



Relational self-construal moderates the effect of social support on life satisfaction



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ABSTRACT

While social support is associated with a host of important physical and psychological benefits, these effects are not always straightforward. Still, the moderating factors that might underlie individual differences in reactions to social support are not well-understood. In the current studies, we examined individual differences in relational self-construal in the typically positive relationship between social support and life satisfaction. In Study 1 ($N = 79$) relational self-construal moderated the relationship between social support and life satisfaction such that social support was especially beneficial for those with high relational self-construal. We replicated this effect in Study 2 ($N = 284$), and also found that social support was especially important for individuals with high relational self-construal in the context of high feelings of stress. These studies suggest that social support has differently gauged effects on life satisfaction depending on an individual's relational self-construal.

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1. Introduction

It is a practical truism that social support helps humans navigate through the ups and downs of life; as the Beatles pointed out, we get by with a little help from our friends. Social support has been defined as information that leads an individual to believe that he or she is cared for and loved, is esteemed and valued, belongs to a network of communication and mutual obligation, or any combination of these factors (Cobb, 1976). Perhaps unsurprisingly, social support is associated with abundant positive outcomes. These benefits encompass the lifespan, protecting against low birth weight in the beginning and death near the end (Cobb, 1976; Cohen, 2004). In the years in between, social support has been found to encourage coping with crisis and change, as well as to promote health benefits including recovery from illness, stronger immune function, depression avoidance, lower incidence of escapist drinking, lower cholesterol levels, and lower rates of mental illness (Baron, Cutrona, Hicklin, Russell, & Lubaroff, 1990; Cobb, 1976). Additionally, social support seems to protect people in crisis from a variety of ailments including arthritis, tuberculosis, coronary heart disease, and the common cold (Cobb, 1976; House, Landis, & Umberson, 1988; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). Psychologically, social

support also predicts outcomes such as better adjustment and lowered rates of delinquency (Friedlander, Reid, Shupak, & Cribbie, 2007; Sheets & Mohr, 2009; Yoshikawa, 1994). Central to the current analysis, life satisfaction, the cognitive evaluation of the global quality of one's life (Diener, Emmons, Larsen, & Griffin, 1985) and a central component of well-being (Diener, Suh, Lucas, & Smith, 1999), has been found to be positively predicted by social support in a number of samples (e.g., Kong, Ding, & Zhao, 2014; Kong, Zhao, & You, 2012; Newsom & Schulz, 1996; Pinquart & Sorensen, 2000; Siedlecki, Salthouse, Oishi, & Jeswani, 2014; Song, Kong, & Jin, 2013).

Contradictory research findings, however, have challenged the notion that social support is a universally beneficial process. Indeed, some research has found that social support is related to *increased* distress. For example, in samples of new mothers and pregnant adolescents, support was found to be *positively* correlated with depressive symptomatology and stress (Barrera, 1981; Carveth & Gottlieb, 1979). Similarly, students giving speeches were more anxious after receiving support than were students who received no support (Bolger & Amarel, 2007). Importantly, this counterintuitive effect does not seem to be explained by reverse causation (increased distress prompting social support seeking and receipt) (Gleason, Iida, Shrout, & Bolger, 2008) as studies utilizing lagged models have predicted increased distress from the previous day's support (Bolger, Zuckerman, & Kessler, 2000; Shrout, Herman, & Bolger, 2006). Researchers have looked to individual

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differences to explain these inconsistencies (Cohen, Lakey, Tiell, & Neeley, 2005; Coyne & DeLongis, 1986; Gleason et al., 2008), but previously tested factors, including relationship satisfaction and self-esteem, have failed to account for individual differences in distress reactions to social support.

Similarly, the relationship between social support and life satisfaction is not consistent across the literature. Some studies have found a *negative* relationship between social support and well-being, particularly in older adults (e.g., Lee, Netzer, & Coward, 1995; Silverstein, Chen, & Heller, 1996). Interestingly, Thomas (2010) found that for older adults, receiving support from a sibling or spouse was positively associated with well-being, but this relationship was reversed when the support came from one's children. This negative relationship might be due to the inconsistency between drawing this support and the parent role (Lee et al., 1995). It seems that the positive effects of social support can be overwhelmed by an incongruency between receiving support and a person's sense of self. Song et al. (2013) found that the positive relationship between social support and life satisfaction was mediated by core self-evaluations, specifically self-esteem, generalized self-efficacy, neuroticism, and locus of control. An additional aspect of the self that seems particularly relevant to this relationship is the relational self-construal, as we will now consider.

1.1. Relational self-construal

Views of the self can be construed, framed, or conceptually represented in different ways (Markus & Kitayama, 1991). Much research has focused on cultural differences in the manner in which groups and roles influence views of the self. For instance, individuals in collectivistic cultures such as Japan typically hold a highly interdependent self-concept, in which the self is defined based upon group membership and social roles, whereas those in individualistic societies such as the United States tend to have a highly independent self-concept, in which the self is based on unique characteristics of the individual (Kanagawa, Cross, & Markus, 2001; Markus & Kitayama, 1991).

Moving from these broader group and role identifications, there are also differences in the manner in which individuals incorporate their close relationships into views of the self. An individual holding a relational self-construal defines himself or herself based upon close relationships (Cross, Hardin, & Gercek-Swing, 2011; Cross & Madson, 1997), which are then combined with personal attributes to make up an individual's self-concept (Cross, Morris, & Gore, 2002). The behavior of highly relational people is determined by the individual's perception of the thoughts, feelings, and actions of relevant others, and they are motivated to find ways to fit in with others and to build a wide range of interpersonal relationships (Cross, Bacon, & Morris, 2000; Cross et al., 2011). Individuals high on the relational self-construal prioritize goals involving the development of self-defining relationships and the maintenance of connectedness within these close relationships, and they garner self-esteem from the fulfillment of these relational goals (Cross & Madson, 1997).

Relational self-construal predicts social preferences and processes. For example, highly relational individuals are more willing to open up about themselves to enhance relationships, even with strangers (Cross et al., 2000). In a study of roommate pairs, relational self-construal was positively correlated with emotional disclosure to the roommate (Gore, Cross, & Morris, 2006). Conversely, individuals low on this dimension are less likely to express their emotions to others as this would suggest dependence upon others which would threaten autonomy, a concept at the core of this view of the self (Cross & Madson, 1997). In fact, there is even a negative correlation between closeness (which can be gained through

disclosure) and well-being for more independent individuals in roommate pairs (Cross & Morris, 2003).

The relationship between social support and well-being has been examined in the context of culture (Uchida, Kitayama, Mesquita, Reyes, & Morling, 2008), which serves as a proxy for the interdependent self-concept (i.e., focuses on groups and roles).¹ However, the relational self-construal, which focuses directly on the self in terms of close relationships rather than these broad group level roles, has not been considered in the social support literature to date. Importantly, individual differences in relational self-construal have been shown to moderate the effects of other processes (i.e., self-consistency) on well-being (Cross, Gore, & Morris, 2003). As such, the current work represents an examination of the role of relational self-construal in the relationship between social support receipt and life satisfaction. If highly relational individuals are motivated to strengthen close relationships and garner self-esteem from these connections, then perceiving the receipt of high levels of social support might be associated with high levels of life satisfaction. Accordingly, we expect social support to be more beneficial when its receipt fits within an individual's conceptualization of the self in close relationships (i.e., an individual with a highly relational self-construal).

1.2. Overview of current studies

In the current studies, we sought to directly examine the potential role of relational self-construal in the association between social support and life satisfaction. We propose that the beneficial effect of social support on life satisfaction is moderated by the support recipient's relational self-construal. More specifically, social support will benefit those with a highly relational self-construal to a greater extent than it does those lower in this domain. After testing this effect, we add a measure of perceived stress in Study 2. Since support is often sought, offered, and received in conjunction with stressful life circumstances (e.g., Cobb, 1976; Cohen & Wills, 1985), we expect that social support will be especially crucial for those with a high relational self-construal in a context of stress.

2. Study 1 method

2.1. Participants

Participants were 79 undergraduate students (54 women) who completed an online survey in partial fulfillment of a research participation requirement for a General Psychology course. Participants ranged in age from 18 to 21, $M = 18.35$, $SD = 0.58$, and 96% were white/Caucasian.

2.2. Materials

The materials for this study were included with questionnaires for another, unrelated, study. These additional measures were not examined in reference to this research question and will not be discussed further.

2.2.1. Perceived social support

Perceived social support refers to a support recipient's cognitive appraisal that he or she is connected to close others (Barrera, 1986) and was measured with the Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988). This 12-item

¹ Uchida et al. (2008) found a positive relationship between emotional support and positive affect in samples from Japan, Philippines, and United States. This relationship was fully mediated by self-esteem for U.S. participants, but not for participants from the Asian cultures. For members of the independent American culture, social support was beneficial to well-being only to the extent that it increased self-esteem.

scale assesses three potential sources of support (family, friends, and a significant other) with three items regarding each source. For example, “I can talk about my problems with my friends.” Responses ranged from 1 (*very strongly disagree*) to 7 (*very strongly agree*), $M = 5.84$, $SD = 1.07$, $\alpha = .96$.

2.2.2. Relational self-construal

The 11-item Relational-interdependent Self-construal Scale (RISC) was used to measure relational self-construal, or the degree to which individuals use their relationships to form their sense of self (Cross et al., 2000). Items, for example, “My close relationships are an important reflection of who I am,” were rated from 1 (*strongly disagree*) to 7 (*strongly agree*), $M = 5.45$, $SD = 0.81$, $\alpha = .89$.

2.2.3. Life satisfaction

The Satisfaction with Life Scale (SWLS) was used to measure overall life satisfaction (Diener et al., 1985). This scale consists of five items, including “In most ways my life is close to my ideal,” rated on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), $M = 5.43$, $SD = 1.07$, $\alpha = .93$.

3. Results and discussion

Life satisfaction was related to both social support ($r = .56$) and relational self-construal ($r = .41$), which were also related to one another ($r = .49$), all p 's $< .001$. There were gender differences in relational self-construal and perceived social support, but not life satisfaction. Women were higher on relational self-construal ($M = 5.46$, $SD = 0.93$) than men ($M = 4.95$, $SD = 0.77$), $t(77) = 2.62$, $p = .01$, $d = 0.60$, in fitting with previous research (e.g., Kashima et al., 1995). Women also reported receiving more social support ($M = 6.10$, $SD = 0.96$) than did men ($M = 5.29$, $SD = 1.11$), $t(77) = 3.32$, $p = .001$, $d = 0.78$.

To test our central prediction, that the positive relationship between social support and life satisfaction would be moderated by individual differences in self-construal, we computed a hierarchical regression predicting life satisfaction from the centered main effects of social support and self-construal followed by the product of the two. Conforming to predictions, a main effect of social support, $\beta = .59$, $p < .001$, and a marginal main effect for self-construal, $\beta = .19$, $p = .07$, $R^2 = .344$, were accompanied by an interaction between the two, $R^2 = .406$, $\Delta R^2 = .062$, $\beta = .28$, $p = .006$.² Figure 1 shows that social support is related to life satisfaction especially for those high on relational self-construal, whereas this relationship is attenuated for those low on this individual difference. Simple slopes analyses (Aiken & West, 1991) were conducted to test the relationship between social support and life satisfaction at $\pm 1 SD$ on the RISC scale revealing a stronger relationship, $\beta = .80$, $p < .001$, at high levels of RISC compared to low, $\beta = .38$, $p = .001$.³

This study provides initial evidence that individual differences in relational self-construal moderate the positive relationship between social support and life satisfaction such that support is associated more strongly with this positive outcome for those with a relatively higher relational self-construal. While the evidence from this study supports our hypothesis, the sample used was relatively small.

² We conducted analyses for each social support subscale. The interaction effect with self-construal replicated for both social support from family ($\beta = .22$, $p = .039$) and friends ($\beta = .23$, $p = .031$), and was marginal for significant other ($\beta = .19$, $p = .062$).

³ The three-way interaction between gender, self-construal, and social support predicting life satisfaction was not significant, $\beta = -.04$, $p = .76$.

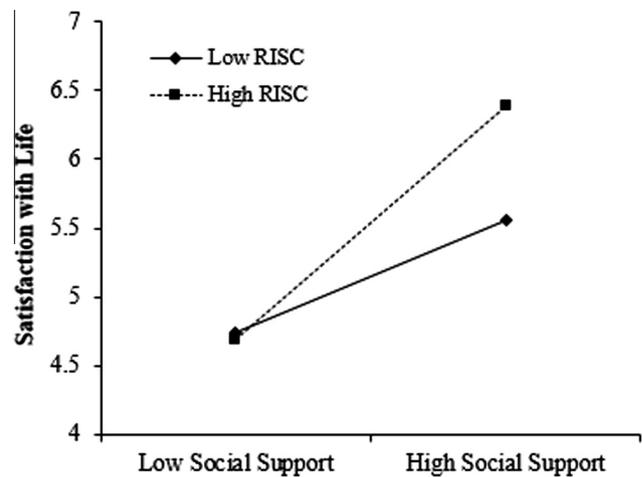


Fig. 1. Generated regression lines predicting life satisfaction from social support and relational self-construal, Study 1.

4. Study 2 method

In Study 2, we sought to replicate the interaction effect from Study 1 in a larger sample. Furthermore, we added a measure of perceived stress to examine the influence of the context on these associations. The stress-buffering model of social support suggests that social support serves to negate the deleterious effects of stress either by attenuating the likelihood that a situation is appraised as stressful or by relieving the impact of stress by providing access to resources with which to address the stressor (Cohen & Wills, 1985). In this vein, in the absence of stress, social support becomes virtually meaningless (Cohen, 2004). We expected a three-way interaction between social support, self-construal, and stress predicting life satisfaction such that the association between social support and life satisfaction would be the strongest for individuals high in relational self-construal in a stressful context while this relationship would be less pronounced in low stress environments and for those low in relational self-construal.

4.1. Participants

Participants in this study were 284 students (197 women) recruited from a liberal arts college and a community college who received extra class credit in Psychology courses for completing an online survey. Participants ranged in age from 18 to 56, $M = 20.67$, $SD = 3.77$.

4.2. Materials

Participants completed the same perceived social support ($M = 5.85$, $SD = 0.90$, $\alpha = .90$), relational self-construal ($M = 5.44$, $SD = 0.78$, $\alpha = .86$), and life satisfaction ($M = 4.98$, $SD = 1.26$, $\alpha = .88$) measures that were used in Study 1.

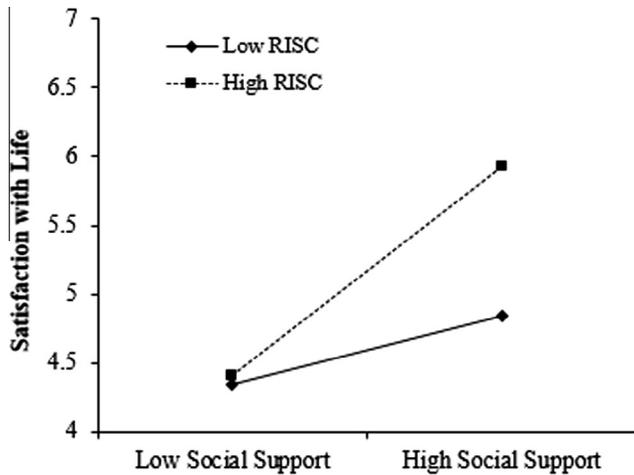
In addition, participants completed the 14-item Perceived Stress Scale (PSS) to measure their subjective levels of stress defined by an unpredictable, uncontrollable, and overloaded life (Cohen, Kamarck, & Mermelstein, 1983). This scale consists of items such as “In the last month, how often have you felt that you were unable to control the important things in your life?” which were rated from 0 (*never*) to 4 (*very often*), $M = 2.28$, $SD = 0.47$, $\alpha = .82$.

5. Results

The correlations among all variables are shown in Table 1. Perceived stress was related (negatively) to life satisfaction and social

Table 1
Correlations, Study 2.

	Relational self-construal	Social support	Perceived stress
Life satisfaction	.31***	.37***	-.28***
Relational self-construal		.50***	-.01
Social support			-.13*

Note: $N = 284$.*** $p < .001$.* $p < .05$.**Fig. 2.** Generated regression lines predicting life satisfaction from social support and relational self-construal, Study 2.

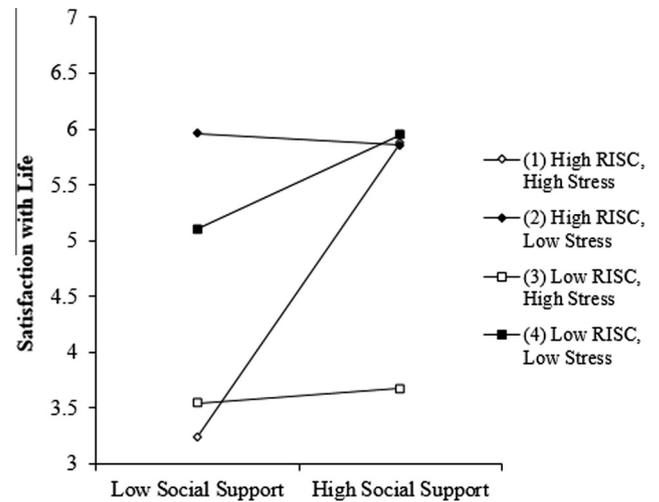
support and unrelated to relational self-construal. Men and women did not differ significantly on life satisfaction or perceived stress, but there were gender differences, as in Study 1, for both relational self-construal and social support. Women were higher on relational self-construal ($M = 5.54$, $SD = 0.73$) compared to men ($M = 5.22$, $SD = 0.82$), $t(282) = 3.32$, $p = .001$, $d = 0.41$. Women also reported receiving more social support ($M = 6.05$, $SD = 0.78$) than did men ($M = 5.42$, $SD = 1.02$), $t(282) = 5.63$, $p < .001$, $d = 0.69$.

Next, we again regressed life satisfaction on the centered main effects for perceived social support and self-construal followed by the product of the two. Main effects of both social support, $\beta = .36$, $p < .001$, and self-construal, $\beta = .18$, $p = .005$, $R^2 = .16$, were qualified by an interaction effect, $R^2 = .18$, $\Delta R^2 = .03$, $\beta = .19$, $p = .001$.⁴ Figure 2 shows that social support positively predicts life satisfaction especially for those high on relational self-construal. Simple slopes analyses (Aiken & West, 1991) were conducted to test the relationship between social support and life satisfaction at $\pm 1 SD$ on the RISC scale revealing a stronger relationship, $\beta = .51$, $p < .001$, at high levels of RISC compared to low levels, $\beta = .22$, $p = .001$. The results from Study 1 were replicated in this larger sample.⁵

Next, we examined the role of perceived stress in these relationships. We computed a hierarchical regression equation with three steps predicting life satisfaction. The mean centered main effects of social support, self-construal, and perceived stress were entered first, $R^2 = .216$, followed by all two-way interactions, $R^2 = .255$, and finally by the three way interaction, $R^2 = .274$. This three-way interaction significantly predicted life satisfaction, $\Delta R^2 = .02$,

⁴ Analyses for the social support subscales revealed significant interaction effects between self-construal and social support from friends ($\beta = .21$, $p = .001$) and significant others ($\beta = .13$, $p = .027$), but not from family ($\beta = .09$, $p = .105$).

⁵ The three-way interaction with gender was nonsignificant, $\beta = -.11$, $p = .13$.

**Fig. 3.** Generated regression lines predicting life satisfaction from social support, relational self-construal, and perceived stress, Study 2.

$\beta = .20$, $p = .008$. As shown in Fig. 3, under situations of high stress, social support, while not beneficial in terms of life satisfaction for those with low relational self-construal, was especially important for those with high relational self-construal. These relationships were less pronounced in situations of low stress.

6. Discussion

The current studies examined the role of individual differences in relational self-construal in the association between social support and life satisfaction. Two samples provide evidence for the predicted interaction effect such that individuals high in relational self-construal garner the benefits of social support, in terms of life satisfaction, to a greater extent than do those with low relational self-construal. Furthermore, in Study 2 we demonstrated that social support seems to be the most beneficial for highly relational individuals in times of greater stress. Whereas stress was associated with low life satisfaction for individuals with low relational self-construal regardless of the level of social support received, social support was associated with higher life satisfaction for individuals with high relational self-construal under these stressful circumstances.

Integrating self-construal promises a more nuanced understanding of the common phenomenon of social support. Furthermore, these findings help to clarify the inconsistent relationship between support and life satisfaction, suggesting that the self ought to be considered in this association. Accordingly, these findings have lessons for those seeking to provide support as these interpersonal encounters might be most effective when the interaction is constructed in a manner that matches the support recipient's self-construal. Receipt of support by individuals with low relational self-construal might present a challenge to this view of the self as independent of others, leading to an attenuation of the benefits of this interpersonal process for well-being. Feelings of burdening others with demands of support provision are likely stronger when those close others are not seen as part of the self, and this difference could explain the current results.

Beyond these theoretical gains in understanding reactions to social support, the current study also has potential implications for prominent psychological treatment models stressing support-seeking. Often these types of interventions are assumed to work for everyone, and attrition information, which could presumably offer important insights regarding treatment efficacy, is ignored

(Helgeson & Gottlieb, 2000). As suggested by these studies, the self-construal of the individual might help to predict the extent to which treatments promoting support receipt will be beneficial. Establishing the likelihood of incurred benefits from support interventions based on a client's relational self-construal could allow better individualization of a treatment plan.

6.1. Limitations and future directions

One limitation of the current studies is the use of a retroactive self-report scale to assess social support receipt broadly. Future research might examine these associations within the context of specific support interactions. A number of aspects of a real-life interpersonal interaction could be manipulated to examine the nuances of the interactions among these variables. For example, examining the effects of support receipt in the context of specific stressful events compared to situations that are not inherently stressful would offer external validation to the present findings. Another aspect of the interaction that might be manipulated is whether a support provider is a close other or a stranger. The stronger relationship between social support and life satisfaction for those high in relational self-construal might be specific to instances when the support provider is a close other that is seen as an overlapping part of the self for these individuals. In the current studies, participants rated social support in reference to particular close others in their lives (family, friends, and significant others). Perhaps support from a stranger would have the same, dampened, effect regardless of one's level of relational self-construal. Furthermore, these studies are limited in assessing only life satisfaction as an outcome measure. A more extensive survey of outcome variables would be needed to make claims about the role that self-construal might play in determining the degree of efficacy of social support interactions for improved well-being and functioning more broadly.

6.2. Concluding remarks

Social support, although often considered to be a panacea, is not associated with the same extent of beneficial outcomes for all individuals. The current studies suggest that individual differences in relational self-construal temper the degree to which social support receipt is associated with higher levels of life satisfaction. Therefore, considering differences in the manner in which individuals construct the self is an important aspect for implementing supportive interactions that are best matched to meet the needs of the support recipient.

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