their
relationships.

When examining forgiveness in relationships, studies have found that highly promotion-focused (but not prevention-focused) people are more likely to forgive their partners when they trust there are benefits to be gained by repairing their relationship (Molden & Finkel, 2010). In contrast, prevention-focused people are most likely to forgive their partners when they focus on commitment to protecting the relationship against breakup. These findings again suggest that people's motivational orientations affect the strategies that are most useful in maintaining relationships.

The above studies support my assertion that concerns with advancement and growth (promotion focus) and safety and security (prevention focus) shape how individuals think and behave in romantic relationships (e.g., Finkel, Molden, Johnson, & Eastwick, 2009; Hui et al., 2013; Lackenbauer & Campbell, 2012; Molden et al., 2009; Righetti, Finkenauer, & Rusbult, 2011; Righetti & Kumashiro, 2012; Winterheld & Simpson, 2011; see Luchies, Finkel, & Fitzsimmons, 2011). Although these studies established how support of *personal* goals enhanced relationship well-being for promotion-focused individuals, prior work has not examined how the presence or absence of shared *relationship* experiences (e.g., a relationship characterized by fun

and excitement versus stability and reliability) affects perceptions of relationship success. The current research tackles this question. Given that such experiences are posited to be a core component of relationship well-being (e.g., Aron et al., 2002; Hazan & Shaver, 1987), understanding whether there are critical motivational differences in how different relationship experiences affect relationship success is important for advancing relationship science. This work also advances relationship science because it challenges a "one size fits all" approach and instead provides a framework for understanding the qualities that predict experiencing relationship success. This research has the potential to make significant contributions to both relationship and self-regulation science with practical implications for designing interventions to improve people's romantic relationships.

#### The Present Research

Five studies examined whether individual differences in regulatory focus shape the extent to which people value and prioritize growth versus security-related relationship qualities in their romantic relationships, and how the presence of those relationship qualities contribute to evaluations of relationship success. I tested the hypothesis that experiencing growth in one's relationship is particularly important and beneficial for promotion-focused individuals. Because promotion-focused people a) define success through the presence of growth and gains more broadly, and b) value partner support for growth needs in their relationship (Hui et al., 2013), I predicted that promotion-focused people will also experience higher relationship well-being when growth-related relationship qualities are more versus less present in their relationship.

Building on Aron et al.'s (2000) description of the kinds of experiences that promote growth and expansion in close relationships (Aron et al., 2013), I tested the hypothesis that promotion-focused people may especially value growth in their relationships—a sense of positive progress

toward relationship gains, such as experiencing fun, excitement, passion, and novelty. In contrast, I predicted that growth would not be as strongly linked to perceived relationship success for prevention-focused individuals, given that prevention success is primarily about maintaining non-loss.

In contrast, I predicted that prevention-focused people may be particularly likely to value relationships characterized by the presence of security. However, although the self-regulation literature makes a clear case for prevention-focused individuals valuing security (e.g., Crowe & Higgins 1997), research in close relationships suggests that security may be so fundamental in the interpersonal context that it will be difficult to detect differences in its importance (e.g., Hazan & Shaver, 1987). Security in close relationships has also been argued to serve as a necessary precondition for experiencing growth (Green & Campbell; 2000; Feeney & Thrush, 2010). Thus, taking into account both self-regulation and close relationship findings, I predicted that the link between security and prevention success may be more likely to become apparent when examining the *relative* importance of security versus growth in relationships. If forced to consider the relative value of security versus growth qualities to their overall relationship success, prevention-focused (but not promotion-focused) individuals may place relatively greater value on security.

The first three studies examined how chronic differences in regulatory focus predicted the importance of growth- and security-related relationship qualities across a number of contexts.

Study 1 examined how chronic differences in regulatory focus predicted the rated importance of growth- and security-related relationship qualities. I examined the importance of relationship qualities at both an absolute level (when looking solely at growth or security), and at a relative level (when looking at the importance of growth relative to security). Doing so allowed me to

examine how regulatory focus predicted not only the importance of growth and security separately, but the relative weighting of growth versus security. Studies 2 and 3 examined how chronic differences in regulatory focus predicted the importance of growth- versus security-related relationship qualities when those qualities were pitted against one another. Participants indicated a preference for relationships comprised of growth- versus security-related relationship qualities (Study 2), and rank ordered the importance of secure- versus growth-related relationship qualities (Study 3).

The remaining studies examined whether regulatory focus would predict people's reported relationship well-being as a function of the presence or absence of relationship growth and security. Perceptions of relationship well-being (e.g., how satisfied, committed people feel in their relationships) is a strong predictor of relationship persistence over time (Eastwick, Luchies, Finkel, & Hunt, 2014; Le et al., 2010). Study 4 manipulated regulatory focus and examined the hypothesis that promotion-focused, but not prevention-focused, individuals would rate their relationship well-being higher when their relationships were characterized by more growth (but not security). I also examined whether prevention-focused participants would rate their relationship well-being higher when security versus growth relationship qualities were present. Study 5 tested the prediction that a manipulation of relationship growth and security would affect relationship well-being differently for promotion- versus prevention-focused individuals. Specifically, Study 5 examined whether a relationship growth (versus relationship security) prime would predict higher relationship well-being for promotion-focused people, and that a relationship security (versus relationship growth) prime would predict higher relationship wellbeing for prevention-focused people

## Study 1

The purpose of Study 1 was to investigate whether the importance people place on growth- or security-related relationship qualities would be differentially predicted by regulatory focus. Participants completed a measure of chronic regulatory focus and rated the importance of growth- and security-related qualities in their own relationships. I examined whether regulatory focus predicted both the absolute and relative importance ratings for growth and security. I hypothesized that promotion focus would positively predict the importance of growth-related (e.g., fun, excitement) but not security-related (e.g., stability, reliability) relationship qualities at both an absolute level and when examining the presence of growth relative to the presence of security. In contrast, I predicted that prevention focus would not predict the importance of growth. Instead, I predicted that prevention focus would predict the relative importance of growth versus security. I did not have a strong prediction about whether prevention focus would predict importance ratings of security at an absolute level, given how fundamental security qualities are to relationships.

#### Method

**Participants.** Based on effect sizes from previous research examining regulatory focus and relationship outcomes (Hui et al., 2013), it seemed reasonable to expect an effect size for the predicted interactions (Promotion Focus × Quality Type, Prevention Focus × Quality Type) in the small to medium range ( $\eta_p^2$  for the interaction term = .04). I conducted an a-priori power analysis using G\*power (Faul, Erdfelder, Lang, & Buchner, 2007), which suggested that a sample of approximately 80 participants would provide .80 power to detect an effect size of  $\eta_p^2$  = .04. In the current study, I had the resources to collect a large sample of approximately 400 participants with a conservative estimate of a small effect size. I recruited 405 (222 females, 182

males, 1 unspecified) U.S. participants from Amazon's Mechanical Turk. Participants were required to be in romantic relationships ( $M_{length} = 8.14$  years, SD = 9.42) and were paid money for their time. Participants were between 18 and 74 years of age (M = 35.80, SD = 12.22). Participants were generally quite satisfied with their relationship (M = 6.05, SD = 1.11; Fletcher, Simpson, & Thomas, 2000b;  $\alpha = .94$ ).

**Procedure and measures.** Participants first completed the Regulatory Focus Questionnaire (RFQ; Higgins et al., 2001) to assess chronic promotion and prevention focus, followed by a series of other filler personality measures.<sup>2</sup> The RFQ is an 11-item measure that captures chronic regulatory focus orientations by assessing participants' history with promotion and prevention success. Using a 5-point scale from 1 (never or seldom) to 5 (very often), participants answered six promotion focus and five prevention focus items. Sample promotion focus items included: "Do you often do well at different things that you try?" "How often have you accomplished things that got you "psyched" to work even harder?" and "Compared to most people, are you typically unable to get what you want out of life (reverse scored)?" Sample prevention focus items included: "How often did you obey rules and regulations that were established by your parents?" "Not being careful enough has gotten me into trouble at times (reverse scored)," and "Growing up, would you ever 'cross the line' by doing things that your parents would not tolerate (reverse scored)?" See Appendix A for the full scale. The internal reliability of the prevention scale was good ( $\alpha = .82$ ) and adequate for the promotion scale ( $\alpha =$ .67). Although the promotion scale reliability is lower than ideal, given the established validity of the RFQ (Haws, Dholakia, & Bearden, 2010) and its wide use across many investigations of regulatory focus (e.g., Cesario, Grant, & Higgins, 2004; Hui et al., 2013), I proceeded to compute the subscales as traditionally done. See Table 1 for the descriptive statistics and

correlations of chronic promotion and prevention focus in this study and in the remaining studies that measured them (Study 2, 3, 5).

Next, participants were asked to rate the importance that they place on various relationship qualities. Embedded in the questionnaire were both growth- and security-related relationship qualities (which were randomly ordered). The scale consisted of 18 items total: Nine items captured growth-related qualities in relationships and nine items captured security/stability related qualities ( $1 = not \ at \ all \ and \ 7 = extremely$ ).

To capture growth in relationships, I adopted Aron et al.'s (2000) conceptualization of growth through self-expansion and emphasized qualities that allowed for the potential for relationship growth (advancement beyond a satisfactory state, progress, and the possibility for gains), such as fun, excitement, novelty, and connection. Growth-related items included: "It's important that my partner and I always continue growing together as a couple," "I care a lot about having excitement in my relationship," and "I want to have adventures with my partner that we can look forward to." The subscale capturing security and stability focused on qualities necessary to maintain a satisfactory non-loss state, such as stability, predictability, and consistency, which are not directly linked to the possibility for gains and growth. Sample items included: "I want my relationship to be reliable and consistent," "It's important to me that my partner and I establish routines in our relationship," and "I want to be able to predict what my partner will do in most situations." Both the growth ( $\alpha = .89$ ) and security ( $\alpha = .89$ ) subscales had good reliability. See Appendix B for the full scale.

Because I created the growth and security scales for this study, I conducted an exploratory factor analysis on the 18 items. A principal components analysis with varimax rotation indicated the existence of three robust factors (eigenvalues > 1) revealing high loadings

of growth-related experiences onto one factor (all nine items included in the scale; loadings > .62). The other two factors comprised the security-related experience items. The three conflict-related items in the scale loaded onto their own, the third and weakest, factor (loadings > .50), while the rest of the security-related items loaded onto the second factor (loadings > .57). Because the conflict avoidance items map onto my and others' past conceptualization of security, I included all items in the security scale for the primary analyses. The correlations between scales also supported this decision, as the conflict scale was highly correlated with the rest of the items in the security scale (r = .58), and instead had a weaker correlation with the growth scale (r = .18).

#### Results

Table 2 provides the raw correlations between the variables of interest: promotion and prevention focus, and importance of growth- and security-related relationship qualities. Notably, consistent with past work, there was a small positive association between promotion and prevention focus (r = .20, p < .001), demonstrating the independence between the two constructs, while also providing support that both constructs capture self-regulation skills. Growth and security ratings were also moderately correlated (r = .22, p < .001). Table 3 summarizes the results described below (the standardized coefficients and level of significance for both absolute and relative analyses).

I began by conducting a repeated measures analysis of importance of relationship growth/security as a within-subjects factor, and promotion and prevention focus as between-subjects covariates. There was no main effect of prevention focus, F(1, 402) = .05, p = .827,  $\eta_p^2 < .01$ , and a significant positive main effect of promotion focus, F(1, 402) = 22.47, p < .001,  $\eta_p^2 = .05$ . There was a main effect of quality type; participants rated the importance of growth (M = .05).

5.79, SD = .90) more highly than security (M = 4.62, SD = .80), F(1, 402) = 535.44, p < .001,  $\eta_p^2 = .57$ . Critically, the interaction between relationship quality type and promotion focus, F(1, 402) = 46.39, p < .001,  $\eta_p^2 = .10$ , and the interaction between relationship quality type and prevention focus, F(1, 402) = 5.60, p = .018,  $\eta_p^2 = .01$ , were both significant and in opposite directions. To examine the specific pattern of the interactions, I conducted two sets of follow up analyses. First, I examined how regulatory focus predicted the importance of growth and security at an absolute level. I then examined how promotion- and prevention-focused individuals *prioritized* the importance of growth relative to security.

Examining growth and security at an absolute level. I first examined how promotion and prevention focus predicted the importance of growth and security separately, at an absolute level. I conducted two multiple regression analyses. The first model included the importance of growth-related relationship qualities as the dependent variable and both promotion and prevention focus (standardized) as simultaneous predictors, while controlling for security-related relationship qualities (standardized). The second model was the same, except security qualities was the dependent variable, and growth qualities were controlled for. Consistent with my hypothesis, promotion focus significantly predicted the importance of relationship growth,  $\beta = .37$ , t(401) = 7.73, 95% CI [.25, .42], p < .001, and negatively predicted relationship security,  $\beta = .12$ , t(401) = -2.26, 95% CI [-.01, -.18], p = .024. Prevention focus marginally predicted the importance of security,  $\beta = .09$ , t(401) = 1.75, 95% CI [-.01, .15], p = .081, and negatively predicted the importance of growth,  $\beta = .09$ , t(401) = -1.96, 95% CI [.00, -.16], p = .050.

**Examining growth and security at a relative level.** To examine regulatory focus differences in the relative importance of growth versus security, I created an index of relative prioritization. I calculated a difference score by subtracting security importance ratings from

growth importance ratings. I regressed the difference score on promotion and prevention focus simultaneously. Consistent with my hypothesis, promotion focus positively predicted prioritization of growth over security,  $\beta = .33$ , t(402) = 6.81, 95% CI [.25, .45], p < .001. In contrast, prevention focus negatively predicted prioritization of growth over security,  $\beta = -.11$ , t(402) = -2.37, 95% CI [-.22, -.02], p = .018 (see Figure 1). Interestingly, even people high in prevention focus rated the importance of growth as overall higher than security. However, the difference between the importance of growth and security was attenuated for prevention-focused people.

# **Discussion**

Consistent with my theorizing, Study 1 provided evidence that people chronically high in promotion focus perceived growth-related relationship qualities to be more important in their relationships than did people low in promotion focus. Further, and somewhat unexpectedly, promotion focus negatively predicted the importance of security-related relationship qualities. It is possible that when viewing the security quality items next to the growth items, the security items felt like an impediment to growth potential (e.g., "we can't grow if we have too much consistency"), and thus were devalued by promotion-focused individuals. Indeed, the data from this study suggest that promotion-focused people place relatively more importance on growth-versus security-related relationship qualities.

In contrast, at an absolute level, prevention focus marginally predicted the value of security qualities. Prevention-focused individuals also placed relatively less importance on growth *relative* to security, compared to those low in prevention focus. Although people high in prevention focus placed marginally more importance on security at an absolute level, the predicted mean for people high in prevention focus was still above 0 in the relative importance

analysis, suggesting an overall high importance rating of growth. These findings are likely in part due to the large main effect of quality type in this study—people generally placed greater importance on growth than security. One possibility is that something about the growth items led participants to infer higher quality relationships if growth was present than did the themes presented in the security items (thus making even prevention-focused people favourable towards growth).

Another possibility is that the method of the study (continuous ratings of importance) did not allow for prevention focus to emerge as a stronger predictor of the importance of security-related relationship qualities. In the current study, participants were not asked to explicitly indicate how they would prioritize growth versus security concerns, which may have more directly revealed their fundamental concerns with security relative to growth. These possibilities are addressed in Studies 2 and 3, in which I examined contexts under which prevention focus may be more likely to emerge as a significant predictor of relationship security. In Study 2, I examined the prioritization of growth versus security when these experiences were directly pitted against one another, while keeping constant perceptions of relationship satisfaction. In Study 3, participants ranked the importance of relationship security and growth qualities that were either framed in a way that is sensitive to the promotion system – gain framed, or framed in a way that is sensitive to the prevention system – loss-framed.

# Study 2

The purpose of Study 2 was to examine how promotion- versus prevention-focused people would prioritize growth or security using a more rigorous methodology to assess relative importance. Specifically, I adopted a forced-choice paradigm in which participants had to indicate the extent to which they would value growth *versus* security in relationships. In this

study, individuals were presented with a choice between two relationships that were equally satisfying and positive, but that differed in whether their relationship was primarily characterized by growth (excitement, novelty) or security and stability (have a relationship that is the same one day to the next). I hypothesized that promotion-focused people would more strongly prefer the couple that displayed growth-related qualities, while prevention-focused people would more strongly prefer the couple that displayed security-related qualities.

### Method

**Participants.** Based on effect sizes from previous research examining regulatory focus and relationship outcomes (Hui et al., 2013), and from the results from Study 1, a G\*power analysis suggested that a sample of approximately 153 participants would provide .80 power to detect an effect size in the small to medium range (OR = 1.80). I recruited 201 (91 females, 110 males) U.S. participants from Amazon's Mechanical Turk. Participants were between 18 and 74 years of age (M = 32.25, SD = 10.87) and were paid money for their time.

**Procedure and measures.** Participants first completed the same Regulatory Focus Questionnaire (RFQ; Higgins et al., 2001) as in Study 1 to assess chronic promotion and prevention focus. The internal reliabilities of the prevention scale ( $\alpha = .83$ ) and the promotion scale ( $\alpha = .74$ ) were adequate.

Next, participants read vignettes of two couples – Sarah and John, and Amy and Dan, which appeared in counterbalanced order (no order effects were found). Participants were told that both couples were highly satisfied in their relationship and that they loved and cared for one another. However, the description of Sarah and John's relationship reflected the presence of growth-related qualities, emphasizing excitement and trying new things:

Sarah and John are a loving couple who care a lot about one another and who both feel

highly satisfied in their relationship. Near the beginning of their relationship, they spent a lot of time going to the movies and hiking, but eventually they decided to change their hobbies, and began snowboarding and cooking meals together instead. Sarah and John like to try new things and "change it up" every once in a while. They are always excited about where their relationship will take them next. They enjoy having a relationship that is different from one day to the next.

In contrast, the description of Amy and Dan's relationship was reflected the presence of security-related qualities, emphasizing routine activities and stability:

Amy and Dan are a loving couple who care a lot about one another and who both feel highly satisfied in their relationship. They both enjoy pursuing activities together like going to the movies and hiking, which they started doing near the beginning of their relationship and continue to do now. Amy and Dan set many traditions and rituals in their relationship, like having a special homemade 3-course meal date night once a month and attending their favourite annual festival. They always look forward to the next scheduled event. They enjoy having a relationship that is the same and stable from one day to the next.

Finally, participants indicated which relationship they would rather have using a forced-choice paradigm. Participants answered either "I would rather have a relationship like Sarah and John's" or "I would rather have a relationship like Amy and Dan's".

# **Results and Discussion**

My analyses began with a chi-square test revealing that both couples were attractive to participants; neither couple was overwhelmingly preferred (52.7% of participants chose the growth-relevant couple,  $X^2 = .602$ , p = .481). I then tested the prediction that promotion and

prevention focus would differentially predict the relative importance placed on growth versus security-related qualities by conducting a binary logistic regression with the preferred couple as the dependent variable (0 = preference for security-related couple, 1 = preference for growth-related couple), and both promotion and prevention focus (mean-centered) as simultaneous predictors. Consistent with my predictions, promotion focus significantly positively predicted relationship choice, (OR = 1.37, p = .036, 95% CI [1.02, 1.84]), indicating a preference for the growth couple's relationship. In contrast, prevention focus significantly negatively predicted relationship choice, (OR = .63, p = .003, 95% CI [.47, .86], indicating a preference for the security-related couple's relationship.

The results of this study provided evidence that people high (versus low) in promotion focus preferred a relationship that emphasized growth versus security (given the same level of relationship well-being). This study also provided evidence that, in this forced-choice paradigm, prevention-focused individuals prioritize relationship security over growth qualities.

# Study 3

Study 3 sought to replicate and extend the findings of Studies 1-2 by examining preferences for relationship growth or security in a paradigm that allowed people to rank order their preferences. Specifically, I examined whether promotion focus would still predict a prioritization of growth, but not security, when growth and security qualities were presented simultaneously. I also examined whether prevention focus would predict a prioritization of security, but not growth, when these qualities were presented simultaneously. The current study also extended previous studies by manipulating the framing of the qualities to engender eagerness or vigilance, and thus match the promotion and prevention system's motivational concerns (respectively). Promotion focus should place prioritization on growth qualities

particularly when in an eager mindset, whereas prevention focus should place prioritization on security qualities particularly when in a vigilant mindset. This would also provide another context in which prevention focus should emerge as a significant predictor of security importance.

Participants ranked growth-related and security-related relationship qualities. In the eagerness-inducing condition, I had participants focus on relationship qualities with respect to the deviations between 0 and 1 by asking them to rank the *importance* of those qualities (e.g., how important it is to have excitement, stability). In the vigilance-inducing condition, I had participants focus on relationship qualities with respect to the deviations between -1 and 0 by asking them to rank how *problematic* it would be if those qualities were absent (e.g., how problematic it would if there was boredom, instability). I also included fundamental relationship qualities neutral to both systems (e.g., commitment and trust) as filler items to provide additional ranking options other than just growth and security qualities. To be clear, the fundamental relationship qualities are considered system-neutral because they are foundational qualities needed to maintain successful close relationships (e.g., Fletcher et al., 2000a; Rusbult, Martz, & Agnew, 1998). Trust in one's partner, for instance, is necessary both to feel secure and to explore new horizons (e.g., Aron & Aron, 1997; Holmes & Rempel, 1989; Simpson, 2007). Without trust, it might be difficult to fulfill any security or growth relationship needs (Wieselquist, Rusbult, Foster, & Agnew, 1999).

I predicted that when system-preferred relationship qualities (promotion and growth, prevention and security) were aligned with a congruent frame (growth and eager, security and vigilance), those qualities would be especially likely to be prioritized. Specifically, because promotion-focused individuals are most sensitive to eagerly pursuing gains and progress, I

hypothesized that promotion-focused participants would be particularly likely to prioritize growth when induced in an eager mindset, by thinking about the presence of multiple important qualities. In contrast, because prevention-focused individuals are sensitive to vigilantly maintaining security and stability, I hypothesized that prevention-focused participants would be particularly likely to prioritize security when induced into a vigilant mindset, by thinking about the absence of important qualities. I did not expect promotion or prevention focus to predict the ranking of fundamental relationship qualities in either framing condition because the fundamental qualities are all crucial, foundational characteristics needed to maintain a successful close relationships (e.g., Fletcher et al., 2000b; Rusbult et al., 1998), and should therefore be system-neutral.

### Method

**Participants.** Based on effect sizes from previous research examining regulatory focus and relationship outcomes (Hui et al., 2013), and from the results from Study 1, a G\*power analysis suggested that a sample of approximately 80 participants would provide .80 power to detect an effect size in the small to medium range ( $R^2$  for the interaction term = .10). A total of 104 (45 females, 57 males, 2 unspecified) American participants from Amazon's Mechanical Turk participated in this study. A total of 16 people were excluded from the analyses because they did not meet the eligibility criteria specified in the recruitment ad (they were not in exclusive romantic relationships), leaving a total of 86 (38 females, 48 males) participants. In the final sample, participants were between 19 and 66 years of age (M = 31.60, SD = 11.13) and were in exclusive (i.e., exclusively dating, common-law, and/or married) romantic relationships ( $M_{length} = 7.00$  years, SD = 8.34). Participants were paid money for their time.

**Procedure and measures.** Participants first completed the same regulatory focus

questionnaire (RFQ; Higgins et al., 2001) as in Studies 1-2 to assess chronic promotion and prevention focus. The internal reliabilities of the prevention scale ( $\alpha$  = .84) and the promotion scale ( $\alpha$  = .72) were adequate and consistent with past research (Higgins et al., 2001).

Next, participants were randomly assigned to one of two relationship quality ranking conditions. In the gain-framed condition, participants were asked to rank order the *importance* of the presence of various qualities, which captured growth-related (fun and excitement, full of new adventure and spontaneity) and security-related (secure and stable, reliable and consistent) relationship qualities. I also included fundamental relationship qualities neutral to both systems—commitment and trust, and support and respect, to balance out the qualities that people were ranking (i.e., providing more options than just security and growth qualities). In the lossframed condition, participants were asked to rank order how *problematic* the presence of various relationship qualities that were opposite to the original qualities (e.g., "boring" instead of "fun") would be. Again, I included growth-related (boring and dull, lacking new adventures), securityrelated (insecure and unstable, unreliable and inconsistent), and fundamental (lacking commitment and trust, lacking support and respect) relationship qualities. Participants were instructed to click and drag the qualities in their preferred order. A composite was created for each of the three gained-framed and three loss-framed quality categories (growth, security, fundamental). After completing the rankings, participants were debriefed and thanked.

### **Results and Discussion**

I conducted six regression analyses, regressing promotion and prevention focus on each of the gain-framed and loss-framed quality composites (growth, security, fundamental). The variables were recoded so that higher numbers indicated greater, rather than lesser, importance to make the results more easily interpretable in the context of the other studies. The results are

summarized in Table 4.

**Gain-framed categories.** As can be seen in Table 4 and replicating Studies 1 and 2, promotion focus significantly predicted the prioritization of the presence of growth-related,  $\beta$  = .36, t(41) = 2.29, 95% CI [.04, .69], p = .028, but not security-related,  $\beta = -.20$ , t(41) = -2.23, 95% CI [-.45, .11], p = .223, qualities. Promotion focus marginally predicted rating fundamental related relationship qualities as less important,  $\beta = -.31$ , t(41) = -1.94, 95% CI [-.40, .01], p = .060). Additionally, prevention focus did not predict any of the ratings when the qualities were gain-framed,  $\beta s < .18$ , ps > .290.

**Loss-framed categories.** However, when examining the ranking of relationship qualities that were loss-framed, prevention focus significantly predicted prioritization of the security-related relationship qualities,  $\beta = .34$ , t(39) = 2.16, 95% CI [.59, .02], p = .037. That is, people high in prevention focus were more likely to indicate that it would be problematic if their relationships lacked security-related qualities like stability and reliability relative to people low in prevention focus. Chronic prevention focus also predicted loss-framed growth-related qualities in the opposite way—people high (versus low) in prevention focus were less likely to indicate that the absence of growth-related qualities was problematic,  $\beta = -.33$ , t(39) = -2.10, 95% CI [-.01, -.62], p = .042. Prevention focus did not predict ranking of fundamental relationship qualities,  $\beta = .01$ , t(39) = .06, 95% CI [.31, .-29], p = .953. When loss-framed, promotion focus did not predict any of the ratings,  $\beta s < .15$ , ps > .396.

Up until this point, the studies have demonstrated that motivational orientations (promotion versus prevention focus) predict differential valuing of relationship qualities (growth versus security). So far the study findings suggest a clear and robust link between promotion focus and the value of growth-related qualities in relationships. Promotion focus predicted the

importance of growth at an absolute and relative level (Study 1), when pitted directly against security (Studies 2-3), and when qualities were framed in a gain context (Study 3). Study 1 even hinted at a potential devaluation of security for promotion-focused people.

In contrast, prevention focus predicted assigning greater value to relationship security, especially when examined directly relative to growth. Prevention focus marginally predicted greater importance ratings of security qualities at an absolute level (Study 1). When examining the importance of growth relative to security, the overall higher importance ratings of growth compared to security was attenuated by prevention focus. That is, prevention-focused people placed less importance on growth compared to security qualities (Study 1). Prevention focus most cleanly predicted a preference for relationship security when pitted directly against growth (Studies 2-3) and when in a vigilant context (Study 3).

# Study 4

Studies 1-3 provide evidence that one's regulatory focus orientation affects whether growth or security in relationships is more or less valued and preferred. However, this research has yet to establish whether the presence or absence of growth versus security qualities in one's *own* relationship affects how satisfied one is in his/her own relationship. Study 4 was designed to build on Studies 1-3 by examining whether perceptions of relationship well-being are affected by the presence of growth and security in one's own relationship differently for individuals in a promotion- versus prevention-focused state. That is, do promotion-focused people feel happier in their relationships when more growth-related relationship qualities are present? Do prevention-focused people feel happier in their relationships when more security-related relationship qualities are present? Study 4 also built on previous studies by manipulating, rather than measuring, regulatory focus to provide increased confidence in the proposed causal model. By

manipulating regulatory focus, I was able to rule out alternative explanations accounting for the observed patterns (i.e., the possibility of other variables associated with regulatory focus driving the patterns). Although people can be chronically promotion-focused or prevention-focused, each system can also be situationally induced as successfully shown in prior research (Freitas & Higgins, 2002; Higgins et al., 2001; Higgins et al., 1994).

After being induced into a promotion- or prevention-focused state, participants in this study evaluated the presence of growth- and security-related relationship qualities in their own romantic relationship, and in their partners, and then reported their relationship well-being. I predicted that people induced into a promotion-focused state would evaluate their relationships more positively when their relationship and when their partner's had more (versus less) growth-related qualities, but that their relationship quality would be unaffected by the presence or absence of security-related relationship qualities. I expected the regulatory focus manipulation to interact with growth qualities at both an absolute and a relative level (relative to security) in predicting relationship well-being. In contrast, I predicted that the presence or absence of growth-related qualities would not affect relationship well-being for those induced into a prevention focus.

Because the previous studies have demonstrated that prevention's relation with security in relationships appears strongest when security is directly pitted against growth, I predicted that prevention effect should be especially likely to emerge in an analysis weighting the presence of relationship security relative to growth. Specifically, I predicted that the relationship well-being of participants in a prevention-focused (versus promotion-focused) state would be most strongly related to the relative weight of security versus growth qualities. Because prevention focus only marginally predicted a preference for security qualities in Study 1, I did not have strong

predictions about whether prevention focus would predict relationship well-being as a function of absolute security presence.

#### Method

**Participants.** Based on previous studies examining regulatory focus and relationship outcomes with effect sizes in the medium range (Hui et al., 2013), a G\*power analysis suggested a sample of approximately 80 participants, providing .80 power to detect an effect size in the small to medium range ( $R^2$  for the interaction term = .10). I aimed to obtain as large a sample as possible over the academic term. A total of 98 (76 females, 22 males) undergraduate students from the University of Waterloo participated in an online study in exchange for course credit. Eight people were excluded from the analyses because they did not meet the eligibility criteria specified in the recruitment ad (they were not in exclusive romantic relationships), leaving a total of 90 (72 females, 18 males) participants. In the final sample, participants were between 17 and 58 years of age (M = 22.76, SD = 7.33) and were in exclusive romantic relationships ( $M_{length} = 3.64$  years, SD = 6.99).<sup>6</sup>

Procedure and measures. To manipulate regulatory focus, consistent with the self-regulation literature, I adopted Higgins et al.'s (1994) established Regulatory Focus

Manipulation. In the promotion induction condition, participants were asked to write brief essays on their current aspirations, hopes, and ideals, and how these have changed over time since childhood:

# **Hopes and Aspirations**

For this task, we would like you to think about how your current hopes and aspirations are different now from what they were when you were growing up. In other

words, what accomplishments would you ideally like to meet at this point in your life? What accomplishments did you ideally want to meet when you were a child?

In the prevention condition, participants wrote brief essays on their current obligations, duties, and responsibilities, and how these have changed over time since childhood:

# **Duties and Obligations**

For this task, we would like you to think about how your current duties and obligations are different now from what they were when you were growing up. In other words, what responsibilities do you think you ought to meet at this point in your life? What responsibilities did you think you ought to meet when you were a child?

Next, participants were asked to indicate the presence of various relationship qualities. They read "How much is your current relationship with your partner..." and indicated on a 1 (*not at all*) to 7 (*extremely*) scale their agreement with both growth-related items (fun, exciting, full of new adventures, passionate, always growing, full of laughter and humour;  $\alpha = .93$ ), and security-related items (stable, secure, reliable, consistent;  $\alpha = .91$ ). Consistent with my conceptual theorizing, a factor analysis on these items revealed two robust factors (eigenvalues > 1), with the growth-related items loading onto the first factor (loadings > .63) and the security-related items loading onto the second factor (loadings > .84). The two scales were correlated, r = .60, p < .001.

Using the same scale, participants were also asked the extent to which their partners themselves (rather than the relationship) displayed these same growth (e.g., the extent to which their partner was "fun";  $\alpha = .85$ ) and security-related (e.g., the extent to which their partner was "reliable"  $\alpha = .85$ ) characteristics. See Table 5 for descriptive statistics and correlations of the relationship and partner quality measures. Finally, participants rated the overall well-being of

their relationships by responding to the items described below.<sup>8</sup>

**Relationship** well-being measure. To capture overall relationship well-being, I administered several established scales that assess critical aspects of relationship well-being, such as satisfaction and commitment, and combined those scales for a reliable index of overall relationship well-being. First, six items ( $\alpha = .94$ ) adapted from Norton's (1983) Marital Quality Index assessed participants' relationship quality (e.g., "I have a good relationship"; 1 = strongly disagree and 5 = strongly agree). Participants then completed an 18-item Perceived Relationship Quality Scale (e.g., "How satisfied are you with your relationship?" and "How committed are you to your relationship?" Fletcher et al., 2000b; 1 = not at all and 7 = extremely;  $\alpha = .94$ ). Five items ( $\alpha = .93$ ) adapted from Rusbult et al (1998) provided an additional measure of satisfaction (e.g., "I feel satisfied with our relationship"  $1 = do \ not \ agree \ at \ all; 9 = agree \ completely$ ). Participants then reported their relationship commitment on a 7-item scale ( $\alpha = .78$ ; Rusbult et al., 1998; e.g., "I am committed to maintaining my relationship with my partner"; 1 = do not agree at all and 9 = agree completely). See Appendix C for all of the full scales, and Table 6 for the descriptive statistics and correlations of each scale. I created a composite measure of relationship well-being by averaging the above measures ( $\alpha = .91$ ), each transformed to a zscore.

# **Results**

Below I present the results when examining a) reports of *relationship* qualities (growth and security) as a moderator between regulatory focus and relationship well-being, and b) reports of *partner* qualities (growth and security) as a moderator between regulatory focus and relationship well-being. Overall, and as expected, the findings are quite consistent across relationship and partner ratings. Within each section, both the absolute and relative level

analyses are presented.

# Presence of relationship characteristics.

**Preliminary analyses.** I first examined whether the regulatory focus manipulation had an effect on reports of growth and security-related qualities present in the current relationship. Independent t-tests revealed that both ratings of current growth-related and security-related relationship qualities did not significantly differ by condition, t(88) = .22, p = .826, t(88) = -.37, p = .715, respectively, suggesting that the manipulation did not create a bias in identifying the qualities present in participants' relationships.

Examining growth and security at an absolute level. I began by examining the interaction between regulatory focus and presence of growth or security relationship qualities at an absolute level, in predicting relationship well-being. I first regressed perceived relationship well-being onto the regulatory focus condition (-1 = prevention), the presence of growth-related relationship qualities (standardized), the presence of security-related relationship qualities (standardized), and the two-way interactions of interest (Regulatory Focus × Presence of Growth, Regulatory Focus × Presence of Security). 10 There was no effect of regulatory focus,  $\beta = -.03$ , t(84) = -.59, 95% CI [-.12, .07], p = .556. Not surprisingly, both main effects of the presence of growth and security relationship qualities were significant ( $\beta = .44$ , t(84) = 7.17, 95% CI [.29, .50], p < .001;  $\beta = .55$ , t(84) = 8.45, 95% CI [.39, .64], p < .001, respectively). The more people rated having growth and security qualities present in their relationship, the higher they rated their overall relationship well-being. Critically, consistent with my hypothesis, there was a Regulatory Focus × Growth Relationship Presence interaction,  $\beta = .17$ , t(84) = 2.55, 95% CI [.04, .26], p = .008, suggesting that relationship well-being was rated highest when growth relationship qualities were more (versus less) present for promotion-focused participants relative to prevention-focused participants (see Figure 2).

I examined the simple slopes in each condition at one standard deviation above and below the mean for the presence of relationship growth. As predicted, when induced into a promotion state, relationship well-being was higher when growth qualities were more (+1 SD) versus less (-1 SD) present, b = 0.46, t(84) = 7.94, 95% CI [.32, .56], p < .001. This was also the case in the prevention condition, b = 0.22, t(84) = 3.65, 95% CI [.10, .34], p < .001, though the effect was weaker. When relationships were characterized by having more (+1 SD) growth, there was no difference in relationship satisfaction for individuals in a promotion versus prevention-focused state, b = 0.20, t(84) = 1.36, 95% CI [-.09, .45], p = .177. However, when relationships were characterized by having fewer (-1 SD) growth qualities, promotion induced participants felt less satisfied than did prevention focused participants, b = -0.31, t(84) = -2.16, 95% CI [-.60, -0.2], p = .034 (see Figure 2).

The Regulatory Focus × Security Relationship Presence interaction was not significant,  $\beta$  = -.03, t(84) = -.40, 95% CI [-.15, .10], p = .692. That is, prevention-focused participants' relationship well-being ratings were unaffected by the absolute level of security qualities present in their relationships. This finding is somewhat consistent with the weaker pattern detected in Study 1, in which prevention focus only marginally predict absolute ratings of security importance.

Examining growth and security at a relative level. Next, I examined how regulatory focus interacted with the relative presence of growth versus security qualities to predict relationship well-being. Consistent with Study 1, I created a difference score by subtracting the presence of security-related relationship qualities from the presence of growth-related relationship qualities. I regressed relationship well-being onto regulatory focus, the difference

score, and their interaction term. There was no effect of regulatory focus,  $\beta$  = -.01, t(86) = -.05, 95% CI [-.19, .18], p = .960, or the difference score,  $\beta$  = .03, t(86) = .28, 95% CI [-.17, .22], p = .778. However, as predicted, the interaction was significant,  $\beta$  = .30, t(86) = 2.91, 95% CI [.09, .48], p = .005 (see Figure 3). For people induced into a promotion state, relationship well-being was higher when growth (versus security) qualities were more prominent in their relationship, b = 0.31, t(86) = 2.51, 95% CI [.06, .55], p = .014. The reverse pattern emerged in the prevention condition, though this did not reach statistical significance, b = -0.18, t(86) = -1.62, 95% CI [-.39, .04], p = .108.

# Presence of partner characteristics.

Preliminary analyses. I first examined whether the regulatory focus manipulation had an effect on reports of growth and security-related qualities present in the partner. Independent t-tests revealed that ratings of current growth-related partner qualities did not significantly differ by condition, t(88) = .02, p = .984, but that ratings of security-related partner qualities did differ by condition, t(88) = -2.02, p = .047. People in the promotion condition rated their partners as having more security-related qualities (M = 6.11, SD = .85) than people in the prevention condition (M = 5.64, SD = 1.23). This finding was surprising given that relationship ratings and growth-related partner ratings were all unaffected by the manipulation. I confirmed that the critical Regulatory Focus Conditions × Growth Relationship Qualities (and growth relative to security relationship qualities) interactions were both still significant ( $\beta s > .15$ , p < .030) when controlling for these partner trait ratings.

Examining growth and security at an absolute level. I regressed perceived relationship well-being onto the regulatory focus condition, the presence of growth partner qualities, the presence of security partner qualities, and the two-way interactions of interest (Regulatory Focus

Condition × Presence of Growth, Regulatory Focus Condition × Presence of Security). Once again, both main effects of the presence of growth and security-related partner qualities were significant in the positive direction,  $\beta$  = .41, t(84) = 6.08, 95% CI [.25, .49], p < .001,  $\beta$  = .56, t(84) = 7.22, 95% CI [.33, .58], p < .001, respectively. Consistent with my hypothesis, there was a significant Regulatory Focus Condition × Growth Partner Qualities interaction,  $\beta$  = .25, t(84) = 3.68, 95% CI [.10, .34], p < .001, suggesting that relationship well-being was rated highest when partners themselves displayed more (versus less) growth characteristics for promotion induced, relative to prevention induced participants. See Figure 4.

I examined the simple slopes in each condition at one standard deviation above and below the mean for the presence of relationship growth. As predicted, when induced into a promotion state, relationship well-being was higher when growth qualities were more (+1 SD) versus less (-1 SD) present, b = 0.71, t(86) = 7.71, 95% CI [.53, .90], p < .001. This was also the case in the prevention condition, b = 0.45, t(86) = 5.16, 95% CI [.28, .63], p < .001, though the effect was weaker. The other two contrasts were not statistically significant, but were in the expected direction: When partners were characterized by having more (+1 SD) growth, there was no difference in relationship satisfaction for individuals in a promotion versus prevention-focused state, b = 0.25, t(84) = 1.27, 95% CI [-.14, .64], p = .208. When partners were characterized by having fewer (-1 SD) growth qualities, there was no difference in relationship satisfaction for individuals in a promotion versus prevention-focused state, b = -0.32, t(86) = -1.63, 95% CI [-.71, -.07], p = .107 (see Figure 4).

The Regulatory Focus × Security Relationship Presence interaction was not significant,  $\beta$  = -.04, t(84) = -.57, 95% CI [-.16, .09], p = .573. That is, prevention-focused participants' relationship well-being ratings were unaffected by the absolute level of security qualities present

in their partners, as was seen with relationship ratings.

Examining growth and security at a relative level. To examine whether the relative presence of partners with security versus growth qualities influenced relationship well-being, I created a difference score by subtracting the presence of security-related partner qualities from the presence of growth-related partner qualities. Thus, higher scores on this scale indicate a stronger presence of growth relative to security qualities in the partner. I conducted a multiple regression analysis by regressing relationship well-being on regulatory focus (-1 = prevention, 1 = promotion), the difference score, and their interaction term. There was no main effect of regulatory focus or the difference score,  $\beta s < .03$ , ps > .8. However, as predicted, the interaction was significant,  $\beta = .37$ , t(86) = 3.52, 95% CI [.14, .51], p = .001, and suggested that when growth (versus security) qualities were more prominent in the partner, promotion-focused people were more satisfied than prevention-focused people (See Figure 5). For people induced into a promotion state, relationship well-being was higher when growth (versus security) qualities were more prominent in their partner, b = 0.35, t(86) = 2.51, 95% CI [.07, .63], p = .014. The reverse pattern emerged in the prevention condition, b = -0.30, t(86) = -2.72, 95% CI [-.51, .08], p =.008.

# **Discussion**

Extending the findings from Studies 1-3, I found that individuals in a promotion (versus prevention) focus rated their relationships more positively when they perceived growth (but not security) qualities present in their relationship and partners. Although the presence of growth-related qualities was beneficial, at least to some extent, for everyone, the presence and absence of growth was particularly critical for the relationship well-being of individuals primed with promotion focus. When growth was lacking, promotion-focused participants felt less satisfied in

their relationships than prevention-focused participants. This provides direct evidence that for promotion-focused people, relationship success may be especially influenced by the presence of growth-related (versus security-related) relationship qualities. In contrast, and similar to Study 1, prevention focus did not interact with security qualities at an absolute level, but it did at a relative level. Compared to promotion-induced participants, prevention-induced participants' relationship well-being was less affected by the presence of growth over security (and if anything, began to show the reverse pattern).

The studies so far have utilized various methods to offer support for my proposed model, by both measuring and manipulating regulatory focus, assessing growth and security through both importance ratings and forced-choice scenarios, and demonstrating how the presence or absence of growth and security qualities predicts relationship well-being (as a function of one's regulatory focus). In Study 5, I sought to further bolster confidence in my proposed causal model that growth and security experiences are tied to perceived relationship success differently for promotion- than prevention-focused individuals by manipulating perceptions of relationship growth and security experiences within the relationship. Specifically, I examined whether perceptions of relationship well-being could be altered by manipulating perceptions of relationship growth or security through a memory induction.

### Study 5

The primary purpose of Study 5 was to further establish confidence in my proposed causal model by experimentally manipulating perceptions of how representative growth or security qualities were of one's relationship. Specifically, I sought to experimentally alter people's perceptions of how prototypical growth or security qualities were of their existing relationship by having participants recall either a growth- or security-related relationship

memory. Past research has found that the types of memories people recall affect how they perceive themselves and their relationships (McCullough et al., 1998; McCullough, 2001; Worthington & Wade, 1999; Wilson, Hodges, & LaFleur, 1995). For instance, when someone recalls a past success, they feel subjectively better in the present because the past success feels representative of who they are in the present (Ross & Wilson, 2002; 2003; Wilson & Ross, 2003). Thus, in order to make growth- or security-related relationship qualities feel more accessible, I had participants recall a detailed growth or security-related memory, making those respective qualities feel more representative of the relationship.

I hypothesized that promotion-focused people would experience heightened relationship well-being when recalling growth- (versus security-) related relationship memories because growth qualities should be more accessible, and thus feel more representative of the relationship. What might be expected to emerge with prevention focus and memory condition was less clear because of the patterns between prevention focus and security demonstrated in previous studies. On one hand, there is evidence that prevention-focused people care about security in relationships more than people low in prevention focus (Studies 1-3), and sometimes more than growth (Studies 2-3). Because prevention focus has been linked to valuing security in relationships, a Prevention Focus × Relationship Memory interaction could emerge in this study—that is, prevention-focused people may feel happier in their relationships when security qualities feel more reflective of the relationship. However, the previous studies have also demonstrated that there are cases when the prevention effect is less likely to occur, namely, when examining security at an absolute level. In Study 1, prevention focus only marginally predicted importance ratings of security qualities, and in Study 4, prevention focus only predicted relationship well-being as a function of the relative presence of security versus growth, but not

the absolute presence of security. Instead, prevention most strongly emerges as a predictor of security when pitted directly against growth. Thus, the Prevention Focus × Relationship Memory interaction may not emerge in this study because security is not pitted against growth. Thus, while my promotion focus predictions were clear, I did not have strong a priori predictions about whether prevention focus would interact with the memory manipulation to predict relationship well-being.

As an exploratory analysis of another possible contextual factor that might affect the relation between prevention and security, I also examined whether the interaction between prevention focus and memory condition would be moderated by relationship length. Specifically, I examined whether people high in prevention focus would benefit from security priming at any stage in the relationship. For instance, security accessibility may be especially beneficial for relationships early on, because people may feel good about knowing they have a secure foundation and that the relationship will likely persist, but may become less important later on in the relationship, when security has been established (Hazan & Shaver, 1987). The opposite could also be true—perhaps people benefit from security accessibility especially later on in the relationship, when maintenance is likely important given people's investment in the relationship so far, but that security is less impactful in the beginning when couples are more concerned about growth or attainment (Molden et al., 2009). However, prevention-focused people's chronic need for security may lead them to benefit from security regardless of relationship length. Thus, I examine the 3-way interaction between prevention focus, memory condition, and relationship length as an exploratory analysis in this study.

### Method

Participants. Based on previous published research examining regulatory focus and relationship outcomes (Hui et al., 2013) and Study 4 that examined regulatory focus and relationship well-being, it was reasonable to expect an effect size for the predicted interactions (Regulatory Focus × Memory Condition) in the medium range ( $f^2$  for the interaction term = .08). I conducted an a priori power analysis using G\*power, which suggested a sample of approximately 101 participants, providing .80 power to detect an effect size in the small to medium range ( $f^2 = .08$ ). In the current study, I had the resources to collect a large sample of approximately 400 participants with a conservative estimate of a small effect size. I recruited 403 (218 female, 184 male, and one person who identified as masculine androgyne) U.S. participants from Amazon's Mechanical Turk. Five participants were excluded from the data because they did not complete the manipulation (left the writing task blank) or did not complete the writing task properly (i.e., did not write about a past experience). 11 The final sample comprised of 398 (215 female, 182 male, and one person who identified as masculine androgyne) U.S. participants from Amazon's Mechanical Turk between the ages of 18 and 72 years (M = 32.90, SD = 9.96). Participants were required to be in romantic relationships ( $M_{length} = 6.97$  years, SD = 7.59) and were paid money for their time.

Procedure and measures. Participants first completed the same regulatory focus questionnaire used in Studies 1-3 (RFQ; Higgins et al., 2001), followed by a filler personality scale. Next, participants were asked to recall a particular relationship memory. Participants were randomly assigned to recall either a specific growth-related event that had occurred in their relationship or a security-related event that had occurred in their relationship. This manipulation was intended to prime participants to feel that their relationship was represented by either

growth- or security-related qualities. In the "Growth Memory" condition, participants read:

In this exercise, we'd like you to think back to a time in your relationship when you felt like you were really growing with your partner. This could be a moment where the two of you shared a strong connection together, an experience where you tried and enjoyed something new, a memory where you had fun and felt excited, or a time you were playful and passionate with each other.

Take your time to think of an event that most closely fits this description.

Once you have thought of this event that captures a growth experience between you and your partner, please describe it in detail below:

In the "Security Memory" condition, participants read:

In this exercise, we'd like you to think back to a time in your relationship when you felt like you were really secure with your partner. This could be a time when you relied on your partner for something and s/he did not let you down, a time when your partner pulled through when you weren't sure if s/he would, an event where you felt secure and safe knowing your partner was there for you, or a time your partner didn't turn his/her back on you when it could have been easy to.

Take your time to think of an event that most closely fits this description.

Once you have thought of this event that captures an experience where you felt very secure you're your partner, please describe it in detail below:

Finally, I assessed participants' state relationship well-being, using a 3-item "in-the-moment" measure. Participants were asked how "satisfied," "committed," and "close" they felt to their partner *in that moment* (the three items were from Fletcher et al., 2000b's relationship quality scale, but only the 3 items were administered; 1 = not at all and 9 = extremely;  $\alpha = .90$ ).

Generally, participants reported feeling highly satisfied in that moment (M = 7.92, SD = 1.42).

# **Results**

To test the hypothesis that regulatory focus would interact with the memory manipulation to predict feelings of relationship well-being, I regressed feelings of relationship well-being onto promotion focus (standardized), prevention focus (standardized), the memory manipulation (-1 = security, 1 = growth), and the two-way interactions of interest (Promotion Focus  $\times$  Memory Condition). Condition, Prevention Focus  $\times$  Memory Condition).

**Primary analyses.** There was a main effect of promotion focus in the positive direction,  $\beta = .27$ , t(392) = 5.68, 95% CI [.25, .52], p < .001, and no main effect of prevention focus,  $\beta = .03$ , t(392) = .60, 95% CI [-.09, .18], p = .549. There was also a main effect of memory condition,  $\beta = -.12$ , t(392) = -2.55, 95% CI [-.04, -.30], p = .011, suggesting that in general, thinking about a security-related relationship memory led people to evaluate their relationships more positively in the moment (M = 8.10, SD = 1.20) than did thinking about a growth-related relationship memory (M = 7.74, SD = 1.58), although relationship ratings were generally quite high across both conditions. Critically, consistent with my hypothesis, there was a Promotion Focus × Memory Condition interaction,  $\beta = .13$ , t(392) = 2.66, 95% CI [.05, .32], p = .008, suggesting that relationship well-being was rated more highly for people high (versus low) in promotion focus when they were made to feel their relationship was represented by growth qualities (i.e., re-lived a past growth experience) versus security qualities (i.e., re-lived a past security experience). See Figure 6.

To examine the nature of the interaction, I examined the simple slopes for people high versus low in promotion focus in the growth and security memory conditions. As predicted, when primed with a growth-relationship emphasis (growth memory condition), people high (+1

SD) in promotion focus rated their relationship well-being higher than did people low (-1 SD) in promotion focus, b = 0.95, t(392) = 5.99, 95% CI [.64, 1.26], p < .001. This was also the case in the security condition, b = 0.34, t(392) = 2.11, 95% CI [.02, .66], p = .036, though to a lesser degree. Although people high in promotion focus did not vary in levels of relationship quality across condition, b = 0.04, t(392) = .17, 95% CI [-.40, .48], p = .862, people low in promotion focus rated their well-being lower in the growth compared to security condition, b = -0.73, t(392) = -3.23, 95% CI [-1.17, -.28], p = .001.

The Prevention Focus × Memory Condition interaction was not significant,  $\beta$  = .01, t(392) = .15, 95% CI [-.12, .15], p = .884. That is, prevention-focused participants' relationship well-being ratings were unaffected by the memory condition manipulation. This finding is not surprising given the general patterns observed in Studies 1 and 4, in which prevention did not emerge as a significant predictor when an absolute level analysis was conducted (which is more parallel to the methodology in the current study).

Exploratory analyses with relationship length. As an exploratory analysis, I also examined whether relationship length would moderate the interaction between prevention focus and the memory manipulation. As reviewed in the study introduction, I speculated that although the value of security may shift depending on the stage of the relationship for some people, for people high in prevention focus, this shift may never occur. That is, prevention-focused people may continue to place more emphasis on security (and not growth) even later into the relationship. I regressed relationship well-being onto prevention focus, memory condition, relationship length, their two-way interaction, the 3-way interaction (of interest), and controlled for promotion focus. Of all the main effects and two-way interactions, only the main effect of condition was significant (as reported in earlier analyses),  $\beta = -.12$ , t(387) = -2.38, 95% CI [-.03,

-.30], p = .018. The three-way interaction of interest emerged as marginal in significance,  $\beta = .09$ , t(387) = -1.78, 95% CI [-.28, .01], p = .076. See Figure 7.

To break down the 3-way interaction, 2-way interactions between prevention focus and relationship length across the memory conditions were conducted. The first model, in the security condition, regressed (all standardized) prevention focus, relationship length, their interaction, and promotion focus (as a control variable) onto relationship satisfaction. The second model contained the same variables but examined the interaction in the growth condition. Consistent with previous reports, the main effects of prevention focus and relationship length were nonsignificant ( $\beta$ s < .12, ps > .4), and the main effects of promotion were significant ( $\beta$ s > .19, ps < .010). The interaction results were the main interest in this analysis. In the security condition, prevention focus significantly interacted with relationship length to predict relationship satisfaction,  $\beta = .14$ , t(192) = 2.05, 95% CI [.01, .41], p = .042 (see Figure 8). In the growth condition, prevention focus did not interact with relationship length,  $\beta = -.05$ , t(192) = -.72, 95% CI [-.25, .12], p = .471. The findings suggest that when recalling a security memory, how prevention focus predicted relationship satisfaction depended on relationship length. When recalling a growth memory, relationship length had no bearing on how prevention focus predicted relationship satisfaction.

To examine the nature of the 2-way interaction in the security condition, I conducted simple slope analyses at one standard deviation above and below the mean in prevention focus and relationship length. When relationship length was low (-1 SD), there was no difference in prevention focus on relationship well-being in the security memory condition, b = 0.04, t(193) = .32, 95% CI [-.32, .39], p = .832. That is, earlier on in the relationship, thinking about a security memory affected relationship well-being for people low in prevention focus the same way it did

for people high in prevention focus. However, when relationship length was higher (+1 SD), prevention focus significantly predicted relationship well-being, b = 0.37, t(198) = 2.10, 95% CI [.02, .97], p = .037. That is, later on in relationships, the security memory prime benefitted prevention-focused people's perceptions of their relationship more than it did for people low in prevention focus.

### **Discussion**

When manipulating the presence of growth versus security in relationships, I again found evidence that people high in promotion focus uniquely value growth in their relationships. Although a relationship-security prime seemed to be beneficial for everyone's feelings of relationship well-being (see Figure 6), a growth prime uniquely benefitted promotion-focused people's relationship perceptions: Promotion-focused people rated their relationship well-being higher when they were made to feel that their relationships were characterized by growth-related qualities (i.e., when they reflected on growth-related relationship memories). In contrast, reflecting on security-related memories did not affect perceptions of relationship well-being differently for people low or high in promotion focus. Figure 9 highlights the general finding that among all groups of people, it is those high in promotion focus who have an increased sensitivity to growth. Making people feel as though their relationships are characterized by growth qualities is only beneficial for relationships to the extent that someone is promotion-focused.

The Prevention Focus × Memory Condition interaction predicting relationship well-being was not significant. This was somewhat unsurprising given the findings from Studies 1-4, which suggest that prevention focus appears to emerge as a significant predictor particularly when examining security relative to growth (which I was unable to capture with the current design). However, there was a marginal three-way interaction with relationship length. Further analyses

revealed that although everyone appears to benefit from a security prime early in the relationship, only people high in prevention focus continued to benefit from a security prime later in the relationship. Prevention-focused people may value security later on in relationships when others tend to emphasize growth instead. However, caution should be taken in inferring too much from these results because this was an exploratory analysis, was marginal in significance, and needs to be replicated in future work.

### **General Discussion**

Discovering the key to relationship success is a challenging and elusive quest. The current work integrates relationship science and motivational science in a previously unexplored way by highlighting the powerful role of motivational concerns in understanding what types of experiences are critical for relationship success versus failure, depending on an individual's regulatory focus motivational orientation. Specifically, the current research suggests that the importance of growth- versus security-related relationship qualities for one's relationship wellbeing depends on the motivational orientation of the individual. Both chronic (Studies 1-3, 5) and temporarily induced (Study 4) promotion-focused individuals rated growth- (versus security-) related relationship qualities as particularly important (Study 1), preferred relationships that had a lot of growth qualities over those that had a lot of security qualities (Study 2), and ranked growth versus security-related relationship qualities as especially important (Study 3). Promotion-focused people also rated their own relationship well-being as higher when growth, but not security qualities were more present in their relationship (Study 4), and when made to feel that their relationships were characterized by growth versus security qualities (Study 5). In sum, for promotion-focused individuals, the presence of relationship security does not appear to be enough for relationship success; in order to feel most satisfied in

their relationships, promotion-focused people need the presence of growth qualities.

In contrast, when examining the absolute value of growth, the presence of growth qualities were less important or unrelated to prevention-focused people's ratings of importance or preferences (Studies 1-3), and to their perceptions of relationship well-being (Studies 4-5). Unlike the clear and robust connection between promotion focus and growth, the connection between prevention focus and security was more nuanced. When examining security at an absolute level, prevention focus only marginally predicted importance (Study 1) and did not predict well-being as a function of the presence of security (Study 4, 5). However, the relation between prevention motivation and an emphasis on security experiences emerged under certain contexts: when examining the relative weighting of security versus growth (Studies 1, 4), when forcing participants to choose between security or growth (Study 2), when in a vigilant mindset (Study 3), and when security was examined across the length of relationships (Study 5).

# **Beyond the Current Findings: A Study Manipulating Growth Potential**

The findings from this thesis highlight how the qualities that people value in their relationships depend, in part, on their motivational states. Further support for the conceptual model I introduced in this thesis comes from one of my published papers (in a study that was run by colleagues at Wilfrid Laurier University; Cortes, Scholer, Kohler, & Cavallo, 2018). Specifically, we hypothesized that promotion-focused individuals would reap relational rewards when made to feel that their relationship had plenty of room to grow, but that their relationships would suffer when made to feel that their relationship had very little room to grow (and thus their full growth potential had been reached). In contrast, we expected a growth potential manipulation to have no effect on relationship quality for prevention-focused people.

Individuals who were in romantic relationships came into the lab and filled out various

relationship belief and experience measures which were ostensibly used to calculate their relationship scores on satisfaction and growth potential. For instance, participants indicated, yes or no, whether they had experienced activities together, ranging from high frequency experiences, like watching a movie together, to more rare experiences, like having been on a hot air balloon ride together. Couples were then given bogus relationship feedback. All couples were told that their relationships were very high quality compared to other couples in the database. In the low growth potential condition, participants were told they had reached their peak amount of growth and would likely not experience much growth in the future (see Figure 10). In the high growth potential condition, couples were told that they still had plenty of room to continue growing in the future (see Figure 10). We found support for our hypotheses—promotion-, but not prevention-focused, people reported higher relationship well-being when made to feel that their relationships had plenty of room for further growth (versus limited room for growth). See Figure 11.

These findings complement and extend the studies in the current thesis, because they further demonstrate promotion motivation's sensitivity to growth in relationships in a new context: when altering perceptions of growth potential in one's relationship. These findings suggest that motivational concerns predict relationship well-being not only through the qualities that are currently present in one's relationship, but also through the experiences that individuals expect to have with partners in the future. Additionally, much of past work has focused on the negative implications of lacking security in relationships (e.g., Cavallo et al., 2009; Cavallo et al., 2012; Murray, 2005; Murray et al., 2002), but this study sheds light on the implications of lacking growth potential in relationships, and how that can hurt relationships for some—a novel phenomenon that has not been explored in past work.

# The Asymmetry in the Patterns for Promotion versus Prevention-Focused Individuals

The nonparallel findings between promotion and growth (clear and robust) and prevention and security (more nuanced) are surprising because they would not be as easily derived from a self-regulation perspective. Based on past work in regulatory focus theory, it would be reasonable to predict a clear prevention to security connection, just as it would be reasonable to predict (as I found) a clear promotion to growth connection. However, the studies revealed that prevention will give greater priority to security especially when security is evaluated in relation to growth and when presented under a vigilant mindset. One reason for the more complex association between prevention focus and valuing security may be that, as described in the introduction, security is so fundamental in relationships that variability in the importance assigned to it was harder to detect. Based on the data, this certainly is a possibility; however, as I describe in more detail below, that data do not paint a perfectly clear picture to lend support for this assumption. Although some studies pointed to a security emphasis over growth when looking at main effects (Studies 4-5), other studies pointed to a stronger emphasis on the importance of growth over security (Study 1), or no dominant preference (Study 2). It is possible that ceiling effects on ratings of security or experiences of security prevented the emergence of prevention focus effects. For instance, Study 4 had high mean ratings of partner security and Study 5 revealed high relationship satisfaction in the security condition.

This leads to another possibility that may account for the more nuanced prevention effects. It is also possible that the relation between prevention focus and security may be more closely tied to relationship well-being at an absolute level when the relationship is sitting closer to the "-1" mark, (i.e., when security is truly threatened in the relationship). Generally, the participants in each sample scored quite high on relationship satisfaction, and security presence

ratings in Study 4 (in which there was not a Prevention  $\times$  Security Presence interaction predicting well-being) were also quite high (M = 5.84 out of 7). If I conducted Studies 4 and 5 with couples in more troubled relationships, the Prevention  $\times$  Security Presence interaction predicting well-being may have emerged as significant. Indeed, in other domains research has shown that motivational dynamics shift for prevention-focused individuals when in a loss versus status quo state (Scholer et al., 2010). More work is needed to unpack the relationship between prevention focus and security.

# **Implications for Relationship Science**

The current studies provide evidence that whether a given individual will perceive and experience relationship success depends on how the presence of two critical ingredients—security and growth—serves their motivational needs. Past work has shown that relationship success can arise from the presence of relationship-specific desires (Campbell et al., 2001; Fletcher et al., 2000b), and that regulatory focus can predict relationship success when motivationally relevant personal goals are supported by a partner (e.g., Hui et al., 2013). However, the present work is the first to provide insight into how people differentially and systematically judge the success of relationship experiences in contributing to their relationship success. The current research provides evidence that the criteria for judging relationship success can arise from general self-regulatory orientations, leading to differential emphasis on even the most essential relationship qualities.

Further, while the presence or absence of security in relationships has been strongly emphasized as a key component of relationship success (Hazan & Shaver, 1987; Murray et al., 2006), I have shown that in fact the presence or absence of *growth* in relationships is predictive of relationship success for some people; namely, those who are promotion-focused. These

findings suggest interesting implications for the value of growth and security for relationships. That is, the presence of security has been theorized as a prerequisite for exploration and growth to occur within and outside the relationship (Hazan & Shaver, 1987). For example, attachment figures serve as a secure base from which individuals can explore the environment, knowing they can return to the secure base if difficulties arise (Feeney & Thrush, 2010; Green & Campbell, 2000; Simpson, 2007). Thus, a minimal level of relationship security should be a necessary precondition to experiencing relationship growth. However, as noted earlier, in Study 1 participants were particularly likely to value growth. One possibility is that people are not as consciously aware of the fundamental importance of security, but that when security-related relationship qualities are present, couples are ultimately better off. Another possibility is that there is a minimal threshold of security that is required for relationships to be successful and to experience growth (but that the threshold may be more variable than relationship science would predict). Perhaps as long as relationships are not truly troubled, or on the verge of breakup, whether further security matters or not depends on other factors (such as people's motivational concerns). In this case it would be important for everyone, even promotion-focused people, to establish some degree of security in their relationships.

It is also possible that there are important differences in the *manner* in which promotion and prevention-focused people seek security, an interesting direction for future research. For example, prevention-focused people may strive for consistency and routine in the relationship to avoid any negative events and conflicts that could threaten the state of the relationship (i.e., adopting vigilant strategies to avoid security threats directly). In contrast, promotion-focused people may strive to maximize growth to establish a positive "buffer" against the inevitable conflicts that will arise (i.e., reducing the impact of security threats). In addition, it will be

important to examine how and if the prioritization of security changes over time for prevention-focused individuals. While promotion-focused individuals' need for security may fluctuate and decrease as the relationship progresses, prevention-focused individuals' need for relationship security may remain active and highly salient at all stages of the relationship. Study 5 hinted at this idea, but longitudinal studies need to be conducted to more fully and accurately capture this process.

The present studies do not delineate the exact types of experiences or factors that are most likely to serve growth needs, such as risky adventures, intimate self-disclosures, or novel shared experiences. Figure 12, which provides examples of written responses from participants when asked to recall a growth- or security-relevant relationship memory (Study 5), provides some ideas about the kinds of experiences that are considered growth or security enhancing. In the growth condition, participants recalled exciting travel adventures and novel experiences, but they also recalled having difficult conversations that were quite ground-breaking for their relationship and replayed ordinary events that allowed for strong connection. In the security condition, people recalled making it through financial difficulties and being able to rely on a partner during trying times, but they also recalled fun experiences that allowed them to feel solid and secure as a couple.

I suspect that some experiences will likely be very clearly high growth for everyone (e.g., risky adventures), but that others will be dependent on the relationship. That is, relationships are likely to have idiosyncratic standards for whether a particular experience counts as low or high growth. The same can be said for security: For a couple on the rocks, a simple smile and "how are you" may be perceived as a high-security experience, but not even thought twice about by someone in a highly satisfying, stable relationship.

To illustrate, for Couple A, a walk in the park could be a very low growth experience because they do it almost every day, and talk about similar topics each time. For Couple B, a walk in the park could be a high growth experience because they never really go for walks in their fast-paced lifestyle, and it gives them the opportunity to divulge and connect. It is also possible that even relatively mundane activities can be perceived as a growth experience if the perceiver seeks growth-relevant qualities in the experience or feels emotions that are typically coupled with growth experiences (e.g., excitement, passion). For instance, although Couple A typically experiences a walk through the park as a low growth experience, the walk could be perceived as a high growth experience if the couple takes a new route, has an interesting, philosophical discussion, behaves playfully on the walk, or witnesses something striking on the walk.

Longitudinal approaches would also provide further insight into how the needs for security and/or growth manifest over time, both in terms of intensity and quality. For instance, the importance of growth experiences may remain high for promotion-focused individuals over the course of a relationship, but what counts as "growth" may change. On the one hand, as individuals adapt to the opportunities for growth in their relationships, they may require even more intense experiences of growth to remain satisfied. At the same time, perceptions of what counts as a growth-related experience may shift as resources and opportunities for new experiences change over the course of a relationship. For example, going to a new restaurant may be perceived as less exciting early in a relationship than after the birth of a child.

**Relationship interventions.** The current perspective suggests new ways of thinking about the types of relationship interventions that may be most effective for promotion or prevention-focused individuals. An intervention that boosts security, such as having people

retrieve memories of warm and comforting interactions with their partner (Mikulincer & Shaver, 2007), may be particularly beneficial for prevention-focused individuals. An intervention that boosts growth, such as encouraging couples to pursue novel, exciting activities together (Aron et al., 2000), may be particularly beneficial for promotion-focused individuals. It may also be important to explore ways that the same intervention could be designed to serve both needs. For example, it is possible to highlight how embarking on the same type of activity (e.g., a novel activity) fulfills both growth needs (excitement and adventure) and security needs (reliance and support). Indeed, when participants were asked to recall a growth- or secure-relevant relationship memory in Study 5, sometimes participants reported the same event in both conditions. Example #4 in Figure 11 highlights this observation – one person describes "marriage" as a growth opportunity, while another saw it as a signal of high security. This example highlights how the same experience can signal growth or security. If people can focus on the features of the experience that best serve their motivational concerns, the same experience can be relationship enhancing for people with either regulatory focus orientation activated. In sum, taking motivational differences into account may lead to the development of more effective interventions.

# **Practical Application**

What does the current research mean for day-to-day relationship maintenance? Although promotion-focused people may not need daily doses of novelty and excitement with their partner, it may be important that they perceive growth or anticipate continued growth with their partner. For instance, even a relatively mundane activity (e.g., cooking) could be construed in growth-enhancing ways—by cooking side-by-side, couples are creating something together, connecting, and perhaps engaging in intimate self-disclosure, for example. Promotion-focused people may be

more likely to benefit from focusing on the growth aspects of these types of more mundane experiences. Further, anticipating a novel or fun experience in the future (e.g., a booked excursion) may maintain perceptions of continued growth and sustain feelings of relationship success for promotion-focused people. Partners of promotion-focused people may also reap relational rewards by planning novel and exciting activities for their partners (or at least cooperate if their partner suggests them). Partners of prevention-focused people, on the other hand, would likely not benefit as significantly from enhancing growth experiences for their partners. These are exciting questions for future research.

## **Regulatory Focus in the Context of Interpersonal Relationships**

The present work suggests that promotion and prevention-focused individuals experience relationship success in distinct ways. One may infer that individuals would be better off, therefore, with a partner who had the same regulatory focus orientation. Similarity in regulatory focus orientation should lead to interpersonal harmony and agreement because partners would have similar standards for relationship success, and would value the same end-states both within, and outside of their relationships. Partners should strive for the same kinds of relationship experiences, creating common ground and potentially minimizing conflict. Similarity would also lead to congruent perceptions between partners about the current success of the relationship, unlike complementary partners who disagree about whether growth and excitement are fundamental or irrelevant for relationship success. A prevention-focused individual who is very satisfied in her relationship may have a hard time understanding her promotion-focused partner's dissatisfaction and need for change and growth.

Similarity in regulatory focus should also benefit romantic relationships because partners would be more likely to share the same goals, making it easier for them to be supportive of each

other's goals. The importance of goal support in relationships can be seen in past work showing that support for partners' goals predicts positive relationship outcomes, like satisfaction and breakup (e.g., Brunstein, Dangelmayer, & Schultheiss, 1996; Hui et al., 2013). The importance of goal support in relationships can also be seen in new theorizing about the connection between goal pursuit and relationships. According to Transactive Goal Dynamics (TGD) theory, independent relationship partners pursue their goals as interdependent subparts of one single selfregulating system, in which goals are oriented toward and driven by each member of the system (Fitzsimons, Finkel, & vanDellen, 2015). TGD posits that relationship success should be more likely to the extent that partners achieve better goal outcomes due to their involvement in the relationship. In this case, goal compatibility is important. Past work has found that similar regulatory focus predicts better goal compatibility and goal support for a partner's goals (Righetti, Rusbult, & Finkenauer, 2010). Specifically, promotion- (but not prevention-) focused people were more likely to receive support for their ideal-goals and were better at supporting their partner's ideal goals (Righetti et al., 2010). Promotion-focused people's goal pursuits also benefited from receiving support from a promotion-focused rather than a prevention-focused partner (Righetti et al., 2011). If promotion-focused people's ideal goals are the goals they care most about (cf. Hui et al., 2013), and promotion-focused people are effective ideal-goal supporters, it makes sense that regulatory focus similarity would be beneficial for relationships. However, the effects with prevention were less clear in these studies—prevention-focused people did not appear to benefit from "fit" with regard to their goal pursuit, although regulatory focus complementarity was no better (Righetti et al., 2010; 2011).

The organizational literature supports the idea that regulatory focus similarity predicts positive outcomes. Researchers have found that motivational fit between leaders and followers

(similarity in regulatory focus) is more effective than non-fit because it increases feelings of liking and feeling valued (de Liu, Bian, Gao, Ding, & Zhang, 2016; Hamstra, Sassenberg, Van Yperen, & Wisee, 2014; Hamstra, Van Yperen, Wisse, & Sassenberg, 2011; Stam, van Knippenberg, & Wisse, 2010).

However, in contrast to the above research suggesting an advantage in having regulatory focus similarity, other research suggests that regulatory focus complementarity (one predominantly promotion-focused partner, one predominantly prevention-focused partner) between romantic partners can be beneficial for relationships (Bohns et al., 2013; Bohns & Higgins, 2011). Bohns et al. propose that complementarity is beneficial to the extent that romantic partners can pursue shared goals with their preferred strategies. Among couples with high goal congruence (i.e., "I'm confident that my partner and I generally share the same goals for our relationship"), regulatory focus complementarity led to greater relationship satisfaction. For individuals with low goal congruence, regulatory focus complementarity was unrelated to relationship satisfaction. The researchers reasoned that when partners have complementary regulatory focus, each individual can adopt his/her preferred strategy (e.g., promotion-focused individual eagerly designing his dream house) while his/her partner implements the non-preferred strategy (e.g., vigilantly ensuring that all financial documents are in order; see also Bohns & Higgins, 2011).

The potential discrepancy between these two programs of research provides new insights into when—and why—similarity versus complementarity in relationships is beneficial.

Similarity in regulatory focus predominance may make it easier for couples to land on the same page about what counts as relationship success, but similarity is likely not necessary for a couple to appreciate that there are multiple ways to construe relationship success. I propose that

complementarity will not be problematic if a) individuals have insight into the factors that contribute to relationship success for them, b) are able to communicate those effectively to their partners, and c) have partners who either share or support those desired outcomes.

The ability to communicate and respond effectively about idiosyncratic perceptions of relationship success may depend in part on the relative accessibility of the promotion and prevention systems for each individual. Because these systems are orthogonal, individuals can be relatively high in both, low in both, or high in only one. Research in regulatory focus theory has tended to focus on how the single system (promotion versus prevention) that is activated in the moment (via chronic or temporary sources) guides behavior. Not much is known about the implications of being relatively strong in both systems, particularly in dyadic relationships. It may be, for instance, that a predominantly promotion-focused individual who also has a moderately strong prevention focus system is better able to appreciate a partner's prevention focus tendencies than a predominantly promotion-focused individual who has a very weak prevention focus system. It is also possible that this situation would lead to higher goal congruency among partners.

Further, complementary couples may be better off to the extent that each partner experiences joint activities as serving different needs. For instance, exploring a new hiking trail may serve a promotion-focused individual's need for excitement ("I love that we are trying something new together!") at the same time that it serves a prevention-focused individual's need for security and stability ("I love that we still enjoy hiking together!"). Complementary couples who engage in activities that serve the needs of each individual—and who are able to validate divergent reactions—may not encounter hardship due to lack of similarity. In fact, if complementarity couples are able to a) meet their individual relationship needs and b) engage in

their preferred strategy while pursing tasks with a partner, they may experience enhanced relationship outcomes relative to couples matched on regulatory focus. Couples in which partners share the same dominant regulatory focus might encounter hardships if both partners engage in the same strategy on tasks that would benefit from both eager and vigilant approaches (Bohns & Higgins, 2011). It will be important to explore the trade-offs of regulatory focus similarity and complementarity in future relationships research.

### **Limitations and Future Directions**

One strength of the current research is that I demonstrated the patterns in the proposed model in the contexts of experiments in which I carefully controlled and/or manipulate essential factors (e.g., regulatory focus, growth/security experiences). However, one limitation of the current research is that I did not examine the predicted pattern longitudinally. Doing so would provide insight into how the presence of security and growth experiences affect relationship well-being—and longevity—over time. The current work would also benefit from a daily diary study because it would allow me to assess what growth and security looks like in relationships and how perceptions of growth/security are affected by other relationship factors (e.g., in the presence or absence of conflict or stressors, when mood is generally positive versus negative). Additionally, although three of the five studies were high-powered, the smaller sample sizes of Studies 3-4 were not ideal.

Another limitation of the current studies is that I assessed relationship well-being with self-report methods. Although perceptions about one's relationship are important (Murray et al., 1996; Reis, Clark, & Holmes, 2004), future work could examine relationship well-being behaviourally, by examining how couples support each other in the lab, how long they stay together (in longitudinal designs), or how much they sacrifice for each other, for example. It

would be useful to examine how the presence or absence of growth and security affect other relationship processes (e.g., conflict, sex) aside from perceptions of well-being.

How people respond to system-relevant threats. Future research should examine whether individuals calibrate their expectations for growth or security according to factors such as the state of the relationship, access to perceived growth/security opportunities, or the regulatory focus orientation of the partner. It will also be important for future research to examine how people respond when their preferred relationship quality is threatened. For example, how do people with promotion concerns react when growth is threatened in their relationships? There is some evidence that promotion-focused people are more likely than prevention-focused people to attend to romantic alternatives due to their advancement needs and tendencies to take chances in order to ensure gains (Finkel et al., 2009). Are promotion-focused people especially likely to pursue romantic alternatives when growth is threatened in their own relationships, or will they instead seek growth opportunities in their relationships to buffer against the lack of growth threat? The study conducted at Wilfrid Laurier hints that promotionfocused people may generally take the more problematic route. When made to feel there was little growth potential in the relationship, promotion-focused people devalued the relationship (Cortes et al., 2018).

It is also unknown how prevention-focused people may react to a relationship security threat. Do they actively strategize to improve feelings of security, or instead begin to disengage? Findings from past studies hint that how promotion versus prevention-focused people react to respective relationship threats (growth, security) may differ. Outside of the relationship domain, when given failure feedback, promotion-focused people tend to disengage, but prevention-focused people become motivated (Idson & Higgins, 2000). When given success feedback,

promotion-focused people become motivated and prevention-focused people disengage. Similarly, when reflecting on potential strengths, people with promotion concerns persist longer on tasks, whereas people with prevention concerns persist longer when reflecting on potential weaknesses (Scholer, Ozaki, & Higgins, 2014). These findings may suggest that when relationship growth is threatened, promotion-focused people begin to disengage and seek romantic alternatives, but that when relationship security is threatened, prevention-focused people actively work to repair security. Future research should examine these possibilities as well as the factors (e.g., love, investment) that affect the strategies that people choose.

How other motivational orientations affect relationship dynamics. The current work demonstrates the importance of considering people's general motivational orientations specifically, their regulatory focus—when understanding the desired qualities that successfully sustains people's romantic relationships. However, there are other important motivational frameworks that are likely to affect relationship dynamics in interesting ways. In particular, motivational frameworks may help clarify not only the features that produce successful relationships, but the likelihood that dating relationships will develop into exclusive, committed relationships in the first place. What predicts whether a person will "leap into love" versus take their time to ensure that committing is the right choice, for example? A motivational approach would shed light on these questions. Specifically, regulatory mode theory explains how some people are driven by the need to constantly move forward with their goals, "locomotors," and how others are driven by the need for thorough comparisons and evaluations to make the best choice, "assessors" (Higgins, Kruglanski, & Pierro, 2003; Kruglanski et al., 2000). While locomotors may be more likely to quickly commit to dating partners to move forward with their relationship goals, assessors may be more likely to take their time and make thorough

evaluations before fully committing to a partner. Further, there are likely trade-offs in both approaches. Locomotors who leap quickly may evoke feelings of flattery for partners and thus more liking and excitement, but may jump into relationships *too* quickly, without seeing potential warning signs. In contrast, assessors may make more accurate decisions about settling with the "right" partner, but could miss out on rewarding relationship experiences if partners are tired of waiting. These are important questions for future research because although past research has focused on both predictors of romantic attraction (e.g., Bersheid & Reis, 1998) and factors that sustain romantic relationships over time (e.g., Rusbult et al., 1998), less research has investigated the factors that predict how and if people transition from casually dating to exclusively committing.

### **Conclusion**

What makes a relationship successful? The current research demonstrates that general, non-relationship specific motivational orientations can exert a powerful influence over how people experience relationship success. In particular, the presence of growth-related relationship qualities are valued and essential for the experience of relationship success within the promotion system, but not so essential for the prevention system. In contrast, prevention-focused people prefer the presence of security-related qualities over growth-related qualities, and experience heightened relationship well-being when security is more present relative to growth in the relationship. Although a large body of literature suggests the general importance of both security and growth for relationship well-being (Aron et al., 1992; Hazan & Shaver, 1987), the current work is the first to demonstrate how each quality can be helpful for some individuals more than others. In addition to exploring how regulatory focus motivations shape perceptions of relationship success, the current work suggests the interesting and important ways in which the

intersection of motivational science and relationship science can provide new insights into what makes relationships work (and work better).

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#### **Footnotes**

<sup>1</sup>The studies were not run in the same order as presented. Studies 1 and 5 were run after Studies 2-4 and were planned based on a priori power analyses (described in the "participants" section). Studies 2-4 were conducted prior to major changes in the field regarding sample size. I did not conduct formal power analyses before running those studies. Thus, variation in sample sizes are partly due to when the studies were run. However, sensitivity analyses suggest that all studies are adequately powered at a minimum of .80, with the exception of Study 2, which was powered at .70 (but only given the effect size for the prevention focus effect, and not the promotion focus effect).

<sup>2</sup>Included in these filler questionnaires was a measure of self-esteem (Rosenberg, 1965), attachment style (Brennan, Clark, & Shaver, 1988), and the ten-item personality inventory (Gosling, Rentfrow, & Swann, 2003). The ten-item personality measure was also included as a filler scale in Study 5.

<sup>3</sup>Generally, the results looked the same when examining the security scale without the conflict items in the analyses. The only slight differences were as follows: The Prevention Focus × Relationship Experience interaction in the general linear model dropped to marginal significance (p = .076) and the prevention focus predicting relative importance of growth to security analysis became marginally significant,  $\beta = -.09$ , p = .076.

<sup>4</sup>The 3-way interaction between promotion, prevention, and quality type (growth versus security) was nonsignificant, F = .21, p = .647.

<sup>5</sup>We ran all of the reported analyses using the full sample. The direction and significance of the results were generally the same as in the final sample, with the following slight differences: Promotion focus dropped to marginal in significance when predicting the

importance of growth characteristics,  $\beta = -.27$ , p = .079, and prevention focus dropped to marginal in significance when predicting the absence of growth characteristics,  $\beta = -.23$ , p = .096, and the absence of secure characteristics,  $\beta = .25$ , p = .068.

<sup>6</sup>We ran all of the reported analyses using the full sample. The direction and significance of the results were the same.

<sup>7</sup>We also asked participants about the importance of growth versus secure relationship qualities ("How important is it to you that your relationship with your partner is...") prior to asking about the current existence of those qualities and found no regulatory focus condition effects (ts < .4, ps > .5). Participants rated both security and growth-related relationship qualities as highly important (Ms = 6.35, 5.91, SDs = .73, .86, respectively), perhaps making it more difficult to detect effects of the regulatory focus manipulation on importance ratings. Controlling for importance ratings in our primary analyses did not change the pattern of effects. That is, the critical Regulatory Focus Condition × Growth Relationship Qualities (and growth relative to security relationship qualities) interactions were both still significant (βs > .17, ps < .008) and the Regulatory Focus Condition × Security Relationship Qualities interaction remained nonsignificant (p > .8).

<sup>8</sup>Participants also completed a measure of quality of alternatives (Rusbult et al., 1988), investment size (Rusbult et al., 1988), inclusion of other in the self (Aron et al., 1992), and future relationship optimism (MacDonald & Ross, 1999), as exploratory measures at the end of the study. There were no main effects of condition, nor any two-way interactions on these measures.

<sup>9</sup>The direction and significance of the results of each subscale were the same as the overall well-being measure reported in Study 4, for both relationship and partner quality ratings, with the exception of the Regulatory Focus Condition × Growth Qualities interaction dropping to

nonsignificant in the absolute level analysis with the Rusbult Commitment Scale as the dependent measure (this was the case for both relationship and partner ratings). See Tables 7 and 8 for detailed analyses containing the predicted interactions regressed on each relationship well-being measure separately for relationship (Table 7) and partner (Table 8) quality ratings.

<sup>10</sup>The 3-way interaction between condition, presence of relationship growth, and presence of relationship security was nonsignificant, β < .01, p = .961.

<sup>11</sup>Of the four participants who did not complete the writing task properly, one wrote an illegible passage ("I felt the growth when she starts caring me. I had so much of love in her but i realized only when she started to care me and showed me a lot of love") and the other three made a general statement about their relationship without specifying a memory (e.g., "We are open with each other all of the time and I feel secure"). I ran all of the reported analyses using the full sample. The direction and significance of the results were the same.

<sup>12</sup>The 3-way interaction between promotion focus, prevention focus, and memory condition was nonsignificant,  $\beta = .03$ , p = .495.

Table 1

Descriptive Statistics and Correlations of Promotion and Prevention Focus (Studies 1, 2, 3, 5)

Measure	1	2	N	M (SD)	Minimum	Maximum
Study 1						
1. Chronic Promotion Focus			405	3.55 (.63)	1.17	5.00
2. Chronic Prevention Focus	.20*	_	405	3.36 (.84)	1.00	5.00
Study 2						
1. Chronic Promotion Focus			201	3.53 (.64)	1.67	5.00
2. Chronic Prevention Focus	.13t		201	3.34 (.79)	1.20	5.00
Study 3						
1. Chronic Promotion Focus			86	3.50 (.62)	1.33	5.00
2. Chronic Prevention Focus	.08		86	3.33 (.77)	1.40	5.00
Study 5						
1. Chronic Promotion Focus			398	3.60 (.60)	1.50	5.00
2. Chronic Prevention Focus	.13*		398	3.22 (.81)	1.00	5.00
* < 05 + 06						

<sup>\*</sup>p < .05, †p = .06

Table 2

Correlations among Promotion Focus, Prevention Focus, Importance of Growth-Related

Relationship Qualities, and Importance of Security-Related Relationship Qualities (Study 1)

Scale	1	2	3	4
1. Promotion Focus				
2. Prevention Focus	.20*			
3. Importance of Growth Qualities	.35*	< .01	_	
4. Importance of Security Qualities	01	.06	.22*	_

<sup>\*</sup>p < .001

Table 3

Predictors of Reported Importance of Growth- and Security-Related Relationship Qualities at

Absolute and Relative Levels of Analyses (Study 1)

	Importance at an	Absolute Level	Importance at a Relative Level		
	Growth	Security	Growth Relative to Security		
Chronic Promotion Focus	.37**	12*	.33**		
Chronic Prevention Focus	09*	.09f	11*		

Note. Column values are standardized beta coefficients within each Multiple Regression analysis.

<sup>\*\*</sup>p < .001, \*p <= .05, †p = .08

Table 4

Predictors of Rank Ordered Gain-Framed and Loss-Framed Growth Relationship Qualities,

Security Relationship Qualities, and Fundamental Relationship Qualities (Study 3)

	Ga	in Framed	Qualties	Loss Framed Qualties			
	Growth	Secure	Fundamental	Growth	Secure	Fundamental	
Chronic Promotion Focus	.36*	20	31†	14	04	.10	
Chronic Prevention Focus	15	.17	.01	33*	.34*	.01	

*Note*. Column values are standardized beta coefficients within each Multiple Regression analysis. Coefficients in the positive direction signal characteristic prioritization.

<sup>\*</sup>p < .05, †p = .06

Table 5

Descriptive Statistics and Correlations of Growth and Security Relationship and Partner Rated

Qualities (Study 4)

Scale	1	2	3	4	M (SD)
1. Presence of growth relationship qualities					5.33 (1.24)
2. Presence of security relationship qualities	.53*				5.97 (1.11)
3. Presence of growth partner qualities	.88*	.53*			5.40 (1.08)
4. Presence of security partner qualities	.49*	.84*	.51*	_	5.84 (1.10)

<sup>\*</sup>p < .001

Table 6

Descriptive Statistics and Correlations of the Relationship Well-Being Subscales (Study 4)

Scale	1	2	3	4	M (SD)
1. Norton's Relationship Quality Scale					4.41 (0.79)
(5-point scale)					
2. Fletcher's Perceived Relationship Quality Scale	.73*				6.08 (0.87)
(7-point scale)					
3. Rusbult's Satisfaction Scale	.77*	.82*			7.60 (1.56)
(9-point scale)					
4. Rusbult's Commitment Scale	.59*	.68*	.66*	_	6.53 (1.14)
(9-point scale)					

<sup>\*</sup>p < .001

Table 7

Results of the Absolute and Relative Analyses for Relationship Growth and Security Presence for Each Individual Relationship Well-Being Measure (Study 4)

	Absolu	ite Level	Relative Level
	RF Condition ×	RF Condition ×	RF Condition ×
	Growth Qualities	Security Qualities	Growth Minus
			Security Qualities
Overall Relationship Well-Being Index	$\beta = .17, p = .008$	$\beta$ =03, $p$ = .692	$\beta$ = .30, $p$ = .005
(composite of all scales below)			
Norton's Relationship Quality Scale	$\beta$ = .19, $p$ = .023	$\beta$ =11, $p$ = .231	$\beta$ = .32, $p$ = .003
Fletcher's Perceived Relationship	$\beta = .15, p = .022$	$\beta$ =02, $p$ = .760	$\beta$ = .29, $p$ = .007
Quality Scale			
Rusbult's Satisfaction Scale	$\beta = .16, p = .032$	$\beta = .03, p = .687$	$\beta$ = .26, $p$ = .014
Rusbult's Commitment Scale	$\beta = .08, p = .422$	$\beta$ =02, $p$ = .822	$\beta$ = .20, $p$ = .064

Table 8

Results of the Absolute and Relative Analyses for Partner Growth and Security Presence for Each Individual Relationship Well-Being Measure (Study 4)

	Abs	solute	Relative
	RF Condition ×	RF Condition ×	RF Condition ×
	Growth Qualities	Security Qualities	Growth Minus
			Security Qualities
Overall Relationship Well-Being Index	$\beta = .25, p < .001$	$\beta$ =04, $p$ = .573	$\beta = .37, p = .001$
(composite of all scales below)			
Fletcher's Perceived Relationship	$\beta = .25, p = .001$	$\beta$ =04, $p$ = .667	$\beta$ = .36, $p$ = .001
Quality Scale			
Rusbult's Satisfaction Scale	$\beta = .25, p = .001$	$\beta$ =01, $p$ = .870	$\beta = .35, p = .002$
Rusbult's Commitment Scale	$\beta$ =05, $p$ = .646	$\beta = .08, p = .519$	$\beta = .07, p = .574$
Norton's Relationship Quality Scale	$\beta = .21, p = .022$	$\beta$ =10, $p$ = .317	$\beta = .33, p = .002$

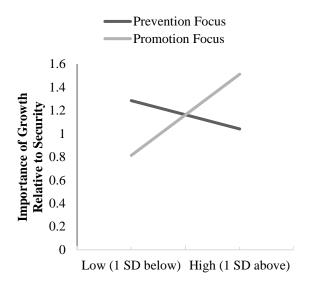


Figure 1. Chronically high (+1 SD above the mean) versus low (-1 SD below the mean) promotion-focused individuals prioritized the importance of relationship growth relative to security. Compared to people low in prevention focus, highly prevention-focused people were less likely to prioritize the importance of relationship growth relative to security (Study 1).

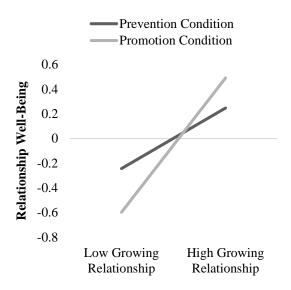


Figure 2. People induced into a promotion (versus prevention) state rated their relationship well-being highest when growth-related relationship qualities were more (+1 SD above the mean) versus less present (-1 SD below the mean; Study 4).

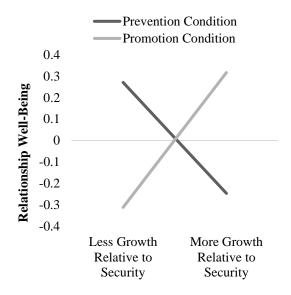


Figure 3. People induced into a promotion (versus prevention) state rated their relationship well-being higher when their relationships had more growth- relative to security-related qualities (Study 4).

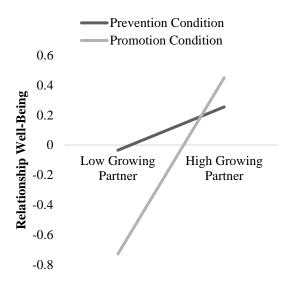


Figure 4. People induced into a promotion (versus prevention) state rated their relationship well-being highest when growth-related partner qualities were more (+1 SD above the mean) versus less present (-1 SD below the mean; Study 4).

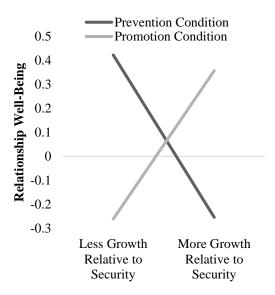


Figure 5. People induced into a promotion (versus prevention) state rated their relationship well-being higher when their partners had more growth- relative to security-related qualities (Study 4).

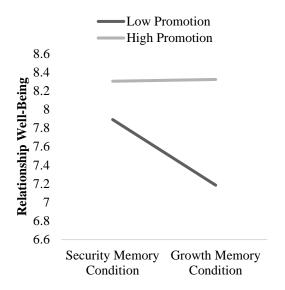
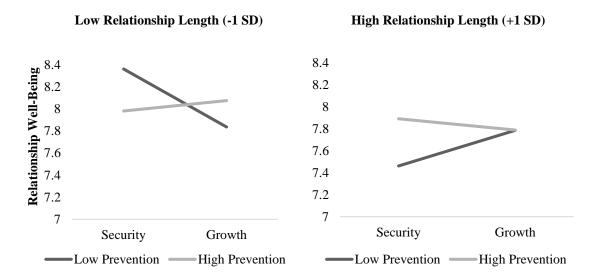


Figure 6. People high (versus low) in promotion focus rated their relationship well-being higher when they recalled growth- (versus security-) related relationship memories (Study 5).



*Figure 7.* Three-way interaction between prevention focus, memory condition, and relationship length predicting relationship well-being (Study 5).

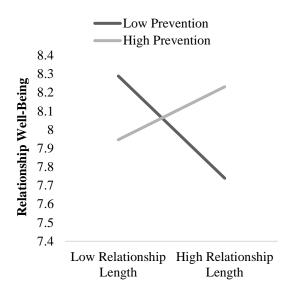


Figure 8. Predicted mean values of relationship well-being for people low (-1 SD) and high (+1 SD) in prevention focus and relationship length in the security memory condition (Study 5).

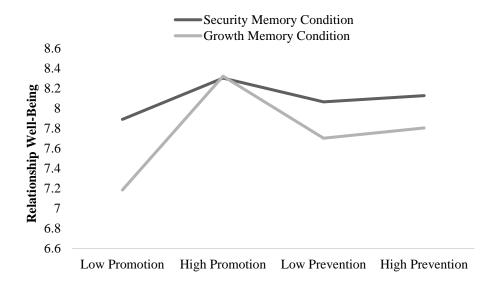


Figure 9. Predicted mean values of relationship well-being for people low (-1 SD) and high (+1 SD) in promotion and prevention focus across memory condition (Study 5).

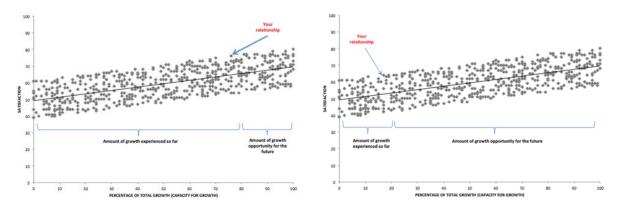
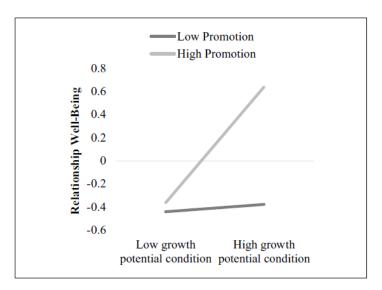


Figure 10. Growth potential manipulation from a study conducted at Wilfrid Laurier University (Cortes et al., 2018, Study 4). Participants were given bogus feedback about their relationship potential. The y-axis represents their supposed relationship satisfaction and x-axis represents their supposed potential for future relationship growth. Participants were assigned to a low growth potential condition (left) or a high growth potential condition (right).



**Figure 4.** Relationship well-being as a function of growth condition and chronic regulatory focus.

Note. Chronically high (+1 SD above the mean) versus low (-1 SD below the mean) promotion-focused individuals rated their relationship well-being highest when given feedback that their relationship had ample growth potential compared with limited growth potential (Study 4).

Figure 11. Plotted Promotion Focus × Growth Potential Condition interaction from Study 4 in Cortes et al. (2018; Study 4).

# Ex. **Growth Memory Condition**

- 1. My girlfriend and I recently decided to take a day trip and go hiking. We woke up early, packed lunches, and drove to the hiking spot. There, we spent hours hiking to a secluded waterfall, taking the time to carefully navigate the trail and enjoy the scenery. Once at the waterfall, we stopped, ate lunch, and enjoyed each others company for a bit before hiking back. The weather was gorgeous, and it was amazing to spend so much time and have so much fun with her.
- 2. Last month we took a trip to a neighboring city to look around, shop, and grab some food. On the trip, we talked a lot about our future and where we saw the relationship going. It was amazing and really nice to talk about the intimate details in our relationship and in our future. This was really helpful and I felt better about going forward in our relationship.
- 3. The discussion we had regarding having a child. We were having infertility problems and both of us had to sit down and talk to one another about our feelings regarding our various options and what we felt like was the best path forward. It was a time for growth because it allowed us to share how we truly felt about the issue and helped us arrive at a conclusion that was best for both of us. This was not an easy conversation to have so it was great we were able to get through it. This added a new element of excitement in our lives because within 5 months we were expecting our first child.
- 4. I felt I was really growing with my partner when I asked her to marry me and she said yes.
- 5. For our first date, my partner and I went to an animal rescue and fed the cats and dogs. She and I really bonded in doing this because it allowed us to spend time together doing something which we both found satisfyingly enriching.
- 6. One our our close friends passed away and it brought us a lot closer in terms of understanding how we grieve together.
- 7. About 4 months in to our relationship my wife discovered that I had not heard of most of the

### **Security Memory Condition**

When my partner and I worked through financial difficulties, and managed to find a solution by employing team-work as a couple to figure out or financial situation. We felt close due to our teamwork.

October of last year I was visiting my significant other. We spent the next 2 days together, making meals together and taking care of her chicken and her rabbit. For those blissful two days I didn't have to think about anything other than her and what we were doing at the moment. I felt really secure with myself, my relationship with her, and everything about life.

When my grandmother died, I really needed someone to be there for me. Theresa was there the whole time. She helped me make it through this trying time by helping me to make necessary decisions and keep myself calm.

I felt very secure with my partner when I asked her to marry me. I was very nervous going into it, but when she said yes, all that nervousness and anxiety went away and I felt very confident.

Once me and my partner were on a date that had been going on for four hours. And I said that I'm sure you have things to do. She said that I've got things to do if you want me to have things to do.

When I asked my girlfriend to post my bail and get me out of jail. I knew I could trust her and she proved to be an extremely reliable partner.

I had to go oversea because of work for about 10 months. At that point we had been together

musical tastes and found that she did not know most of the music I enjoy. We agreed to listen to an album a week, alternating who picks, until we were both satisfied that we had shared our musical tastes together. This took us almost a year. Now we are in the middle of doing the same thing but with movies. It has been a very fun way to get to know each other and it has really helped us grow together rather than apart

- 8. When we were doing dishes in the kitchen and being playful. I realized I loved her.
- 9. My wife and I started taking swing dancing lessons (my wife has loved dancing for a long time, but I've never really liked it). As we went on with the classes, I got better at it to the point where I am somewhat competent, and she too got better at working with me. As we got better over time, we reached a point where it was more of a fun thing to do, and it was something that we both got better doing and we grew together while doing it.
- 10. Two years ago we bought a new house and it needed a lot of work. My husband and I remodeled the bathroom ourselves. He dis most of the work because he had more time, but I helped when I could. I was shocked we could actually od it ourselves and at a fraction of the cost to have someone do it. It looks great and I am so proud of us.
- 11. When we went on our first trip to LA together. We had to go through the ups and downs of coordinating everything, therefore it was a great bonding experience. It was exciting and new and we really got to know each other better in the times of uncertainty in travel.
- 12. My boyfriend is a runner and I have never been too concerned with athletic activities. A month ago I ran my first 5K and he joined me. I wanted to make an effort to try something he loved and he helped me get in shape and train for the race. It was rewarding to experience something he enjoys so much and to be able to show him that I care about his interests.

for about 2 years. During the whole 10 months we weren't able to see each other in person. We talked frankly about the prospect of us staying together and giving this long distance relationship thing a try. We agreed to give it a go and see what happen. I had my doubt because I knew she had other options. I didn't say anything because if our relationship can't stand up to this test then we weren't mean to be anyway. We kept in touch with email, text, and video chat and we both missed each other terribly the whole time. 10 months gone by and I came by and I found myself wanting her even more. Our relationship had deepened as a result of this separation and I felt like she is the one. One night we made a blanket fort and ate breakfast for dinner in it and watched movies. I felt very connected and safe at that moment. There was a time when we started dating that my girlfriend showed me her character. I had a friend who was the ladies man type. He always screened my exes and they all failed. He would flirt with them and ask them to text him for a date. They normally texted him aND THEN BAM HE WOULD TELL ME. She did text him but she let him down easy. I was so impressed that she didn't let me down like the rest. Then I knew she was the one for me. a few birthdays ago my girlfriend took care of and made sure I was safe after getting out of hand drinking and having fun with friends even after she had long work days

my girl lives two hours away and one night my car broke down and she drove to get me and stayed the night with me so that I would have a ride to work until my car was fixed.

I studied abroad with this partner and they helped me navigate another world. I had assistance when getting lost or frustrated and had help finding "home."

- 13. The memory I have is of us skydiving. Neither of us participated in this activity before and I am extremely terrified of heights. This is something he really wanted to do and I feel like we grew together because I put my complete trust in him and overcame a fear. It was a lot of fun also.
- 14. When I was diagnosed with Endometriosis and was told that I may not have children in the future, my partner was there for my 100% with all the procedures and educated himself on how to help me best. We had a deep and meaningful conversation about our relationship and the future depending on the outcomes of what may happen.
- 15. We took a trip together through parts of Asia a little under a year ago. This gave us a chance to explore new places together and try new things together, but it also gave us chances to talk more than usual. It brought us closer together in many ways, and was a fun and memorable trip overall.

The day that we moved into our first house together. / Being in an exclusive relationship is wonderful, though obviously none of my prior relationships had working longevity for one reason or another. / When we unlocked the front door to our home and began moving our joint items in together, it is just about the most comfortable I have ever felt with someone and knew she was the person I wanted to continue to be with until my life ceased to be

I had lost my job back in 2014 and I had no options on the horizon and no savings. I was sure that it was the beginning of a string of events that was going to produce lasting negative consequences. My partner took a vacation from her job and made it a priority to be there for me physically and emotionally. She helped me to get into contact with people who could help me out of my circumstances and she provided much emotional feedback. This morning my boyfriend called me to ask if I wanted to go to a concert. The concert is in August. It makes me feel secure that he is planning events ~2 months in the future, as that indicates he sees us staying together at least that long.

Figure 12. Examples of responses from participants in the Growth Memory Condition (left) and Security Memory Condition (right) from Study 5.

## Appendix A

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

Administered in Studies 1, 2, 3, 5

This set of questions asks you HOW FREQUENTLY specific events actually occur or have occurred in your life.

1	2	3	4	5
Never or seldom		Sometimes		Very often

Compared to most people, are you typically unable to get what you want out of life? Growing up, would you ever "cross the line" by doing things that your parents would not tolerate?

How often have you accomplished things that got you "psyched" to work even harder?

Did you get on your parents' nerves often when you were growing up?

How often did you obey rules and regulations that were established by your parents?

Growing up, did you ever act in ways that your parents thought were objectionable?

Do you often do well at different things that you try?

Not being careful enough has gotten me into trouble at times.

When it comes to achieving things that are important to me, I find that I don't perform as well as I ideally would like to do.

I feel like I have made progress toward being successful in my life.

I have found very few hobbies or activities in my life that capture my interest or motivate me to put effort into them.

#### Appendix B

Importance of Growth and Security Relationship Qualities Scale (created by the author)

### Administered in Study 1

Please indicate the extent to which you agree with the statements below:

1	2	3	4	5	6	7
Not at all			Somewhat			Extremely

- 1. It's important to me that my partner gives me opportunities for personal growth.
- 2. It's important to me that my partner and I have a lot of fun together.
- 3. It's important to me that my partner and I have new experiences together.
- 4. I care a lot about having excitement in my relationship.
- 5. I want to have adventures with my partner that we can look forward to.
- 6. I want to feel excited about where our relationship will take us next.
- 7. It's important to me that my partner and I always continue growing together as a couple.
- 8. I want to feel strongly connected to my partner.
- 9. It's important to me that my partner and I have chemistry.
- 10. It's important to me that my partner and I establish routines in our relationship.
- 11. I want to always know what to expect in my relationship.
- 12. It's important to me to have a relationship that is the same and stable from one day to the next.
- 13. I want my relationship to be reliable and consistent.
- 14. I want to be able to predict what my partner will do in most situations.
- 15. I like always knowing what to expect in my relationship.
- 16. It's important to me to never argue with my partner.
- 17. I'd rather avoid discussing a controversial issue with my partner than risk a fight.
- 18. I'm willing to argue with my partner if it means better things for us in the end.

*Note*: The growth scale is comprised of items 1-9. The security scale is comprised of items 10-18. Item 18 is reverse-scored.

### Appendix C

Relationship Well-Being Measure Composite (citations for each sub-scale provided below)

## Administered in Study 4

Subscale 1: Martial Quality Index (Norton, 1983)

Please indicate what your current partner/relationship is like, answering each question that follows.

1	2	3	4	5
Strongly disagree				Strongly Agree

We have a good relationship.

My relationship with [partner's name] is very stable.

Our relationship is strong.

My relationships with [partner's name] makes me happy.

I really feel like part of a team with [partner's name].

1	2	3	4	5
Not very much				Very much

To what extent are you happy, everything considered, with your romantic relationship?

Subscale 2: Relationship Quality Components Scale (PRQC; Fletcher, Simpson, & Thomas, 2000)

Please indicate what your current partner/relationship is like, answering each question that follows.

1	2	3	4	5	6	7
Not at all						Extremely

How satisfied are you with your relationship?

How content are you with your relationship?

How happy are you with your relationship?

How committed are you to your relationship?

How dedicated are you to your relationship?

How devoted are you to your relationship?

How intimate is your relationship?

How close is your relationship?

How connected are you to [partner's name]?

How much do you trust [partner's name]?

How much can you count on [partner's name]?

How dependable is [partner's name]?

How passionate is your relationship?

How lustful is your relationship?

How sexually intense is your relationship?

How much do you love [partner's name]?

How much do you adore [partner's name]?

How much do you cherish [partner's name]?

### Subscale 3: Relationship Satisfaction (Rusbult, Martz & Agnew, 1988)

Please indicate the degree to which you agree with each of the following statements regarding your current relationship.

1	2	3	4	5	6	7	8	9
Do not agree at all				Agree somewhat				Agree completely

I feel satisfied with our relationship.

My relationship is much better than others' relationships.

My relationship is close to ideal.

Our relationship makes me very happy.

Our relationship does a good job of fulfilling my needs for intimacy, companionship, etc.

Subscale 4: Relationship Commitment (Rusbult, Martz & Agnew, 1988)

1	2	3	4	5	6	7	8	9
Do not				Agree				Agree
agree at				somewhat				Agree completely
all								

I want our relationship to last for a very long time.

I am committed to maintaining my relationship with my partner.

I would not feel very upset if our relationship were to end in the near future.

It is likely that I will date someone other than my partner within the next year.

I feel very attached to our relationship-very strongly linked to my partner.

I want our relationship to last forever.

I am oriented toward the long-term future of my relationship (for example, I imagine being with my partner several years from now).