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The social mentality theory of self-compassion and self-reassurance: The interactive effect of care-seeking and caregiving

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ABSTRACT
The aim of this study was to test social mentality theory, which views self-compassion/reassurance as a form of intrapersonal relating in which the interpersonal mentalities of care-seeking and caregiving are activated. Self-report measures of motivations, cognitions, and behaviors related to seeking and receiving care from others were administered to 195 students. Self-compassion/reassurance was predicted by the interaction of care-seeking and caregiving, with the positive effect of care-seeking intensified at high caregiving. As hypothesized, the combination of high care-seeking and high caregiving predicted the highest level of self-compassion/reassurance. The lowest level of self-compassion/reassurance was predicted by the combination of low care-seeking and high caregiving consistent with the concept of compulsive caregiving. Findings suggest that fostering a kinder way of relating to oneself may be achieved through more effective care-seeking and caregiving with others.

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Caregiving; care-seeking; self-compassion; self-reassurance; social mentality

Self-compassion and self-reassurance are ways of relating to oneself with care and concern in the context of personal inadequacies, failures, and difficult life struggles. Self-compassion is characterized by the three components of being kind to oneself rather than critical, seeing one’s troubles as part of a common humanity rather than isolating, and being mindful of one’s distress rather than avoiding or over-identifying with it (Neff, 2003). Similarly but more narrowly defined, self-reassurance is the ability to be kind, caring, and supportive to oneself in the face of setbacks (Gilbert, Clarke, Hempel, Miles, & Irons, 2004). The growing body of literature on self-compassion/reassurance indicates it is an important predictor of well-being (for a review, see Barnard & Curry, 2011). Self-compassion is associated with positive psychological functioning, including greater purpose in life, low perceived stress, and high life satisfaction (Neely, Schallert, Mohammed, Roberts, & Chen, 2009). Self-compassion is associated with positive psychological functioning, including greater purpose in life, low perceived stress, and high life satisfaction (Neely, Schallert, Mohammed, Roberts, & Chen, 2009). Self-compassion is associated with positive psychological functioning, including greater purpose in life, low perceived stress, and high life satisfaction (Neely, Schallert, Mohammed, Roberts, & Chen, 2009). Self-compassion is associated with positive psychological functioning, including greater purpose in life, low perceived stress, and high life satisfaction (Neely, Schallert, Mohammed, Roberts, & Chen, 2009). Self-compassion is associated with positive psychological functioning, including greater purpose in life, low perceived stress, and high life satisfaction (Neely, Schallert, Mohammed, Roberts, & Chen, 2009).
has supported this view. Neff and McGehee (2010) found that adolescents’ recollections of greater maternal support were associated with higher levels of self-compassion, while greater maternal criticism was linked with lower levels of self-compassion. Additionally, self-compassion was predicted by the degree of family functioning, such that individuals from close, conflict-free families were more self-compassionate. Pepping, Davis, O’Donovan, and Pal (2015) demonstrated that recalled poor parenting during childhood (i.e., low warmth, high over-protection, and high rejection) was associated with lower self-compassion, and this relationship was mediated by heightened attachment anxiety. Similarly, recall of parental warmth was associated with the ability to be self-reassuring (Irons et al., 2006). Overall, findings suggest that people tend to relate to themselves with compassion and reassurance to the degree that others have related to them in that manner.

While existing developmental theories (Baldwin, 1992; Blatt, 1974; Bowlby, 1969/1982; Kernberg, 1976) focus on how others’ behaviors toward the self influence self-to-self relating, Gilbert’s (1989, 2000) social mentality theory suggests that individuals relate to themselves through systems that were originally evolved for relating to others. Social mentalities are internal systems that “generate patterns of cognition, affect and behaviour … that allow for the enactment of social roles” (Gilbert, 2000, p. 120) to solve social challenges essential for survival, such as care-seeking, mating, cooperation, and competition. A social mentality orient a person to create certain roles with others (e.g., seeking affiliation with a friend versus seeking dominance of a rival) and guides interpretation of the roles others are enacting (e.g., perceiving others as acting in a friendly versus competitive way toward the self). Importantly, a distinguishing feature of the human species is our higher-order cognitive capacity for self-awareness, imagination, and reflection. Thus, it is theorized that both internal and external stimuli can produce similar responses. For instance, people can bring about their own sexual arousal through fantasy and imagination (i.e., internal stimulus) in the absence of a sexual partner (i.e., external stimulus). Therefore, Gilbert (1989, 2000) suggests that social mentalities are activated not only in relations with others but also in relations within the self.

The combination of care-seeking and caregiving social mentalities is theorized to underlie self-compassion/reassurance (Gilbert, 2000, 2005). Capacities for care-seeking and caregiving have generally been examined within the context of attachment theory (Bowlby, 1969/1982) in which humans are theorized to possess the innate behavioral systems of attachment and caregiving. According to Bowlby (1969/1982), the function of the attachment system is to protect individuals from danger by ensuring that they maintain proximity to caring and supporting others, and it includes competencies for expressing distress and being responsive to others’ signals of care. Conversely, the function of the caregiving system is to provide protection and support to others in need, and it involves competencies for assessing the needs of the other, empathic understanding, and being responsive through caring behaviors. Gilbert’s (2000, 2005) concepts of care-seeking and caregiving social mentalities map onto Bowlby’s (1969/1982) theories of the attachment and caregiving systems, respectively. According to Gilbert (2005), in the same way that the care-seeking and caregiving mentalities are activated when relating to others (e.g., crying child and comforting mother), they can also be activated when relating to the self. Thus, self-compassion/reassurance is viewed as a form of self-to-self relating in which the care-seeking mentality signals distress and need for care, and the caregiving mentality responds with compassionate thought and emotion directed inward (Gilbert, 2005).

The association between self-compassion/reassurance and care-giving has been documented in several studies. In a study of undergraduate students and community adults (Neff & Pommier, 2012), higher levels of self-compassion were related to measures of other-focused concern, including higher levels of perspective-taking and forgiveness. Among the community adults only, self-compassion was positively associated with compassion for others, empathic concern, and altruism. Within the context of romantic relationships, self-reported levels of self-compassion have been found to be associated with partner-reported levels of caregiving behaviors (Neff & Beretvas, 2012). Thus, to the
degree that individuals were kind and caring toward themselves, their partners described them as more affectionate, warm, and considerate. In a study of undergraduate roommates, Crocker and Canevello (2008) showed that having compassionate goals for one’s roommate was associated with higher compassion for oneself. In an fMRI study by Longe et al. (2010), participants were asked to imagine relating to themselves in a way that was reassuring versus critical in response to various scenarios. Engaging in self-reassurance was associated with left insula activation, which is a brain region that has been associated with expressing compassion and empathy toward others (Lutz, Brefczynski-Lewis, Johnstone, & Davidson, 2008). This suggests that caring for the self and caring for others may be neurologically linked. Further, Breines and Chen (2013) conducted a series of experiments that examined whether activating support-giving schemas can momentarily influence self-compassion. Results demonstrated that recalling memories of giving support, as well as actually giving support in a lab-based task, increased state self-compassion. Taken together, results from cross-sectional, neuroimaging, and experimental studies suggest that the capacity to give care to others underlies the capacity to be compassionate and reassuring to oneself. Attachment security has been shown to be related to self-compassion (Neff & McGehee, 2010) and self-reassurance (Irons et al., 2006), but there is otherwise limited empirical support for the association between care-seeking and compassion for self.

In the present study, we sought to examine the predictive influence of both care-seeking and caregiving social mentalities that are believed to underlie self-compassion and self-reassurance. In accordance with prior findings, we hypothesized two main effects such that self-compassion and self-reassurance would be positively associated with both care-seeking and caregiving. Additionally, we hypothesized that self-compassion and self-reassurance would be predicted by a synergistic two-way interaction of care-seeking and caregiving in accordance with social mentality theory (Gilbert, 2005). That is, we expected the combined capacities for care-seeking and caregiving would produce a stronger effect on self-compassion and self-reassurance than the sum of the separate main effects. To our knowledge, the present study is the first to empirically test the social mentality theory of self-compassion/reassurance by examining both care-seeking and caregiving constructs in an integrated framework.

Method

Participants and procedure

Participants were 195 undergraduate and graduate students at a large Canadian university (94 men, 101 women), ranging in age from 18 to 29 years old (M = 20.88, SD = 2.32). Participants were primarily of Caucasian background (63.7%), followed by Chinese (14.5%), South Asian (11.7%), Korean (3.4%), and other ethnic backgrounds (6.7%). The sample was recruited through advertisements in the university classifieds, Facebook, Craigslist, flyers posted around campus, and the university psychology research participant pool. Participants received $20 compensation or credit toward a course in undergraduate psychology. Participants completed a series of self-report measures online.

Measures

A review of the literature yielded a lack of self-report measures explicitly assessing care-seeking and caregiving mentalities suitable for our research questions. Therefore, we administered multiple measures that assessed conceptually relevant motivations, cognitions, and behaviors with the intent to factor analyze these measures and create care-seeking and caregiving factors.

Receiving and giving social support

Participants’ experiences of receiving and giving social support were assessed using the 2-Way Social Support Scale (2-WSS; Shakespeare-Finch & Obst, 2011). The 2-WSS is a 20-item questionnaire
rated on a 6-point Likert-type scale ranging from 0 (not at all) to 5 (always). It comprises four factors of social support, including receiving emotional support (e.g., “There is someone in my life that makes me feel worthwhile”), receiving instrumental support (e.g., “There is someone who can help me fulfill my responsibilities when I am unable”), giving emotional support (e.g., “People confide in me when they have problems”), and giving instrumental support (e.g., “I am a person others turn to for help with tasks”). Higher scores on each subscale indicate a greater extent of giving or receiving emotional or instrumental support. Scores from the four subscales have been shown to have moderate to high internal reliability ranging from .81 to .92, and good convergent validity (Shakespeare-Finch & Obst, 2011). In the present study, Cronbach’s alphas were .91 for the subscale score of receiving emotional support, .74 for the subscale score of receiving instrumental support, .86 for the subscale score of giving emotional support, and .78 for the subscale score of giving instrumental support.

**Compassionate love for others**
Compassionate love is an attitude toward others involving cognitions, feelings, and behaviors that are oriented toward caring and supporting the other. Compassionate love for others in general (i.e., strangers and humanity) was assessed using the Compassionate Love Scale (CLS; Sprecher & Fehr, 2005). The CLS is a 21-item questionnaire rated on a seven-point Likert-type scale ranging from 1 (not at all true of me) to 7 (very true of me). Items include “I very much wish to be kind and good to fellow human beings” and “If I encounter a stranger who needs help, I would do almost anything I could to help him or her.” Higher scores reflect higher levels of compassionate love. Measurement using the CLS has been found to have good convergent and discriminant validity (Sprecher & Fehr, 2005). Cronbach’s alpha for the CLS total score in our study was .94.

**Compassionate and self-image goals**
Compassionate goals involve a motivation toward supporting and benefitting others, while self-image goals involve a motivation toward maintaining a desired self-image to benefit the self. The Compassionate and Self-Image Goals Scale (CSIG; Crocker & Canevello, 2008) is a 13-item questionnaire rated on a 5-point Likert-type scale ranging from 1 (not at all) to 5 (extremely). All items begin with the phrase “In the past week, in the area of friendships, how much did you want to or try to...” Seven items assessed compassionate goals (e.g., “make a positive difference in someone else’s life”), and six items assessed self-image goals (e.g., “get others to recognize or acknowledge your positive qualities”). Higher scores on each subscale indicate a greater extent of having a compassionate or self-image motivational orientation. In the present study, Cronbach’s alpha was .70 for the score on the compassionate goals subscale and .72 for the score on the self-image goals subscale.

**Distress disclosure**
The tendency to disclose personally distressing information about oneself was measured using the Distress Disclosure Index (DDI; Kahn & Hessling, 2001). The DDI is a 12-item questionnaire rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Items on the DDI include “When something unpleasant happens to me, I often look for someone to talk to” and “I try to find people to talk with about my problems.” Higher scores indicate greater tendency to disclose distress. Previous research has demonstrated evidence for the DDI’s good internal consistency, test-retest reliability, and criterion-related and construct validity (for a review, see Kahn, Hucke, Bradley, Glinski, & Malak, 2012). Cronbach’s alpha for the total score in the present sample was .93.

**Support-seeking**
The tendency to seek social support when dealing with stressful events was assessed using the Emotional Support-Seeking subscale (e.g., “When I’m depressed I get out and talk to others”) and the Instrumental Support-Seeking subscale (e.g., “Information I get from others has often helped me deal with my problems”) of the Proactive Coping Inventory (PCI; Greenglass, Schwarzer, & Taubert,
The Emotional Support-Seeking subscale is comprised of five items, and the Instrumental Support-Seeking subscale is comprised of eight items. Items are scored on a 4-point Likert-type scale ranging from 1 (not at all true) to 4 (completely true). Higher scores on each subscale indicate a greater tendency to seek emotional or instrumental support. Measurement using the PCI has demonstrated good psychometric properties (e.g., Greenglass, 2002). In the present study, Cronbach’s alpha was .83 for the score on the emotional support-seeking subscale and .85 for the score on the instrumental support-seeking subscale.

**Fears of expressing and receiving compassion**

The Fears of Compassion Scales (FOCS; Gilbert, McEwan, Matos, & Rivis, 2011) is a set of three scales assessing (1) fear of expressing compassion for others (e.g., “People will take advantage of me if they see me as too compassionate”); (2) fear of receiving compassion from others (e.g., “When people are kind and compassionate towards me I feel anxious or embarrassed”); and (3) fear of expressing compassion for oneself. The FOCS is rated on a 5-point Likert scale ranging from 0 (don’t agree at all) to 4 (completely agree). We used the first two scales only, including 10 and 13 items respectively. Higher scores on each scale reflect higher fear of expressing compassion for others or fear of receiving compassion from others. In the present study, the scale scores demonstrated good internal consistency with Cronbach’s alpha of .85 and .91 respectively.

**Excessive reassurance-seeking**

Excessive reassurance-seeking was assessed using the four-item Reassurance Seeking subscale of the Depressive Interpersonal Relationships Inventory (DIRI-RS; Joiner & Metalsky, 2001). On a 7-point Likert-type scale ranging from 1 (not at all) to 7 (extremely often), respondents rated items such as “Do the people you feel close to sometimes get fed up with you for seeking reassurance from them about whether they really care about you?” Higher scores reflect greater tendency to excessively seek reassurance. Cronbach’s alpha for the total score was .88 in the present study.

**Self-compassion**

Dispositional self-compassion was assessed using the Self-Compassion Scale (SCS; Neff, 2003). The SCS is a 26-item questionnaire rated on a 5-point Likert-type scale ranging from 1 (almost never) to 5 (almost always). The SCS comprises six subscales assessing self-kindness (e.g., “When I’m going through a very hard time, I give myself the caring and tenderness I need”), self-judgment (e.g., “I’m disapproving and judgmental about my own flaws and inadequacies”), common humanity (e.g., “When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people”), isolation (e.g., “When I fail at something that’s important to me, I tend to feel alone in my failure”), mindfulness (e.g., “When something upsets me I try to keep my emotions in balance”), and over-identification (e.g., “When I’m feeling down I tend to obsess and fixate on everything that’s wrong”). Previous research has demonstrated good convergent and discriminant validity for scores on the SCS (Neff, 2003, 2009). A principal factor analysis of the 26 SCS items was conducted in the present sample. The scree plot and Kaiser criterion indicated a one-factor solution accounting for 64.4% of the total variance and subsequent components accounting for less than 12% each. Therefore, we used the total score in our study, which is also in accordance with previous research using the SCS. Higher scores reflect higher levels of self-compassion. Cronbach’s alpha for the total score in our study was .92.

**Self-reassurance**

The ability to be kind and reassuring to oneself in the context of a perceived failure was assessed using the Reassured Self subscale of the Forms of Self-Criticism/Self-Reassuring Scale (FSCRS; Gilbert et al., 2004). The FSCRS subscale consists of 8 items (e.g., “I am gentle and supportive with myself”) rated on a 5-point Likert-type scale ranging from 0 (not at all like me) to 4 (extremely like me). Higher scores reflect higher levels of self-reassurance. Scores on the FSCRS have shown...
good psychometric properties (Baião, Gilbert, McEwan, & Carvalho, 2014). In our study, Cronbach’s alpha was .86 for the subscale score.

Results

Means and standard deviations of scores from the current study are comparable to values reported in the literature. The assumptions for the following statistical analyses were examined at each step of data analysis. The assumptions of linearity, homoscedasticity, independence, and normality of the error distribution were met. Because participants were free to complete or omit questionnaires, the sample size and degrees of freedom vary slightly across different analyses. The sample size of 195 consisted of participants who completed the demographics survey and at least 2 questionnaires. One hundred seventy-eight participants provided complete data, while 18 participants omitted at least 1 questionnaire. Of these 18 participants, 1 completed more than 75% of the questionnaires, 3 completed more than 50%, 6 completed more than 25%, and 8 completed less than 10%. The number of participants who omitted questionnaires ranged from 1 for the FSCRS to 18 for the DDI.

Exploratory factor analysis

Two exploratory factor analyses were conducted to derive care-seeking and caregiving factors from the conceptually related measures we administered. The first factor analysis included the following scales related to care-seeking: 2-WSS (receiving emotional support and receiving instrumental support subscales), DDI, PCI (seeking emotional support and seeking instrumental support subscales), FOCS (fear of receiving compassion subscale), and DIRI-RS. The DIRI-RS is a measure of excessive reassurance-seeking that was included in the factor analysis in order to distinguish between adaptive and maladaptive care-seeking. The scree plot and Kaiser criterion indicated a two-factor solution, while results of parallel analysis (Horn, 1965) suggested retaining one factor and tentatively keeping the second factor (random data eigenvalue of 1.17 is marginally greater than actual data eigenvalue of 1.15). We examined both one-factor and two-factor solutions. For the one-factor solution, all care-seeking measures except for excessive reassurance-seeking loaded strongly on the factor. The excessive reassurance-seeking measure was omitted due to low factor-loading (-.14). For the two-factor solution, the first factor consisted of all care-seeking measures, with the exception of excessive reassurance-seeking loaded strongly on the factor. The excessive reassurance-seeking measure was omitted due to low factor-loading (-.14). For the two-factor solution, the first factor consisted of all care-seeking measures, with the exception of excessive reassurance-seeking, while the second factor consisted solely of the excessive reassurance-seeking measure. Thus, both the one-factor and two-factor solutions yielded identical outcomes in terms of extracting a single adaptive care-seeking factor.

We elected to present the two-factor solution. All combinations of principal components and maximum likelihood extraction methods with promax (oblique) and varimax (orthogonal) rotations were conducted. There was little difference between solutions. A principal components extraction with promax rotation was chosen for the final solution. The first factor explained 51.4% of the variance and the second factor explained 16.4% of the variance. In the final solution after rotation (factor loadings are specified in parentheses), the first factor was comprised of measures of seeking emotional support (.85), distress disclosure (.82), seeking instrumental support (.81), receiving emotional support (.77), receiving instrumental support (.63), and fear of receiving compassion (.55). The second factor was comprised solely of the excessive reassurance-seeking measure (.89). The correlation between the two rotated factors was -.16. We interpreted the first factor as a measure of adaptive care-seeking and the second factor as a measure of maladaptive care-seeking. This result provided support for discriminant validity as intended. The first factor was retained for subsequent analyses because it accorded with our conceptualization of care-seeking, while the second factor was omitted.

The second factor analysis included the following scales related to caregiving: 2-WSS (giving emotional support and giving instrumental support subscales), CLS, CSIG (compassionate goals and self-image goals subscales), and FOCS (fear of expressing compassion subscale). The same procedure for determining the final factor solution was followed as above. Similarly, there was little difference
between solutions. A principal components extraction with promax rotation was chosen for the final solution. The scree plot, Kaiser criterion, and results from parallel analysis indicated a two-factor solution. The first factor explained 39.6% of the variance, and the second factor explained 21.3%. In the final solution after rotation, the first factor was comprised of measures of giving emotional support (.82), giving instrumental support (.81), compassionate love (.71), and compassionate goals (.70). The second factor was comprised of measures of self-image goals (.82) and fear of expressing compassion (.71). The correlation between the two rotated factors was -.10. We interpreted the first factor as a measure of caregiving oriented toward benefiting others, and the second factor as a measure of withholding caregiving in order to benefit the self. The first factor was retained for subsequent analyses because it accorded with our conceptualization of caregiving, while the second factor was omitted.

Approximate factor scores were computed for the care-seeking and caregiving variables by taking the mean of the standardized scores of the scales that loaded on those factors. The Cronbach’s alphas were .86 for the constituent scales of the care-seeking factor and .76 for the caregiving factor.

**Descriptive statistics**

Means, SDs, and correlations are presented in Table 1. Consistent with our hypotheses, care-seeking and caregiving correlated positively with self-compassion and self-reassurance. There was a strong positive correlation between self-compassion and self-reassurance as expected, but they were not so highly correlated as to suggest they are identical and interchangeable constructs. There was also a moderate positive correlation between care-seeking and caregiving. To examine potential gender differences, independent samples t-tests were conducted for all the variables of interest. There were significant effects of gender for care-seeking, \( t(185) = -3.26, p = .001, d = .48 \), with women \( (M = 0.23, SD = 1.06) \) having higher levels of care-seeking than men \( (M = -0.24, SD = 0.88) \), and caregiving, \( t(179) = -4.50, p < .001, d = .66 \), with women \( (M = 0.31, SD = 0.89) \) having higher levels of caregiving than men \( (M = -0.32, SD = 1.01) \). These results are consistent with previous findings indicating gender differences in care-seeking (Tamres, Janicki, & Helgeson, 2002) and caregiving (Kunkel & Burleson, 1998).

**Regression analyses**

Hierarchical regression models were tested to examine our hypotheses regarding care-seeking and caregiving social mentalities predicting, first, self-compassion, and second, self-reassurance.

**Self-compassion**

Care-seeking and caregiving were standardized and then entered in the first step of the regression predicting self-compassion. The overall model was significant, adjusted \( R^2 = .134, F(2, 178) = 15.01, p < .001 \). Greater care-seeking was associated with greater self-compassion, \( b = 6.31, SE_b = 1.30, \beta = .39, t(178) = 4.87, p < .001 \), but there was no main effect of caregiving, \( b = -0.18, SE_b = 1.30, \beta = -.09, t(178) = .73, p > .05 \).

**Table 1. Correlations and descriptive statistics for all variables.**

<table>
<thead>
<tr>
<th></th>
<th>Care-Seek</th>
<th>Caregive</th>
<th>Self-Compassion</th>
<th>Self-Reassurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care-Seek</td>
<td>–</td>
<td>.48**</td>
<td>.37**</td>
<td>.46**</td>
</tr>
<tr>
<td>Caregive</td>
<td>–</td>
<td>–</td>
<td>.17*</td>
<td>.29**</td>
</tr>
<tr>
<td>Self-Compassion</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>.73**</td>
</tr>
<tr>
<td>Self-Reassurance</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Mean</td>
<td>0.00</td>
<td>0.00</td>
<td>77.19</td>
<td>20.74</td>
</tr>
<tr>
<td>SD</td>
<td>4.62</td>
<td>3.05</td>
<td>16.16</td>
<td>5.91</td>
</tr>
</tbody>
</table>

Note. Care-Seek and Caregive are approximate factor scores computed by taking the mean of the standardized scores of the scales that loaded on that factor. *p < .05. **p < .001.
The interaction between care-seeking and caregiving was then entered in the second step of the regression predicting self-compassion. The overall model was significant, adjusted $R^2 = .192$, $F(3, 177) = 15.26$, $p < .001$. The interaction was significant, $b = 4.05$, SE$_b = 1.10$, $\beta = .25$, $t(177) = 3.69$, $p < .001$, suggesting that the effect of care-seeking on self-compassion depended on the level of caregiving (see Figure 1).

We probed the interaction by first examining the simple slopes and then testing the difference between point estimates at low ($-1$ SD) and high ($+1$ SD) levels of care-seeking and caregiving. Simple slopes analysis revealed a positive association between care-seeking and self-compassion at high caregiving, $b = 10.68$, SE$_b = 1.72$, $\beta = .66$, $p < .001$, but no association at low caregiving, $b = 2.59$, SE$_b = 1.61$, $\beta = .10$, $p = .11$. Examining the effect of caregiving on self-compassion at high care-seeking indicated that the point estimate at high caregiving ($M = 85.32$, $SE = 1.78$) was greater than the point estimate at low caregiving ($M = 78.18$, $SE = 2.83$), $t(177) = 2.21$, $p = .028$. Additionally, the highest point estimate of self-compassion at high care-seeking and high caregiving ($M = 85.32$, $SE = 1.78$) was greater than the average estimate of the three other points ($M = 71.72$, $SE = 1.47$), $t(177) = 6.05$, $p < .001$. Together, these results support our hypothesis that individuals who have heightened capacities for both care-seeking and caregiving exhibit the highest levels of self-compassion.

Examining the effect of caregiving on self-reassurance at low care-seeking indicated that the point estimate at high caregiving ($M = 63.96$, $SE = 3.00$) was less than the point estimate at low caregiving ($M = 73.01$, $SE = 1.77$), $t(177) = 2.63$, $p = .009$. Additionally, results indicated that the lowest point estimate of self-reassurance at low care-seeking and high caregiving ($M = 63.96$, $SE = 3.00$) was significantly less than the average estimate of the three other points ($M = 78.83$, $SE = 1.32$), $t(177) = 4.47$, $p < .001$. Together, these results suggest that individuals who give care to others but do not also seek care from others have the lowest levels of self-compassion. This finding was not initially hypothesized.

**Self-reassurance**

The same analytic strategy as above was used to examine the effects of care-seeking and caregiving on self-reassurance. Care-seeking and caregiving were entered in the first step of the regression predicting self-reassurance. The overall model was significant, adjusted $R^2 = .207$, $F(2, 178) = 24.45$, $p < .001$. Greater care-seeking was associated with greater self-reassurance, $b = 2.50$, SE$_b = 0.46$, $\beta = .41$, $t(178) = 5.45$, $p < .001$, but there was no main effect of caregiving, $b = 0.56$, SE$_b = 0.46$, $\beta = .09$, $t(178) = 1.22$, $p = .22$. The interaction between care-seeking and caregiving was then entered in the second step of the regression predicting self-reassurance. The overall model was significant,
adjusted $R^2 = .231$, $F(3, 177) = 18.97, p < .001$. The interaction was significant, $b = 1.01$, $SE_b = 0.39$, $\beta = .17$, $t(177) = 2.55, p = .01$, suggesting that the effect of care-seeking on self-reassurance depended on the level of caregiving (see Figure 2).

Simple slopes analysis revealed a positive association between care-seeking and self-reassurance at high caregiving, $b = 3.58$, $SE_b = 0.62$, $\beta = .61$, $p < .001$, and a weaker positive association at low caregiving, $b = 1.57$, $SE_b = 0.58$, $\beta = .27$, $p = .007$. Examining the effect of caregiving on self-reassurance at high care-seeking indicated that the point estimate at high caregiving ($M = 24.27$, $SE = 0.64$) was greater than the point estimate at low caregiving ($M = 21.29$, $SE = 1.02$), $t(177) = −2.98, p = .011$. Additionally, the highest point estimate of self-reassurance at high care-seeking and high caregiving ($M = 24.27$, $SE = 0.64$) was greater than the average estimate of the three other points ($M = 18.85$, $SE = 0.53$), $t(177) = 6.70, p < .001$. Together, these results support our hypothesis that individuals who have heightened capacities for both care-seeking and caregiving exhibit the highest levels of self-reassurance.

There was no effect of caregiving on self-reassurance at low care-seeking, $t(177) = 0.84, p = .40$. However, results indicated that the lowest point estimate of self-reassurance at low care-seeking and high caregiving ($M = 17.10$, $SE = 1.08$) was significantly less than the average estimate of the three other points ($M = 21.23$, $SE = 0.48$), $t(177) = 3.44, p < .001$. This result suggests that individuals who give care to others but do not also seek care from others have the lowest levels of self-reassurance. This finding was not initially hypothesized.

**Discussion**

Our findings indicated a positive zero-order association between caregiving and self-compassion/self-reassurance in accordance with previous studies (e.g., Breines & Chen, 2013; Crocker & Canevello, 2008; Longe et al., 2010; Neff & Beretvas, 2012; Neff & Pommier, 2012). Results also showed a positive zero-order association between care-seeking and self-compassion, which is consistent with findings demonstrating a positive relationship between attachment security and self-compassion/self-reassurance (Irons et al., 2006; Neff & McGehee, 2010). We had hypothesized two positive main effects of care-seeking and caregiving on self-compassion/self-reassurance in accordance with prior findings. However, when both care-seeking and caregiving were entered into the regression model, results indicated a main effect of care-seeking only. Previous studies had not examined the constructs of care-seeking and caregiving together in predicting self-compassion/self-reassurance. Therefore,
the extent to which one relates to oneself in a compassionate and reassuring way is uniquely predicted by the capacity for seeking care rather than the capacity for giving care.

Although care-seeking was a significant predictor of self-compassion and self-reassurance, caregiving also exerted a moderating effect when the interaction of care-seeking and caregiving was included in the regression model. The positive relation of care-seeking and self-compassion/reassurance was intensified when individuals also possessed high capacities for caregiving. Humans are theorized to possess innate behavioral systems for care-seeking and caregiving (Bowlby, 1969/1982; Gilbert, 2000, 2005). As for any human competency, care-seeking and caregiving mentalities need to be stimulated by early developmental experiences so that appropriate interpersonal scripts are learned and elaborated. The extent to which care-seeking and caregiving roles are enacted in one’s present relationships will potentially further influence the ease of accessibility of that mentality. According to social mentality theory, both care-seeking and caregiving mentalities are activated when one is being self-compassionate/reassuring. Individuals who are high care-seekers and high caregivers are those who have the ability, comfort, and opportunity for enacting these social mentalities with others. Thus, they are likely to have more elaborated memories of both effective care-seeking and caregiving that are more readily activated. In accordance with our hypothesis of a synergistic interaction, the highest level of self-compassion and self-reassurance was predicted by the combination of both high care-seeking from others and high caregiving to others.

Our hypothesis of a synergistic interaction was not entirely supported, however, because the lowest level of self-compassion and self-reassurance was observed at low care-seeking and high caregiving. Our findings suggest that individuals who give care to others but do not also seek care from others have deficits in self-compassion and self-reassurance. This pattern is consistent with the concept of compulsive caregiving (Bowlby, 1977), an attachment style in which an individual emphasizes giving care within relationships rather than receiving it. Compulsive caregiving is theorized to develop in response to a child’s early experiences of being forced to care for an attachment figure (e.g., a parent) wherein the child’s own need for care is stifled in order to maintain the relationship. Therefore, expending cognitive and emotional resources caring for others (i.e., having an overly elaborated and chronically activated caregiving mentality) without the opportunity to seek and receive care for oneself (i.e., having an under-developed care-seeking mentality) is likely to lead to deficits in self-compassion/reassurance.

The potential mediating mechanisms that link care-seeking and caregiving to self-compassion/reassurance may involve underlying physiological systems. According to Gilbert’s (2005) tripartite model of affect regulation, three interacting systems evolved to respond to signals of threat, rewards/resources, and affiliation, which respectively trigger negative affect, high-arousal positive affect, and feeling secure and warm with others. Care-seeking and caregiving are thought to involve an up-regulation of the affiliation system and a corresponding down-regulation of the threat system. The same pattern of affect regulation is thought to underlie self-compassion/reassurance. The extent to which these systems are developed and elaborated depend on early interpersonal experiences, while accessibility of these systems is influenced by opportunities afforded in one’s present social context.

Both self-compassion and self-reassurance are adaptive ways of relating to oneself in the context of negative personal events. Self-compassion is a broader construct operationalized as including the distinct components of being kind to oneself, common humanity, and a mindfulness of distress (Neff, 2003), while self-reassurance is more narrowly characterized by the self-kindness component (Gilbert et al., 2004). Our findings were replicated across these two similar, but not identical, constructs of self-compassion and self-reassurance, thereby increasing confidence in the robustness of the results.

Our findings have implications for both theory and practice. These findings add to the limited empirical support for the social mentality theory of self-compassion/reassurance and lead to a better understanding of its interpersonal correlates and, perhaps, underlying interpersonal mechanisms. Consequently, researchers and clinicians will be better able to design interventions aimed at increasing self-compassion/reassurance by influencing an individual’s interpersonal context.
work has suggested that highly self-critical individuals struggle with fostering self-compassion (Gilbert & Irons, 2004; Shahar et al., 2012). Therefore, rather than targeting self-compassion directly and meeting resistance, it may be more feasible to target care-seeking and caregiving behaviors with others, which in turn, may boost self-compassion. It will be important to endorse care-seeking and caregiving in equal measure, though, to prevent the consequences of compulsive caregiving. This echoes the aims of a preliminary virtual reality intervention in which self-critical participants first embodied a caregiving role, then experienced their own compassionate response in a care-receiving role (Falconer et al., 2014).

**Limitations**

Although findings are consistent with social mentality theory and experimental manipulations (Breines & Chen, 2013) that suggest the way we relate to others consequently influences how we relate to ourselves, the cross-sectional design of this study precluded definitive conclusions about directionality and causality. The results of this study may also be of limited generalizability given that the sample comprised solely university students. Another concern is that of shared method variance due to the exclusive use of self-report and single-informant measures that may inflate the associations between variables.

**Conclusion**

Relating to ourselves in a kind, compassionate way has profound outcomes for our well-being. Previous research on the origins of self-compassion/reassurance has focused on the influence of early interpersonal experiences. We learn to relate to ourselves in the way that others have related to us (i.e., other-to-self-relating). However, social mentality theory suggests that self-compassion/reassurance operates through systems originally evolved for navigating social roles (i.e., self-to-other relating). Our findings provide the first empirical support for social mentality theory that views self-compassion/reassurance as a form of intrapersonal relating in which both interpersonal mentalities of care-seeking and caregiving are activated.

**Notes on contributors**

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