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# Relational Regulation Theory: A New Approach to Explain the Link Between Perceived Social Support and Mental Health

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Perceived support is consistently linked to good mental health, which is typically explained as resulting from objectively supportive actions that buffer stress. Yet this explanation has difficulty accounting for the often-observed main effects between support and mental health. Relational regulation theory (RRT) hypothesizes that main effects occur when people regulate their affect, thought, and action through ordinary yet affectively consequential conversations and shared activities, rather than through conversations about how to cope with stress. This regulation is primarily relational in that the types of people and social interactions that regulate recipients are mostly a matter of personal taste. RRT operationally defines relationships quantitatively, permitting the clean distinction between relationships and recipient personality. RRT makes a number of new predictions about social support, including new approaches to intervention.

*Keywords:* social support, perceived support, affect, emotion regulation, SRM

The social support literature is vast, as reflected in over 33,000 entries in PsycINFO and over 45,000 in Medline. It is scattered across a wide range of disciplines, including psychology, psychiatry, medicine, nursing, social work, sociology, and communications. Social support is an important construct because it has been linked to a wide range of health outcomes, including both mental (Barrera, 1986; Cohen & Wills, 1985) and physical health (Uchino, 2004, 2009). Perceptions that family and friends would provide effective help during times of stress (i.e., perceived support) have been consistently linked to good mental health, including low rates of major depression (Lakey & Cronin, 2008), few posttraumatic stress disorder symptoms (Brewin, Andrews, & Valentine, 2000), low levels of nonspecific psychological distress (Barrera, 1986; Cohen & Wills, 1985; Procidano, 1992), and low negative affect, as well as high positive affect (Finch, Okun, Pool, & Ruehlman, 1999).

## Research and Theory on Stress Buffering

Cohen and Wills (1985) distinguished between social support's stress buffering and main effects, and this has played a foundational role in shaping research and theory. Stress buffering occurs when social support protects (i.e., buffers) people from the bad effects of stress. Evidence for stress buffering is indicated when

the link between life stress and poor mental health is stronger for people with low social support than for people with high social support. A key idea is that in the absence of stress, social support is not linked to mental health (see Figure 2 in Cohen & Wills, 1985). Main effects occur when people with high social support have better mental health than those with low social support, regardless of stress levels.

Stress buffering theory has been thoroughly developed and has dominated social support research. Nearly all research on social support is guided by the assumption that social support's link to mental health reflects stress buffering. Stress buffering theory is not a single author's work, and many scholars have contributed to its development. Some of the clearest, and most widely cited statements are those of Barrera (1986), Cohen and Wills (1985), Cutrona and Russell (1990), and Thoits (1986). Stress buffering theory is an extension of the general stress and coping theory of Lazarus (1966) and Lazarus and Folkman (1984). As applied to mental health, the theory can be summarized succinctly by five hypotheses: (a) Life events are stressful to the extent that people perceive the events as threats (i.e., primary appraisal) and perceive themselves as lacking adequate responses (i.e., secondary appraisal). (b) Events increase risk for poor mental health depending on people's coping. Coping involves a wide range of deliberate thought and action, including problem solving, reappraisal, avoidance, and support seeking. (c) Social support is a relatively stable resource that buffers stress, primarily by influencing appraisal and coping. (d) Social support includes what friends and family say and do regarding stressful events (i.e., enacted support), as well as recipients' perceptions that quality enacted support is available (i.e., perceived support). Perceived support is based primarily on one's history of receiving effective enacted support. (e) Social support is effective in buffering stress when the support specifically meets the demands of the stressor.

Although stress buffering theory dominates social support research, the theory has important empirical limitations. The most

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critical problem is that stress buffering is observed only inconsistently, compared to the easily replicable main effect between perceived support and mental health. For example, in Lakey and Cronin's (2008) comprehensive review of studies of social support and major depressive disorder, nearly all studies found main effects, but only the seminal Brown and Harris (1978) study reported consistent evidence for stress buffering. For example, Wade and Kendler (2000) reported no evidence for stress buffering after extensive testing with large samples. Beyond research on major depression, many other studies have not observed stress buffering effects (e.g., Beeble, Bybee, Sullivan, & Adams, 2009; Burton, Stice, & Seeley, 2004; Procidano, 1992; Stroebe, Zech, Stroebe, & Abakoumkin, 2005). Thus, many of the documented links between perceived support and mental health reflect main effects rather than stress buffering.

Second, enacted support does not at present explain perceived support's link to mental health. One problem is that stress buffering theory describes support perceptions as mostly veridical accounts of specific supportive actions (Hobfoll, 2009; Lakey & Cohen, 2000). Yet enacted support and perceived support are not strongly correlated (Barrera, 1986; Dunkel-Schetter & Bennett, 1990; Goldsmith, 2004; Haber, Cohen, Lucas, & Baltes, 2007; Uchino, 2009). A second problem is that many studies have found no link between enacted support and mental health (Barrera, 1986; Finch et al., 1999) or have found that receiving enacted support is linked to worse mental health (Barrera, 1986; Bolger & Amarel, 2007; Bolger, Zuckerman, & Kessler, 2000). One explanation for these counterintuitive findings is that the link between enacted support and mental health is obscured because people with high stress receive the most enacted support and also have the worst mental health (Barrera, 1986; Larzelere, Kuhn, & Johnson, 2004). Yet Seidman, Shrout, and Bolger's (2006) simulations suggest that such an explanation requires implausibly strong links between stress and worse mental health. Thus, given that enacted support is not consistently linked to better mental health, it does not appear to be the mechanism linking perceived support to mental health.

Third, coping and appraisal do not at present explain the link between perceived support and mental health. Surprisingly, there is a lack of a focused, coherent literature on this question (Lakey & Cohen, 2000). If coping or appraisal accounted for perceived support's link to mental health, controlling for coping or appraisal would substantially reduce this link (Baron & Kenny, 1986). Few studies on coping have shown this pattern (see Holahan, Moos, Holahan, & Brennan, 1995, for an exception). In contrast, many studies have found no evidence that coping can explain perceived support's link to mental health (Ben-Zur & Michael, 2007; Frazier, Tix, Klein, & Arikian, 2000; Giurgescu, Penckofer, Maurer, & Bryant, 2006; Haley et al., 1996; Savelkoul, Post, de Witte, & van den Borne, 2000; Smith & Wallston, 1992).

The smaller literature on appraisal shows a similar pattern. With few exceptions (Ben-Zur & Michael, 2007), appraisal has not been able to explain perceived support's link to mental health (Connell, Davis, Gallant, & Sharpe, 1994; Haley et al., 1996; Smith & Wallston, 1992). Moreover, even though theory specifically predicts stress buffering, this effect is rarely reported in the coping or appraisal literatures. Finally, coping theory and research have their own empirical and theoretical challenges (Coyne & Gottlieb, 1996; Coyne & Racioppo, 2000) that present additional problems for relying on coping to explain perceived support's link to mental

health. Thus, although this literature does not permit definitive conclusions, coping and appraisal do not appear to explain perceived support's link to mental health at present.

Thus, we believe that stress buffering theory does not provide a complete explanation for main effects between perceived support and mental health. We want to emphasize that we do not claim that stress buffering does not occur. We merely claim that the well-replicated main effects between perceived support and mental health are not completely explained by stress and coping.

### Research and Theory on Main Effects

Main effects between perceived support and mental health are highly replicable. Nearly all studies have found cross-sectional, main effects between low perceived support and major depression (Lakey & Cronin, 2008). Likewise, meta-analyses have revealed consistent main effects between low perceived support and post-traumatic stress disorder symptoms (Brewin et al., 2000) and nonspecific psychological distress (Finch et al., 1999; Procidano, 1992). Nearly all studies have found links between perceived support and happiness (Lakey, in press).

Although well-established empirically, there has been comparatively little theoretical development to explain main effects. Cohen and Wills (1985) sketched a few mechanisms. They suggested that support might promote mental health by providing "persons with regular positive experiences and a set of stable, socially rewarded roles. . . . This kind of support . . . provides positive affect, a sense of predictability and stability . . . and . . . self-worth" (Cohen & Wills, 1985, p. 311). Thoits (1985) developed a symbolic interactionist account of main effects that focused on the importance of identity and roles. Social roles (e.g., spouse, teacher) provide frameworks for social interaction that promote identity, belonging, self-esteem, and opportunities for mastery. According to Thoits, "aspects of regularized social interaction and not emotional support dimensions per se, are responsible for maintaining well-being. What we recognize as dimensions of emotional support and main effects of support are simply byproducts of these more abstract social-psychological processes" (Thoits, 1985, pp. 57–58).

### Relational Regulation Theory

Here, we describe relational regulation theory (RRT), developed to explain the main effects between perceived support and mental health. RRT was developed inductively in the course of a 30-year research program in which many of the effects predicted by stress buffering theory were consistently difficult to obtain. In contrast, relational influences on perceived support and main effects between perceived support and mental health were strong and easily replicable. In addition to accommodating these two findings, RRT was developed to meet goals that we thought were valuable in any social support theory. The theory should describe how perceived support and mental health are rooted in social interaction and should clearly distinguish between social and personality influences.

RRT tackles the serious problem that standard methods do not unambiguously rule out the possibility that main effects reflect recipient personality. Thus, interpretations of whether research findings reflect personality or social processes primarily reflect the

theoretical preferences of observers. This problem is illustrated by the following questionnaire item: “It helps to turn to my romantic partner in times of need.” Does this item reflect personality or social processes? A social support researcher might see it as a perceived support item reflecting social processes. An attachment researcher might see it as an adult romantic attachment item reflecting personality. In fact, the item is from an attachment measure (Fraley, Waller, & Brennan, 2000). This ambiguity is a serious problem. Measuring and controlling for personality (e.g., the Big Five) do not solve the problem because such measures reflect a blend of both social and personality influences (Paulhus & Reynolds, 1995). Thus, it is not possible to statistically control for only personality variance using conventional measures of personality without also removing other sources of variance.

### Scope and Definitions

**Scope.** RRT was developed to explain perceived support’s link to emotional and affective disturbance in adults and adolescents. The most relevant phenomena are described by diagnostic criteria for anxiety and mood disorders, as well as self-report measures of anxiety, depression, and general psychological distress. These typically involve high negative affect and, often, low positive affect (Watson, Clark, & Carey, 1988). RRT applies to negative thoughts about the self, world, and future, given that depression and anxiety are strongly linked with such negative thoughts (Beck, 1967; Dozois & Beck, 2008). RRT also applies to behavior associated with psychological distress (e.g., crying, support seeking, drug taking).

**Quantitative definitions.** We rely on Kenny and colleagues’ definition of *relational* from the social relations model (SRM; Kenny, 1994; Kenny, Kashy, & Cook, 2006). Relational influences occur when a provider elicits affect, action, or thought in a recipient that is not characteristic of how the recipient typically responds to other providers and is not characteristic of what the provider typically elicits in other recipients.<sup>1</sup> For example, Bob sees Kate as more supportive than how Bob typically sees other people and as more supportive than how others typically see Kate.

As applied to affect, relational influences occur when, for example, a specific recipient experiences less sadness in response to a specific provider than is typically experienced with other providers and less sadness than the provider typically elicits in other recipients. With regard to action, a recipient drinks more than usual when with a specific provider and more than the provider typically elicits in other recipients. When perceived support and affect are specifically relational, we refer to them as *relational perceived support*, *relational affect*, and so on.

When recipients’ reactions to the same providers are assessed (i.e., each recipient is a level of a Recipients factor and each provider is a level of a Providers factor), relational influences are defined using the equations of the familiar general linear model (Kenny, 1994, p. 233; Kenny et al., 2006, pp. 194–196). The definition of relational influences ( $R_{ij}$ ) on a given variable for Recipient  $i$  and Provider  $j$  is  $R_{ij} = X_{ij} - R_i - P_j + M$ , where  $X_{ij}$  is Recipient  $i$ ’s score on a variable with regard to Provider  $j$ ,  $R_i$  is Recipient  $i$ ’s mean reaction across all providers,  $P_j$  is the mean reaction to Provider  $j$  across all recipients, and  $M$  is the grand mean. Relational influences are conventional statistical interactions for random effects (Kenny, 1994; Kenny et al., 2006). When provid-

ers are situations, relational influences are identical to Person  $\times$  Situation interactions in Endler and Hunt (1969) and essentially similar to “*if . . . then . . .*, situation–behavior profiles” in Shoda, Mischel, and Wright (1994, p. 684) as well as Mischel and Shoda (1995, p. 250). RRT also adopts the SRM’s quantitative definitions of recipient and provider influences. Recipient influences are defined as mean differences among recipients, averaged across providers. Provider influences are defined as mean differences among providers averaged across recipients.

The strengths of relational, recipient, and provider influences can be estimated from either generalizability (G) theory (Cronbach, Gleser, Nanda, & Rajaratnam, 1972) or SRM designs (Kenny, 1994; Kenny et al., 2006) using a variety of estimation procedures, such as ordinary least squares analysis of variance. As applied to perceived support, G studies require that recipients each rate a separate group of providers on supportiveness. In the SRM, the typical study design is round robin, in which each member of a group rates each other. These two designs are depicted in Figure 1. Although the definitions of recipient, provider, and relational influences are essentially similar in G and SRM designs (Kenny et al., 2006), it is easier to describe these effects for the G design. A numerical example for the G design depicted in Figure 1 is provided in Table 1.

In Table 1, Recipient A rates Provider B’s supportiveness as 9. Relational influences reflect the fact that Recipient A’s perception of Provider B’s supportiveness is 1.75 points higher than expected (i.e., 7.25) given that Recipient A’s typical rating of providers is 8 and Provider B’s typical rating by recipients is 6.5. Similarly, Recipient B rates Provider B’s supportiveness as 4, which is 2.5 points lower than expected (i.e., 6.5) given that Recipient B’s typical rating of providers is 6.5 and that Provider B’s typical rating by recipients is also 6.5.

The example just described has one observation per cell, and in such designs, the highest order interaction is confounded with sampling error (Kenny, 1994; Kenny et al., 2006). In this example, relational influences (i.e., the Recipient  $\times$  Provider interaction) are confounded with sampling error. Adding an additional factor (e.g., items or time) permits sampling error to be shifted away from relational influences to the Recipients  $\times$  Providers  $\times$  Item (or Time) effect, providing more accurate estimates of and significance tests for relational influences (Kenny, 1994; Kenny et al., 2006). All of the studies on relational influences on perceived support, reviewed momentarily, have separated relational influences from sampling error in this way.

The quantitative definition of relational influences has a key advantage and intriguing implications. The key advantage is that relational influences are cleanly distinguished from recipient trait and provider influences. This solves the problem in social support research that the standard methods do not unambiguously indicate whether the link between perceived support and mental health reflects relationships or personality.

One intriguing implication of this quantitative definition is that it permits one to identify relational influences not only between

<sup>1</sup> We have adopted the terms *support recipient* and *support provider* because these terms seem to fit social support particularly well. *Recipient* corresponds to *actor* or *perceiver* in the SRM, and *provider* corresponds to *partner* or *target*.

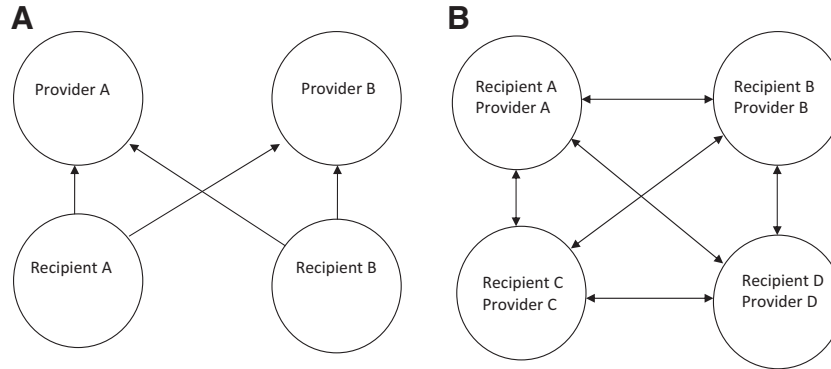


Figure 1. Examples of generalizability and round-robin designs as used in social support research. A: A generalizability design in which each recipient rates the supportiveness of each provider but providers do not rate recipients. B: A round-robin design in which each recipient rates the others on supportiveness.

recipients and providers but also between recipients and activities, symbolic people (e.g., people presented only in photographs or on video), animals, ideas, and objects. To maintain the important distinction between relational influences between people and relational influences between people and nonpeople, we refer to the latter as *quasi-relational influences* or *quasi relationships*. Because relational influences are defined using equations that do not require that providers are real people, it is meaningful to talk about recipients' quasi relationships with sports (i.e., activities), TV characters (i.e., symbolic people), dogs (i.e., animals), music (i.e., ideas), and cars (i.e., objects). As described subsequently, defining relational and quasi-relational influences on the same metric permits an understanding of how relational regulation is rooted in similarities between the recipient's and provider's quasi relationships. This feature forms a key part of RRT's description of how perceived support is rooted in social interaction.

Defining relational influences quantitatively provides a way to think more contextually about constructs that are typically viewed as traits. For example, by definition, major depressive disorder (*Diagnostic and Statistical Manual of Mental Disorders*, 4th ed.; American Psychiatric Association, 1994) is a property of persons that is stable across time and situations. However, thinking relationally requires one to consider how a person's depressive symptoms ebb and flow depending upon with whom one interacts and in what activities one participates (cf. Lewinsohn & Graf, 1973). RRT methods can estimate the links between perceived support and depression for both the trait and relational aspects of both constructs. Thus, one can consider the link between low perceived support and depression when the two reflect recipients' traits as

well as when the two reflect relational influences. However, it is not possible to correlate relational support with trait depression because these influences are represented incommensurately. As indicated by the definitions of relational and recipient influences, the entire Recipient  $\times$  Provider matrix is required to represent relational influences, whereas recipient influences are represented as a single column containing mean scores for recipients, averaged across providers. As depicted in Table 1, it is not possible to correlate a smaller number of scores arranged as a single column (two in this example) with a larger number of scores arranged as a Recipient  $\times$  Provider matrix (four in this example).

When recipients rate the same providers, it is difficult to study people's most important personal relationships, as few recipients have the same important providers. Thus, in people's natural environments, providers are typically nested within recipients (an example of a "one with many" design; Kenny et al., 2006). When providers are nested within recipients, relational and provider influences are confounded in a single social influences component. In such a design, social influences capture change in support and affect that result from interacting with or thinking about different providers. Trait influences are defined as before: mean differences among recipients in their reactions averaged across providers.

**Relational regulation.** RRT defines relational regulation as desired affect, action, or thought that results from interacting with or thinking about specific other people. Quasi-relational regulation occurs from interacting with or thinking about activities, symbolic people, animals, ideas, or objects. Regulation is relational insofar as the provider elicits reactions in the recipient beyond how other recipients typically respond to the provider and beyond how the

Table 1  
A Numerical Example of Relational Influences

Recipients/provider mean	Provider A	Deviation from expectation	Provider B	Deviation from expectation	Recipient mean
Recipient A	7	<i>-1</i>	9	<i>1.75</i>	<b>8</b>
Recipient B	9	<i>1.75</i>	4	<i>-2.5</i>	<b>6.5</b>
Provider mean	<b>8</b>		<b>6.5</b>		

Note. Boldface indicates recipient or provider means. Italics indicate the extent to which the observed score differs from the score that would be expected given the corresponding recipient and provider mean.



recipient typically responds to other providers. We assume that people have preferred levels of affect, action, and thought for specific contexts and that people are motivated to achieve and maintain those preferred levels. What is desired depends on the person. A provider's desired levels of talkativeness might conflict with a recipient's desired levels.

Relational regulation can occur within any time frame, ranging from seconds to hours to years. At one extreme, one might switch conversation partners within seconds. At another extreme, one might build a career over the course of decades. Relational regulation can be controlled or automatic (Gallo, Keil, McCulloch, Rockstroh, & Gollwitzer, 2009; J. J. Gross, 1998). For example, switching careers might require years of planning and preparation, whereas channel surfing might involve little conscious awareness and resource consumption. Social interaction can be launched by a person seeking to regulate him- or herself or by a person seeking to regulate another (e.g., when a parent regulates a child). Regulation among people is typically reciprocal in that interaction launched by a recipient will also influence the affect, thought, and actions of the provider, which will in turn influence the recipient.

## Key Principles of Relational Regulation Theory

**1. Recipients regulate their affect, action, and thought primarily through social interaction.** RRT accepts a key feature of attachment theory (Bowlby, 1969) and the need to belong hypothesis (Baumeister & Leary, 1995): People need a few ongoing personal relationships to maintain their emotional well-being. Thus, the link between perceived support and mental health primarily reflects social interaction, although thought alone about providers can influence mental health. RRT and stress buffering theory are similar in focusing on the importance of personal relationships and social interaction for human well-being. However, stress buffering theory emphasizes enacted support, and as described later, RRT emphasizes ordinary yet affectively consequential social interaction. Their shared focus on social interaction differs from theories that describe the traitlike aspect of perceived support (Lakey & Cassady, 1990; Sarason, Pierce, & Sarason, 1990; Uchino, 2009). Evidence for this principle is not unique to RRT and is provided by the voluminous research on the link between perceived support and mental health (Barrera, 1986; Brewin et al., 2000; Cohen & Wills, 1985; Finch et al., 1999; Lakey, in press; Lakey & Cronin, 2008).

**2. Social interaction primarily regulates affect, action, and thought relationally.** Phrased differently, the specific provider who successfully regulates a specific recipient is primarily a matter of personal taste. For example, one provider's stoicism and another provider's emotional expressiveness will be effective for different recipients. Regulation through interacting with activities, symbolic people, animals, ideas, and objects is also largely relational. That is, people differ greatly in their affective, cognitive, and behavioral reactions to different sports, TV characters, dogs, music, and cars.

By emphasizing relational influences, RRT is explicitly idiographic at one level. That is, recipients' profiles of reactions to the same providers vary greatly across recipients in a way that is not captured well by the objective characteristics of providers or their actions. Instead, investigators must map each recipient's profile of reactions across providers and other stimuli as Endler and Hunt (1969) did for situations and anxiety and Shoda and colleagues

(Mischel & Shoda, 1995; Shoda et al., 1994) did for situations and childhood behavior.

In contrast, stress buffering theory is nomothetic in describing objectively supportive actions for normatively defined stressful situations. For example, the optimal matching hypothesis of stress buffering theory predicts that problem-solving support is most effective for controllable stressors and emotional support is most effective for uncontrollable stressors (Cohen & Hoberman, 1983; Cutrona & Russell, 1990).

Yet both RRT and stress buffering theory are nomothetic at the level of the correlation between perceived support and mental health. On average, people with higher perceived support will have better mental health than people with lower perceived support.

There is evidence for strong relational influences on perceived support. The best evidence comes from studies in which recipients rated providers who were well known to recipients. Using G designs, Lakey, McCabe, Fiscaro, and Drew (1996) asked doctoral students to rate the supportiveness of program faculty (Study 1), and sorority members rated randomly selected sorority sisters (Study 2). Giblin and Lakey (2010) asked medical fellows to rate their clinical mentors. Branje, van Aken, and van Lieshout (2002), as well as Lanz, Tagliabue, and Rosnati (2004), used round-robin designs. In Branje et al., four-person, Dutch, nuclear families rated each family member. In Lanz et al., the families were Italian. Perceived support was overwhelmingly relational in each of these studies.<sup>2</sup>

Lakey's (2010) error-corrected, meta-analytic estimate from these five studies, which included over 5,000 dyads, indicated that relational influences accounted for 62% of the systematic variance. Recipient trait influences were also strong, accounting for 27%. Provider influences were comparatively weak, accounting for only 7%. In addition to studies of providers well known to recipients, other studies have found large relational influences when symbolic providers were presented only via video (Cooper, Lakey, & Cronin, 2010; Lakey, Cohen, & Neely, 2008; Lakey, Drew, & Sirl, 1999; Lakey, McCabe, et al., 1996, Study 3) and when real providers were strangers to recipients (Neely et al., 2006; Veenstra et al., in press).

There is also evidence for relational influences on mental health. Studies of this process have necessarily focused on short-term changes in recipients' affect, given the practical and ethical difficulties involved in producing clinically significant changes in mental health. Recipients have rated affect in response to providers in clinical training and psychotherapy groups (Ingraham & Wright, 1987) and in brief face-to-face conversations (Levesque & Kenny, 1993; Neely et al., 2006; Veenstra et al., in press), to video demonstrations of psychotherapists' techniques (Lakey et al., 2008, Study 2), to symbolic providers presented via video interviews (Cooper et al., 2010, Study 3), and to professors' lectures (J.

<sup>2</sup> Both Branje et al. (2002) and Lanz et al. (2004) calculated relational influences separately for all 12 dyads derived from the combinations of the roles of mothers, fathers, older children, and younger children. Provider and recipient influences were also calculated separately for each type of family role. The values for relational, recipient, and provider influences reported here and in Lakey (2010) combined the effects across dyads for relational influences and across roles for recipient and provider influences.

Gross, Lakey, Edinger, Orehek, & Heffron, 2009). Each study found significant relational influences on recipient affect.

More ecologically valid studies have assessed affect elicited by recipients' important providers. As described previously, in such designs, providers are nested within recipients because each recipient has different important providers. Thus, relational and provider influences are combined into a single component that is referred to here as *social influences*.<sup>3</sup> In seven studies (Barry, Lakey, & Orehek, 2007; Lakey, Orehek, Hain, & VanVleet, 2010; Lakey & Scoboria, 2005), there were strong social influences on both positive and negative affect, accounting for nearly 60% of the error-corrected variance, with recipient trait variance accounting for the remaining 40%. Merlo and Lakey (2007) found the same pattern for subclinical depressive symptoms.

According to RRT, perceived support and mental health should be correlated when constructs reflect relational influences. Testing this hypothesis requires isolating relational, recipient, and provider influences and then estimating the correlations among constructs for relational influences. Cronbach et al.'s (1972) multivariate G analyses are well suited for this purpose. In two studies, recipients interacted with the same providers over multiple occasions and rated provider supportiveness as well as their own affect during the conversation (Neely et al., 2006; Veenstra et al., in press). Participants were strangers when the studies began so as to mimic common social support interventions. In both studies, provider supportiveness and recipient positive affect were strongly linked when correlations reflected relational influences. There were no relational influences on negative affect in these studies, likely because providers were strangers to recipients. Other studies asked participants to rate support and affect elicited by participants' important providers<sup>4</sup> (Barry et al., 2007; Lakey et al., 2010; Lakey & Scoboria, 2005). Each of these studies found strong correlations between provider support and recipients' positive and low negative affect for social influences (i.e., provider plus relational influences).

RRT predicts that relational regulation applies to negative thinking (Beck, 1967; Dozois & Beck, 2008). In a number of studies, recipients reported their negative thinking when with important providers. Strong social influences were observed for low self-esteem (Barry et al., 2007; Lakey & Scoboria, 2005) and self-discrepancies (Barry et al., 2007), as well as automatic negative thoughts, dysfunctional attitudes, worry, hopelessness, and perfectionistic thinking (Lakey & Tanner, 2010). Moreover, the providers who elicited negative thinking also elicited less favorable affect and lower perceived support.

**3. Relational regulation occurs primarily in ordinary yet affectively consequential social interaction.** By ordinary, we mean day-to-day interactions in contrast to stress buffering theory's emphasis on discussions of stress and how to cope with it (i.e., troubles talk; Goldsmith, 2004). Ordinary social interaction includes discussion of positive events, as described by Gable and colleagues' work on capitalization support (Gable, Gonzaga, & Strachman, 2006; Gable, Reis, Impett, & Asher, 2004), as well as aspects of life that would be considered routine (e.g., the non-stressful events of the typical day). Thoits's (1985) hypothesis that the link between social support and well-being reflects "aspects of regularized social interaction and not emotional support dimensions per se" (p. 57) captures well this aspect of RRT.

Nonetheless, RRT hypothesizes that such regulation plays an important role in stressful situations as well. For example, when awaiting news of the outcome of a relative's surgery, people will rely heavily upon the ordinary social interaction that helps regulate them in nonstressful situations (e.g., discussing family members' exploits, work, or sports). Thus, in surgery waiting rooms, one should observe large amounts of ordinary talk as well as troubles talk.

Consistent with these predictions, among mothers awaiting their infants' heart surgeries, generic relationship quality, but not enacted support accounted for perceived support's link to low distress (Kaul & Lakey, 2003). Mak, Bond, Simpson, and Rholes (2010) replicated these findings among students. Hicks and Diamond (2008) observed that discussing positive events was linked to greater well-being but that discussing stressors was not. Clark, MacGeorge, and Robinson (2008) reported that the offer of companionship was preferred by participants to the types of support emphasized by stress buffering theory. Rook (1987) found that companionship was more closely linked to well-being than was enacted support. Hays and Oxley (1986) observed that interactions involving fun and relaxation were linked to adjustment but that the support emphasized by stress buffering theory was not. Capitalization support in response to good events was linked to emotional well-being (Gable et al., 2004, 2006), was substantially correlated with perceived support, and could explain part of perceived support's link to mental health (Shorey & Lakey, in press).

Mehl, Vazire, Holleran, and Clark (2010) recorded conversations among students as they went about their daily lives. Conversations were classified as small talk or substantive. Small talk involved only trivial information, whereas substantive conversation involved meaningful information. For example, two music students talking about whether free jazz is really jazz or two psychology students talking about whether Freud's thought is

<sup>3</sup> One limitation of the nested design is that the distinction between recipient influences and social influences is less clear than in the fully crossed design in which each recipient rates the same providers. In the fully crossed design, one can be confident that recipient influences reflect individual differences because each recipient is exposed to the same stimulus conditions (i.e., providers). However, in the nested design, recipient influences might also reflect differences in providers. For example, Doug might have lower average support scores across his important providers than does Annmarie across her providers. This might result because Doug's providers are objectively less supportive than Annmarie's. In this case, social influences would be wrongly assigned to trait influences. Fortunately, the extent to which variance is wrongly assigned can be tested. If the nested design wrongly assigns social influences to recipient influences, then recipient influences should be stronger in the nested design than in the fully crossed design. There are a number of fully crossed and nested studies of perceived support, and contrary to the wrongly assigned hypothesis, recipient influences in nested designs are slightly smaller (21%; Lakey, in press) than those in fully crossed designs (27%; Lakey, 2010). Thus, the nested design does not appear to wrongly assign social influences to trait influences, at least for perceived support.

<sup>4</sup> Although these studies combined relational and provider influences into a single social influence component, our current meta-analytic estimate from five studies indicates that relational influences are approximately nine times stronger than provider influences (Lakey, 2010), and thus, the bulk of social influences on perceived support likely reflects relational influences.



psychology or philosophy would both be classified as substantive (M. R. Mehl, personal communication, March 10, 2010). Time spent in small talk was linked to less favorable affect, but time in substantive conversations was linked to more favorable affect.

The studies just described are consistent with the hypothesis that perceived support's main effects with mental health are based primarily on ordinary social interaction. Yet it is difficult to completely eliminate the possibility that main effects do not somehow reflect enacted support during troubles talk. Perhaps enacted support has not been measured adequately or studied under the right circumstances. Studies are needed that test the relational link between perceived support and favorable affect when enacted support could not have occurred. RRT's hypotheses about the role of symbolic providers (e.g., celebrities or public figures) in relational regulation are useful here because RRT predicts that perceived support is linked to affect relationally, when recipients view or think about symbolic providers. Symbolic providers mimic how real providers regulate recipients' affect when recipients observe symbolic providers' participating in conversations and shared activities with other symbolic providers. To our knowledge, stress buffering theory does not make predictions about symbolic providers. Stress buffering theory appears to imply that rating the supportiveness of never-met, symbolic providers would not be meaningful because never-met, symbolic providers do not provide enacted support to recipients.

Cooper et al. (2010, Study 1) compared ratings of important network members to those of symbolic providers. Students rated mothers, fathers, and closest peers on support and affect elicited. In addition, recipients rated the symbolic providers to which participants had regular exposure. Results for real providers were essentially similar to those reported in other studies (Barry et al., 2007; Lakey et al., 2010; Lakey & Scoboria, 2005): Perceived support was strongly socially influenced, affect was approximately equally influenced by social factors as by traits, and there were significant correlations between support and affect when correlations reflected social influences. The results for symbolic providers were nearly identical. In Cooper et al.'s Studies 2 and 3, recipients each rated the same symbolic providers, and strong relational influences emerged for expected supportiveness, which were linked to high positive and low negative affect. Thus, Cooper et al. found the expected links between perceived support and affect for relational and social influences when enacted support and troubles talk could not have occurred.

**4. Relational regulation occurs primarily through conversation and shared activities that elaborate on recipients' cognitive representations of relationships and quasi relationships.** Each recipient has cognitive representations of relationships and quasi relationships (Andersen & Chen, 2002), and these representations are linked to affect and action tendencies (Andersen & Chen, 2002; Bargh & Ferguson, 2000; Bower, 1981). Conversation partners provide social contexts to support their experience of favorable affect and thought by activating elements of their cognitive representations of relationships and quasi relationships. The provider helps to activate representations by listening, making comments, and asking questions. In shared activities (e.g., playing music), recipients and providers participate together in quasi relationships that elicit similarly favorable affect and thought in both of them. Such affect and thought become linked to recipients' and providers' representations of each other (e.g., "Richard, with

whom I play jazz") and provide a basis for later relational regulation in subsequent conversations.

Relational regulation is more effective when reciprocal elaboration occurs. Reciprocal elaboration begins when a provider responds to a recipient's statement with new information consistent with the recipient's relationships and quasi relationships. Consider the following example in which two people elaborate on their quasi relationships with jazz. Richard might say, "I bought this Miles Davis–Charles Mingus record that's really interesting." Richard says this because thinking about the record elicits favorable affect in him and he has the expectation that the statement will elicit a similar reaction in Stephen. Understanding Richard's statement launches spreading activation of Stephen's representations of jazz, and if Stephen's quasi relationships are consistent with Richard's, Stephen will also experience favorable affect. Yet, because Stephen's representations are somewhat different from Richard's, Stephen will provide elaboration: "I didn't know they collaborated. I bet it's great!" Stephen's response leads to increased favorable affect in Richard and additional spreading activation, and Richard provides elaboration: "Actually, it's horrible. Miles and Mingus are not compatible at all. Even though they play mostly ballads, you can hear the tension in every measure." This elaboration leads to enhanced favorable affect in both participants and prompts further elaboration. Of course, if Stephen had responded to Richard's initial statement with "Jazz is boring; I like the music of Britney Spears," the conversation's ability to regulate affect would have taken a different turn. Thus, RRT predicts that the correlation between perceived support and mental health is rooted in conversations that provide a social context for lingering with and elaborating on representations of relationships and quasi relationships. Thus, RRT integrates the mechanisms for regulating affect through social interaction with those for regulating affect through activities, symbolic people, animals, ideas, and objects.

Following Heider's (1958) balance theory, relational regulation is most effective if conversation partners elaborate on other people they view similarly. Thus, one reason why people talk about other people is because such talk provides a social context for relational regulation. Gossip about symbolic people (e.g., celebrities) should work the same way. Thus, the popularity of supermarket tabloids reflects a key mechanism by which many people regulate affect.

As indicated by research on similarity and attraction (Byrne, 1971; Huston & Levinger, 1978), dyads with similar relationships and quasi relationships should be more effective in regulating each other. Thus, similarities in attitudes, values, and activities should be good markers of effective regulation, leading dyad members to perceive each other as supportive. Yet the link between similarity and relational regulation should be complex (cf. Montoya, Horton, & Kirchner, 2008). For example, RRT predicts that relational support is rooted not only in whether a recipient has similar attitudes to a provider but primarily in the extent to which talking about these attitudes elicits favorable affect. For example, two people might both have similar religious beliefs, but talking about their beliefs might not elicit favorable affect. If so, the two would not be expected to regulate each other by talking about religion. In addition, two people might be dissimilar on many attitudes, but talking about a handful might be highly effective. If so, the two people will regulate each other well if they can stick to the effective topics.

However, when social settings constrain reciprocal elaboration, relational regulation will also be constrained. For example, two people might regulate each other well by talking about religion and politics. Yet, if the social setting constrains these topics, they might never successfully regulate each other and might instead regulate themselves with more beer and deep-fried, extra-salty lard sticks. Of course, religion and politics are commonly excluded from polite conversation because talking about these topics often dysregulates people.

Relational regulation might also occur during troubles talk. Recipients have personal tastes about their preferred style of talking, thinking, feeling, and acting with regard to bad events. Troubles talk helps regulate recipients and providers when they are well matched in their tastes in responding to bad events. For example, some people like cool rationality, whereas others like hot expressiveness. As an example of these different styles, and how they are likely rooted in culture, one of us once attended two funerals in Detroit, Michigan, separated by only a few days and miles. One funeral was in a storefront Baptist church in which relatives of the deceased expressed their grief intensely and elaborately. The other was in a stone, Anglican church in which grief was expressed in a reserved and measured style. According to RRT, these two styles will help regulate some people but will dysregulate others. Thus, part of what happens when support providers help regulate recipients during troubles talk is that providers make available a social context for recipients to express their affect and thought in a style that is relationally familiar and comforting.

Research on how relational regulation is rooted in social interaction is less well developed than for other RRT principles, yet preliminary evidence is consistent with predictions. Perceived similarities between recipients and providers in attitudes, values, and life experiences are among the strongest markers of provider supportiveness (Lakey et al., 2002; Lakey, Ross, Butler, & Bentley, 1996; Sutor, Pillemer, & Keeton, 1995; Westmaas & Cohen Silver, 2006). This link occurs when similarity is experimentally manipulated (Lakey, Ross, et al., 1996, Study 2) as well as specifically for relational influences (Lakey et al., 2008, Study 1; Lakey, Lutz, & Scoboria, 2004; Neely et al., 2006). Consistent with RRT, dyad members' similarity in emotional reactions to situations is linked to relationship satisfaction (Anderson, Keltner, & John, 2003).

More recently, Sain and Lakey (2011) developed a measure of conversations that elaborate on recipients' relationships and quasi relationships. Items include "I enjoy talking with her/him because we have interesting conversations that last a long time" and "It is difficult to find something he/she and I both want to talk about." Conversation elaboration was correlated strongly with both perceived support and favorable affect and could account for a large percentage of the link between support and affect.

**5. Perceived support is based primarily on relational regulation of affect through ordinary interactions but sometimes also on enacted support.** At initial acquaintance, a recipient infers a provider's supportiveness from expectancies about whether the provider will help regulate the recipient's affect. These expectancies are based on information about the provider's similarity to the recipient in their relationships and quasi relationships. Preliminary support judgments are revised as a result of direct experience with the provider. If a provider regulates a recipient's affect well when discussing ordinary events, the recipient will disclose increasingly more personal thoughts and experiences, including upsetting experiences. If affect regulation remains effective

when discussing upsetting events, the recipient sees the provider as even more supportive. The most effective relationships are those that regulate affect in the widest range of circumstances. However, if the provider is not effective in regulating affect for upsetting events, then the provider's supportiveness is revised downward. Of course, a provider who is initially judged as unsupportive is avoided, and thus, recipients do not disclose upsetting events. As a result, the recipient's initial judgment of unsupportive is unlikely to be revised. Ultimately, perceived support is inferred from affect regulation, and affect regulation is derived from social interaction. In this sense, support judgments are secondary to affect, a prediction that differs from appraisal models that predict that supportive appraisals lead to affect (Cohen & Wills, 1985).

An interesting research question identified by RRT concerns what happens when a provider who has been effective in helping regulate a recipient in ordinary social interaction provides ineffective enacted support at a crucial point. Recipients likely vary in the extent to which they will revise support judgments in response to disappointing enacted support, given that recipients vary in the extent to which they weigh other provider characteristics in making support judgments (Lutz & Lakey, 2001). Some recipients might view the disappointing provider as completely unsupportive. Other recipients might change their support judgments minimally. Other recipients might compartmentalize relationships whereby some providers are useful for regulating affect in many contexts but not for discussing bad events. Recipients might also view providers as supportive for some bad events but not other events.

Thus, RRT predicts that recipients should make meaningful support judgments about providers very early in an acquaintance, before enacted support is offered. Moreover, the information used to judge support early in an acquaintance should be the same information used when recipients have known providers for many years. As just described, provider similarity strongly predicts perceived supportiveness. This link occurs among long-standing dyads (Lakey et al., 2002; Lakey, Ross, et al., 1996, Study 1), strangers (Lakey, Ross, et al., 1996, Study 3; Neely et al., 2006), when recipients judge symbolic providers (Lakey et al., 2004, 2008, Study 1), and when recipients know only providers' attitudes and values (Lakey, Ross, et al., 1996, Study 2). Recipients also judge support from perceived provider agreeableness, and consistent with RRT, this link occurs among long-standing dyads (Lakey et al., 2002), when recipients rate symbolic providers (Lakey et al., 2004), and when providers are represented only by personality profiles (Lutz & Lakey, 2001).

**6. Relational regulation is dynamic in that people shift conversations, interaction partners, and activities in an attempt to optimally regulate affect.** Surfing TV channels to find symbolic people to regulate affect is a specific instance of this general principle. In addition, the extent to which recipients and providers regulate each other changes over time. This instability results from changes in recipients' and providers' relationships and quasi relationships. As dyad members change with respect to with whom and what they regulate themselves, the ability of the dyad members to regulate each other will change as well. In dyads lasting decades, there should be many shifts in the effectiveness of relational regulation.

In Neely et al. (2006) and Veenstra et al. (in press), recipients had multiple conversations with the same providers across months and weeks. This design isolated relational influences that were

stable across conversations from those that changed dynamically from conversation to conversation. Both studies found significant stable and dynamic relational influences on perceived support and affect. Dynamic relational influences were not mere randomness or error as perceived support and affect were significantly correlated for this influence. If dynamic relational influences reflected randomness, the two constructs should not have been correlated.

**7. Social support interventions will be more effective if they harness relational regulation.** Social support interventions have been less effective than hoped (Helgeson & Gottlieb, 2000; Hogan, Linden, & Najarian, 2002; Lakey & Lutz, 1996). This might be because interventions typically have reflected the implicit assumption that many people are objectively supportive. In the typical intervention, new providers were made available to at-risk recipients. Presumably, investigators chose providers whom the investigators thought were supportive. Yet, as described previously, supportiveness primarily reflects relational influences. RRT predicts that social support interventions will be more effective if the interventions focus on relational influences.

Interventions designed to harness relational influences would be designed differently than previous interventions. Rather than provide access to objectively supportive providers, relational interventions would match recipients with providers such that supportive relationships emerged. This requires accurately forecasting supportive matches. Cronbach et al.'s (1972) multivariate G analyses are useful tools for such forecasting. Trait-based prediction (Wiggins, 1973) cannot be used to forecast relational influences because, as described previously, recipient and relational influences are represented incommensurately. As depicted in Table 1, a single recipient column representing trait influences cannot be mapped onto an entire Recipient  $\times$  Provider matrix representing relational influences. Instead, forecasting relational influences requires predicting each recipient's unique profile of responses across providers from predictor variables that are also represented as profiles across providers (Veenstra et al., in press).

In two studies, Veenstra et al. (in press) demonstrated that it is possible to forecast relational support. In Study 1, recipients had three conversations with the same providers across several weeks. In Study 2, recipients had five conversations across several months. In both studies, providers were strangers to recipients initially. After each conversation, recipients rated providers on supportiveness and reported their own affect. The predicted criterion was relational support averaged across the last two conversations. Veenstra et al. successfully forecasted the specific providers who would be relationally supportive on the basis of recipients' reactions to initial 10- or 20-min conversations. Thus, it is possible to forecast relational support, and multivariate G analyses are useful tools for such forecasting.

RRT also predicts that relational regulation occurs in psychological therapy. Recall that to isolate relational influences, recipients must be exposed to the same providers. Because of the practical and ethical nuances of having therapy recipients (patients) receive treatment from multiple providers (therapists) during the same period of time, Lakey et al. (2008, Study 1) presented therapy patients with videos of therapists demonstrating their techniques. Patients rated the expected supportiveness of the therapists and their expected therapeutic alliance. There were large relational influences on both. In Study 2, Lakey et al. presented a new set of therapist videos to students. Again, large relational

influences were observed. Hoyt (2002) also found large relational influences among students who viewed video therapy demonstrations. Lakey and Ondersma (2008) found large quasi-relational influences in clients' responses to different components of a motivational intervention to reduce substance abuse.

**8. The wider the diversity of potential relationships and quasi relationships that are available to recipients, the greater the likelihood of effective regulation.** Conversely, people should be less effective in regulation if there is a restricted range of providers available. This can be seen at the level of large groups as well. The more freedom a society allows for choosing relationships and quasi relationships, the more effective the people of the society should be in relational regulation. Cities and the Internet convey important advantages in relational regulation because they make available a wider range of providers than do sparsely populated, isolated areas. Yet there will always be recipients who cannot effectively regulate themselves through currently accessible relationships or quasi relationships. Rather than concluding that such failures in regulation reflect trait deficits on the part of recipients, RRT encourages asking the question "Can this person not be regulated, or has he/she not yet found the relationships and quasi relationships that will achieve regulation?" Posing this question encourages continued search for relationships and quasi relationships that might regulate the recipient. To our knowledge, the RRT diversity principle has not yet been tested.

To summarize, RRT attempts to explain main effects between perceived support and mental health by describing how people regulate their affect through ordinary yet affectively consequential conversation and shared activities. Perceived support typically does not cause affect directly but emerges from the types of social interaction that successfully regulate affect. Affect regulation via social interaction is primarily relational in that the people and activities that regulate affect are largely a matter of personal taste. RRT predicts that social support and psychotherapeutic interventions will be more successful if designed to reflect relational influences. Preliminary evidence is consistent with these predictions.

### Methodological Recommendations for Social Support Research

In addition to RRT's prescription to separate recipient trait from relational influences, RRT also makes recommendations for perceived support measurement and for alternative designs for testing whether support-related social interactions have causal influences.

Most social support research asks respondents to rate their social networks in general, rather than to rate specific providers. General measures are limited, as investigators cannot distinguish among recipient, provider, and relational influences. Thus, a correlation between a general measure of perceived support and mental health reflects some unknown mixture of recipient personality and social influences. Worse, if respondents make summary judgments of their social networks by using heuristics that average supportiveness across different providers (cf. items), then, according to reliability theory (Cronbach et al., 1972), general measures of perceived support compound recipient trait variance by averaging out effects due to providers. Thus, general measures of perceived support are likely composed of large amounts of trait influences, an undesirable situation if one wants to study social influences. A better approach, if the investigator cannot assess multiple provid-



ers for each respondent, is to ask respondents to rate a single, most important support provider. Such a rating also confounds recipient and social influences, but at least the magnitude of recipient influences is not exaggerated by averaging across multiple providers and the magnitude of the confound is reasonably well known.

RRT also suggests an alternative method for testing potential causal links between support-relevant social interaction and mental health. Many investigators believe that prospective designs are strongest for testing hypotheses that low perceived support causes mental health problems. Such designs attempt to forecast from low Time 1 perceived support the worsening of mental health from Time 1 to Time 2 and are viewed as especially rigorous because perceived support (the hypothesized cause) occurs before the worsening of mental health (the hypothesized effect). Prospective designs are appropriate for stress buffering theory as the theory predicts that perceived support acts as a stable resource that protects people from worsened mental health resulting from subsequent life events. In contrast, prospective designs are not appropriate for testing hypotheses that social interaction leads to relatively immediate changes in both mental health and perceived support (Lakey & Cronin, 2008). This is because in the typical prospective design, Time 2 mental health is assessed months or years after Time 1 perceived support. Relatively immediate influences would not be detected months or years later, especially if Time 1 mental health is controlled statistically. Controlling for Time 1 mental health removes any shared variance between Time 1 mental health and Time 1 perceived support. Yet this is exactly the covariance that would reflect any immediate impact of social interaction on both perceived support and mental health.

In the RRT approach, evidence for a causal role of social interaction is provided by observing changes in mental health as recipients interact with different providers. As examples of such a repeated measures experimental design, Neely et al. (2006) and Veenstra et al. (in press) assigned recipients to interact with the same providers across multiple occasions. In these studies, interactions with providers caused changes in recipients' affect and perceived support. These changes were relational in that recipients responded differently to the same providers. Relational influences on perceived support and affect were strongly correlated, suggesting that provider supportiveness could explain the features of social interaction that caused affect.

Research designs appropriate for RRT are also useful for addressing the hypothesis that the link between low perceived support and poor mental health reflects traitlike differences among recipients. Phrased differently, dispositionally unhappy people might be unhappy about everything, including their support providers. Research methods for RRT distinguish between trait and relational influences and estimate correlations separately for each. RRT research consistently has found strong links between perceived support and favorable affect for recipient trait influences (Lakey, 2010; Lakey & Scoboria, 2005; Neely et al., 2006). Thus, part of the link between perceived support and mental health reflects the phenomenon whereby dispositionally unhappy people are dispositionally unhappy with their support providers. Yet part of the link also reflects social interaction. RRT shows how links between mental health and perceived support can reflect each of these influences simultaneously.

## Links to Other Social Support Theories

We have already discussed the relation between RRT and stress buffering theory. It is also important to briefly touch upon RRT's relation to two other theoretical approaches to social support.

As mentioned previously, Thoits (1985) hypothesized that main effects between social support and mental health primarily reflect ordinary social interaction rather than stress and coping. According to this view, social roles provide a sense of identity and belonging, maintain self-esteem, and provide opportunities for mastery (Cast & Burke, 2002). Accordingly, research from this perspective has emphasized the number of social ties and roles, in contrast to RRT's emphasis on perceived support. This is important because although the number of social ties and roles has important links to physical health (Uchino, 2004, 2009), ties and roles are not typically strongly linked to mental health or perceived support (Barrera, 1986). Thus, RRT and Thoits's theory appear to apply to different social support phenomena.

Recently, several authors have developed perspectives on social support that draw from attachment theory (Collins, Guichard, Ford, & Feeney, 2004; Feeney, 2004; Mikulincer & Shaver, 2009). RRT is similar to these in that RRT draws from attachment theory the premise that people need a few, long-lasting personal relationships to maintain emotional well-being (Bowlby, 1969). Yet RRT concerns itself with relational influences, whereas these attachment theories of social support primarily emphasize personality.

## Concluding Comments

Before closing, we should address two potential concerns about RRT. First, recipient, provider, and relational influences might be inextricably confounded in nature, and thus, isolating these influences would not faithfully capture social support. Reis, Capobianco, and Tsai (2002) made a similar point regarding interdependence theory:

An advantage of this approach is in not separating the "person" and the "situation" into discrete factors, as most theories do, but rather in conceptualizing person effects in terms of the individual's response to, and selection among, the possibilities afforded by situations. (Reis et al., 2002, p. 822)

Although this concern has its merits, attempting to reduce complex phenomena to simpler components has a long tradition in science (e.g., elements in chemistry, factor analytic research in psychology). Ultimately, the utility of our approach will depend on its ability to make new predictions about and account for variation in support and mental health. As reviewed in the current article, substantial evidence suggests our approach is promising. A second concern is how to interpret the comparatively small magnitudes of provider influences. This might mean that there is little in the way of objectively supportive providers (Lakey, 2010). An alternative interpretation is that such objectively supportive providers do exist but that they are sufficiently uncommon in the population that their effects are diluted when combined with those of ordinary providers. For example, recipients might disagree about the supportiveness of Mark and Doug, but everyone might agree that Anne is supportive. This is an important research question. However, regardless of which expla-

nation better accounts for the magnitude of provider influences, large relational influences still require explanation.

In summary, RRT was developed to explain the main effects between perceived social support and mental health. RRT hypothesizes that perceived support is primarily relational in that who is supportive and what is supportive are largely a matter of personal taste. The link between perceived support and mental health primarily emerges in ordinary yet affectively consequential conversations about people's daily lives, as well as in shared activities, rather than in conversations about how to cope with stress. RRT adopts a quantitative definition of relationships that permits their clean separation from personality. The quantitative definition also permits analyses of recipients' quasi relationships with activities, symbolic providers, animals, ideas, and objects. This is important because relational regulation among people is rooted in each person's relationships and quasi relationships. RRT makes a number of new predictions about social support research and suggests new approaches to social support interventions. Preliminary evidence suggests that RRT fits the data sufficiently well to deserve additional theoretical and empirical development.

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