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Insecure attachment and emotional distress: Fear of self-compassion and self-compassion as mediators



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ABSTRACT

According to Attachment Theory (Bowlby, 1980), individual differences in adult attachment styles are based on attachments formed during infancy with primary caregivers. Adults who form secure attachments feel safe and secure in their relationships. Those who form insecure attachments do not. According to Self-Compassion Theory (Neff, 2003a, 2003b), and supported by research, self-compassion (i.e., compassionate attitudes and behaviors towards oneself) is associated with a variety of positive psychological outcomes, while a lack of self-compassion is associated with psychological distress (e.g., Barnard & Curry, 2011). Additionally, the fear of self-compassion has been negatively associated with self-compassion (Joeng & Turner, 2015). In this current study, we extend the research on attachment and self-compassion by examining how self-compassion and fear of self-compassion mediate two types of insecure attachment styles, anxious attachment and avoidant attachment, and two indicators of emotional distress, depression and anxiety, among 473 Korean college students. Structural equation modeling indicated that self-compassion independently mediated, and fear of self-compassion and self-compassion serially mediated, the paths from anxious and avoidant attachment to depression and anxiety in expected directions. Results are interpreted from the perspective of Korean culture, including the influence of Confucianism on the expression of self-compassion.

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1. Introduction

According to Attachment Theory (Bowlby, 1980), infants who do not have their physical or emotional needs met by primary caregivers tend to not form secure and trusting relationships (i.e., secure attachments) with these caregivers nor do they tend, as adults, to form secure attachments to friends or significant others. Through the emergence of internal working models (i.e., models containing the structure and content of relationships with self and others; Collins & Read, 1994), which are based on their earlier infant-caregiver interactions, these individuals believe that others upon whom they depend are inaccessible and uncaring. Indeed, they may unintentionally establish relationships as adults that mirror the unsupportive interactions they experienced as children. Their patterns of interactions within these relationships tend to be relatively devoid of closeness (i.e., insecure avoidant attachment), or

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characterized by neediness, insecurity, and dependency (i.e., insecure anxious attachment) (Hankin, Kassel, & Abela, 2005). These individuals are also hypothesized to have a significantly increased risk for developing depression (Hankin et al., 2005).

Self-Compassion Theory (Neff, 2003a), and the research that has tested this theory, have suggested that if insecurely attached adults develop self-compassion, their emotional distress could decrease (Barnard & Curry, 2011; Gilbert, McEwan, Matos, & Rivis, 2011; Joeng & Turner, 2015). Yet, insecurely attached individuals may be afraid of receiving compassion for fear it would precipitate memories of unfulfilling relationships and exacerbate feelings of loneliness (Gilbert, 2010; Gilbert et al., 2011). Moreover, studies in this area have shown that the fear of self-compassion is negatively associated with self-compassion (Joeng & Turner, 2015), and that self-compassion is negatively associated with anxiety and depression (Barnard & Curry, 2011; Joeng & Turner, 2015). These mediating relationships have not been studied among adults who are anxiously or avoidantly attached. Thus, given this gap in the literature, we investigated whether fear of self-compassion and self-compassion mediate anxious and avoidant attachment styles as

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these attachment styles predict two indicators of psychological distress, depression and anxiety.

1.1. Attachment and emotional distress

Among insecurely attached adults, the two most common attachment styles are avoidant attachment and anxious attachment. Anxious attachment can occur in adults who have had unpredictable and inconsistent childhood caregivers (Pietromonaco & Barrett, 2000). Thus, they yearn for constant reassurance from their significant others (Wei, Mallinckrodt, Larson, & Zakalik, 2005); however, they have difficulty accepting this reassurance because they do not believe they deserve it (Wei, Liao, Ku, & Shaffer, 2011). Avoidantly attached adults had childhood caregivers who were consistent but unresponsive. They tend to withdraw from others in order to avoid the anticipated disappointment of not getting their needs met (Mikulincer, Shaver, & Pereg, 2003). Both groups tend to have strained, untrusting relationships, dysfunctional attitudes, and rigid views about themselves and their worlds. Both groups are vulnerable to greater emotional distress than are securely attached individuals (Burnette, Davis, Green, Worthington, & Bradfield, 2009; Hankin et al., 2005).

1.2. Self-compassion and fear of self-compassion

Self-compassion helps people who are insecurely attached experience less emotional distress (e.g., Neff, 2003a, 2003b; Raque-Bogdan, Ericson, Jackson, Martin, & Bryan, 2011). According to Neff's (2003a, 2003b) Theory of Self-Compassion, self-compassion is comprised of three dimensions: self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus over-identification. When self-compassionate people recognize their own failures, they exercise self-care instead of judging, berating, or belittling themselves. They recognize that their imperfections, and their experiences, even those that are the most painful, are part of the common human experience. They are also able to maintain perspective and to approach stressful situations mindfully (Neff, Kirkpatrick, & Rude, 2007).

When people fear self-compassion, they resist being compassionate towards themselves (Pauley & McPherson, 2010; Rockcliff, Gilbert, McEwan, Lightman, & Glover, 2008). Individuals who have experienced abuse or neglect as children, which may be analogous to the emotional environment experienced by insecurely attached children, tend to develop a fear of self-compassion (Gilbert et al., 2011; Mikulincer & Shaver, 2007). Given these findings, and the theory and research that undergird them, an examination of how the fear of self-compassion and self-compassion serially mediate relationships between insecure attachment styles and emotional distress is an important next step in our quest to understand what initiates and maintains depression and anxiety among insecurely attached adults. To date, however, there is a lack of research that has examined these effects.

1.3. Purpose of the study

The purpose of this current study was to examine the mediating roles of fear of self-compassion and self-compassion in the relationships between avoidant and anxious attachment, and emotional distress, represented by anxiety and depression. Based on theory and on prior research (e.g., Joeng & Turner, 2015), we hypothesized that 1) self-compassion would mediate relationships between the attachment and emotional distress variables, and that 2) the fear of self-compassion and self-compassion also would exert a serially mediating effect upon the emotional distress variables as they were predicted by the attachment variables.

To examine these relationships, we built and tested a model using a two-step approach of evaluating the measurement model and then evaluating the structural model. The aim of this procedure was to ascertain convergent and discriminant validity (Campbell & Fiske, 1959), and

to increase the nomological validity of the structural model (see Anderson & Gerbing, 1988 for a fuller explanation of the two-step modeling approach). Given that we used cross-sectional data, wherein neither causality nor directionality can be assumed, we also constructed an alternate model in order to test and compare the efficacy of the hypothesized model against another theoretically plausible model. The alternate model was based on Pauley and McPherson's (2010) findings that people with higher levels of depression and anxiety are concerned that they cannot develop self-compassion because of their emotional distress. In this model, depression and anxiety mediated relationships between anxious and avoidant attachment and fear of self-compassion; and, depression, anxiety, and fear of self-compassion mediated relationships between anxious and avoidant attachment and self-compassion.

2. Materials and methods

2.1. Participants

Participants were 473 college students from three South Korean universities. Of the participants, 288 (61%) were men, and 185 (39%) were women. Mean age = 25.26 years (SD = 3.78).

2.2. Procedures

Participants were recruited through university email lists and websites, and from psychology classes at their respective universities. These participants voluntarily completed demographic information and online self-report surveys, of which 473 were completed.

2.3. Measures

2.3.1. Attachment styles

The 18-item Anxious Attachment and 18-item Avoidant Attachment subscales of the Korean version (Kim, 2004) of the Experiences in Close Relationships-Revised Scale (Fraley, Waller, & Brennan, 2000) was used to measure adult attachment styles. Items were measured on a 7-point Likert scale ($1 = strongly \ disagree$ to $7 = strongly \ agree$). Sample items are "I worry a lot about my relationships" (Anxious Attachment), and "I prefer not to show a partner how I feel deep down" (Avoidant Attachment). In a psychometric study of the Korean version of the ECR-R (Kim, 2004), the wording of items, and expected vs. observed rates of responding were similar to the English version, as were the number and dimensions of the latent constructs. In this current study, Cronbach's $\alpha = 0.94$ for Anxious Attachment and $\alpha = 0.79$ for Avoidant Attachment (Anxious Attachment M = 69.46, SD = 13.85; Avoidant Attachment M = 54.82, SD = 18.67).

2.3.2. Fear of self-compassion

Fear of self-compassion was measured using the Korean version (Joeng, Choi, Kim, Lee, & Kim, 2015) of the Fear of Compassion for Self Scale (Gilbert et al., 2011), which is one of three scales comprising the Fears of Compassion instrument (Gilbert et al., 2011). Of the three scales comprising this instrument, the Fear of Compassion for Self Scale was the only one that bore directly on our research. This scale consists of 15 items scored on a 5-point Likert scale (0 = don't agree at all to 4 = completely agree). A sample item is "I worry that if I start to develop compassion for myself, I will become dependent on it." By using backtranslation methods, it was found that the Korean version accurately assessed the concepts measured by Gilbert et al.'s (2011) original English version (Joeng et al., 2015). Fear of self-compassion measured by the Korean version was positively related to self-criticism, and negatively related to self-compassion (Joeng et al., 2015). In this current study, Cronbach's $\alpha = 0.94$ (M = 34.52, SD = 11.83).

2.3.3. Self-compassion

Self-compassion was measured using the Korean version (Kim, Yi, Cho, Chai, & Lee, 2008) of the Self-Compassion Scale (SCS; Neff, 2003b). This instrument consists of 26 items measured on a 5-point Likert Scale (1 = almost never to 5 = almost always). Six scales comprise the instrument. Sample items are "I try to be loving towards myself when I'm feeling emotional pain" (Self-Kindness Scale, 5 items), "I'm disapproving and judgmental about my own flaws and inadequacies" (Self-Judgment Scale, 5 items), "I try to see my failings as part of the human condition" (Common Humanity Scale, 4 items), "When I fail at something that's important to me, I tend to feel alone in my failure" (Isolation Scale, 4 items), "When something upsets me I try to keep my emotions in balance" (Mindfulness Scale, 4 items), and "When I'm feeling down I tend to obsess and fixate on what is wrong" (Over-Identification Scale, 4 items). Self-compassion as measured by the Korean-version of SCS has been negatively related to depression and anxiety, and positively related to mental health, emotional regulation, and life satisfaction (Kim et al., 2008). In this current study, Cronbach's $\alpha = 0.90$ (M =81.63, SD = 15.41).

2.3.4. Depression

Depression was measured using the Korean version (Chon, Choi, & Yang, 2001) of the Center for Epidemiological Studies-Depression Scale (CES-D) (Radloff, 1977). This measure consists of 20 items assessing the prevalence of depressive symptoms over the previous week on a 4-point Likert scale ($0 \le 1$ day to $4 = most \ or \ all \ of \ the \ time$). A sample item is "I felt depressed". Chon et al. (2001) reported that the Korean version of CES-D had similar construct validity to the CES-D among college students (Radloff, 1977). Cronbach's $\alpha = 0.92$ in this current study (M = 17.81, SD = 10.64).

2.3.5. Anxiety

Anxiety was measured using the Korean version (Kim, 1978) of the State-Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970). This measure is comprised of two scales: the Trait Anxiety Scale (STAI-T) and the State Anxiety Scale (STAI-S); however, based on previous research that links insecure attachment styles with characteristic manifestations of anxiety and excessive rumination (Burnette et al., 2009; Wei et al., 2011), we used only the STAI-T in this current study. The STAI-T assesses the general frequency of anxiety symptoms. It is comprised of 20 items that are rated on a 4-point Likert scale (1 = almost never to 4 = almost always). Among college students, Han, Lee, and Tak (1993) reported that the anxiety as measured by the Korean version of STAI-T has good concurrent validity with anxiety as a personality trait as measured by the Korean version of the Taylor Manifest Anxiety Scale (Taylor, 1951). It also has good concurrent validity with neuroticism as measured by the Korean version of the Maudsley Medical Questionnaire (Eysenck, 1952). In the present study, Cronbach's $\alpha = 0.94$ (M =43.33, SD = 10.22).

2.4. Data analysis

Both the measurement and structural models were evaluated using the Root Mean Square Error of Approximation (RMSEA), the Comparative Fit Index (CFI), and the Tucker Lewis Index (TLI). RMSEA <0.10 indicates an acceptable fit to the data (Browne & Cudeck, 1993). For TFI and CLI, values closer to 1 indicate a better fit (Bollen, 2002). The Akaike Information Criterion (AIC) and the Bayesian Information Criterion (BIC) were used to determine fit superiority between the hypothesized model and the alternative model, with lower AIC and BIC values indicating better fit (Kenny, 2015).

3. Data analysis

3.1. Preliminary analyses

Data were normally distributed. Males reported significantly greater fear of self-compassion than females, F(1,471) = 6.690, p = 0.01. There were no significant group differences among any other variables.

3.2. Measurement model

Three item parcels were created for five of study variables, anxious attachment, avoidant attachment, fear of self-compassion, depression, and anxiety. We did this to encourage parsimoniousness and reduction in various sources of sampling error, and decrease the chances for residuals to be correlated (MacCallum, Widaman, Zhang, & Hong, 1999). We used random assignment without replacement (Kishton & Widaman, 1994) to create these parcels. Cronbach's α for these parcels was 0.82–0.83, 0.52–0.73, 0.81–0.86, 0.77–0.84, and 0.82–0.87, respectively.

We then created three parcels for self-compassion using Neff's (2003b) theoretical conceptualization of self-compassion being comprised of three, two-dimensional components. Thus, we averaged scores from Self-Kindness and its reverse, Self-Judgment, Common Humanity and its reverse, Isolation, and Mindfulness and its reverse, Over-Identification to create the three measured variables of Self-Kindness, Common Humanity, and Mindfulness. Cronbach's α for these variable pairs was 0.74–0.81.

We used maximum likelihood estimation with no missing data to evaluate the measurement model. Goodness of fit tests of the measurement model demonstrated an acceptable fit to the data, $x^2(120) = 504.037$, p = 0.000, CFI = 0.951, TLI = 0.937, RMSEA = 0.082 [90% CI = 0.075, 0.090]. All loadings of the measured variables on the latent variables were significant at the 0.001 level ($\beta = 0.744$ to 0.947).

4. Results

4.1. Structural models

Analysis of the hypothesized structural model (see Fig. 1) also demonstrated an acceptable fit to the data, $x^2(122)=508.010$, p=0.000, CFI = 0.950, TLI = 0.938, RMSEA = 0.082 [90% CI = 0.075, 0.089]. The structural model was as good a fit as the measurement model to the data ($\Delta X^2=3.973$, df=2, p>0.05) (Hu & Bentler, 1999), and provided a more parsimonious explanation of the data than did the measurement model (O'Rourke & Hatcher, 2013). In the hypothesized model, β weights were significant at the 0.01 level ($\beta=0.100$ to 0.772), except for the β weight for the path from anxious attachment to anxiety ($\beta=0.037$, p>0.05), meaning that this path was fully mediated.

Analysis of the alternative model showed that it also fit the data adequately, $x^2(122) = 542.666$, p = 0.000, CFI = 0.946, TLI = 0.932, RMSEA = 0.085 [90% CI = 0.078, 0.093]. The chi-square difference test between the alternative and measurement models yielded a significant difference. This test indicated that, unlike the hypothesized model, the alternative model did not provide as a good fit to the data as the measurement model, $\Delta x^2 = 38.629$, df = 2, p < 0.01. Moreover, when comparing the hypothesized and alternative structural models, the hypothesized model had lower AIC and BIC than the alternative model did (hypothesized model AIC = 606.010 & BIC = 809.806; alternative model AIC = 640.666 & BIC = 844.462). Thus, we judged that the hypothesized model provided a better fit to the data than did the alternative model, and therefore we only examined the mediation chains in the hypothesized model.

We analyzed 1000 bootstrap samples using user-defined estimands. We found that the serial mediation of fear of self-compassion and self-compassion and the mediating effect of self-compassion were significant for all paths at the 0.01 level.

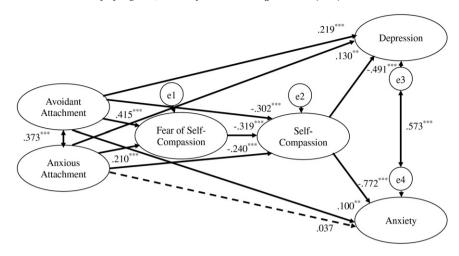


Fig. 1. The hypothesized model Note: p < 0.05, p < 0.01, p < 0.01.

5. Discussion

This study aimed to investigate the mediating roles of fear of self-compassion and self-compassion in the relationships between insecure attachment and emotional distress. The paths from anxious attachment to depression and from avoidant attachment to depression were each partially mediated by self-compassion as a stand-alone mediator. Both of these paths were also partially mediated serially by the fear of self-compassion and self-compassion. In addition, the path from avoidant attachment to anxiety was partially mediated by self-compassion as a stand-alone mediator, and also partially mediated serially by fear of self-compassion and self-compassion. Finally, the path from anxious attachment to anxiety was fully mediated by the stand-alone mediator, self-compassion. It was also fully mediated by the serial mediators of fear of self-compassion and self-compassion and self-compassion and self-compassion.

When considering relationships explained by self-compassion as a stand-alone mediator, results of this research indicated that anxious and avoidant attachment styles were associated with less self-compassion, and concomitantly with greater anxiety and depression. These results were supported by findings from various prior studies. For example, insecurely attached people have been shown to experience more anxiety and depression, and also to have less self-compassion, than securely attached people (Hankin et al., 2005; Pepping, Davis, O'Donovan, & Pal, 2015). Additionally, greater self-compassion has been associated with less emotional distress (e.g., Pepping et al., 2015; Raque-Bogdan et al., 2011; Wei et al., 2011); and the practice of self-compassion, which is under the intentional control of the individual, has been shown to lead to less depression and greater happiness (Shapira & Mongrain, 2010). Thus, the results of this current study suggest that if individuals who have insecure attachment styles exercise self-kindness and mindfulness, and if they perceive that their pain and struggle are the same pain and struggle experienced by all humanity (Neff, 2003a, 2003b), they are more likely to be able to manage depression and anxiety.

When considering relationships explained by fear of self-compassion and self-compassion as serial mediators, results of this research also indicated that fear of self-compassion was associated negatively with self-compassion as these variables predicted greater anxiety and depression. These results were supported by previous studies that suggest that people who are anxiously or avoidantly attached are afraid of self-compassion because they fear being emotionally hurt (Mikulincer & Shaver, 2007). In addition, these results were aligned with the results of prior studies indicating that a) both the fear of self-compassion and self-compassion are related to insecure attachment and to depression

and anxiety (Gilbert et al., 2011), and that b) the fear of self-compassion and self-compassion serially mediate the path between self-criticism and depression (Joeng & Turner, 2015). Thus, there is mounting evidence that greater fear of self-compassion is related to less self-compassion, and that these variables together play a role in the development and maintenance of emotional distress among insecurely attached adults.

Finally, differences were found between the paths from anxious and avoidant attachment to anxiety, with self-compassion, and with the fear of self-compassion and self-compassion fully mediating the path from anxious attachment to anxiety, but partially mediating the path from avoidant attachment to anxiety. This suggests that self-compassion and fear of self-compassion might operate differently depending on whether those who are facing anxiety are anxiously or avoidantly attached (e.g., Mikulincer & Shaver, 2007).

Reasons for this finding may be gleaned from prior studies. For example, one study found that those individuals who are anxiously attached had little capacity for coping with anxiety due to their inability to self-sooth (Pepping et al., 2015). Thus, reducing their fear of self-compassion and increasing their self-compassion could effectively ameliorate their anxiety. However, those individuals who are avoidantly attached tend to be defensive when anxious. They are likely to suppress feelings of vulnerability and deny their need for compassion when faced with anxiety producing situations (Pepping et al., 2015). Thus, they may also need to accept their feelings of vulnerability as well as reduce their fear of self-compassion and increase their self-compassionate behavior in order to effectively manage their anxiety. Future research will need to be conducted to confirm each of these hypothesized mediational chains, and to ascertain whether there are other variables moderating them as well.

The results of this study may be influenced by the culture of the participants. The magnitude of one's self-compassion and fear of self-compassion can be determined in part by the specific features of one's cultural beliefs and practices (Neff, Pisitsungkagarn, & Hsieh, 2008). For example, in one study, Taiwanese students reported lower levels of self-compassion than did Thai and American students (Neff et al., 2008), which was interpreted to mean that the influence of Confucian principles in Taiwanese culture encourages perfectionism and communal endeavor (i.e., valuing others' more than valuing oneself). Since Confucianism is also a major shaper of culture, morality, and social relationships in Korea (Stankov, 2010), it is likely that these same principles encourage Korean college students to approach self-compassion with apprehension and fear. Future research is warranted in order to ascertain the effect of culture on the mediation effects of fear of self-compassion and self-compassion on depression and anxiety among anxiously and avoidantly attached individuals.

5.1. Limitations and directions for future research

Causality among the study variables cannot be assumed. Use of cross-sectional data to test a mediation model could result in an overestimation of temporal mediational effects (MacKinnon, Coxe, & Baraldi, 2012). Future studies should focus on longitudinal and experimental designs in order to verify the directionality of variable relationships. Finally, future research should include cross-cultural differences and the use of culture as a moderating variable in investigations of self-compassion, fear of self-compassion, insecure attachment types and emotional distress.

6. Conclusion

This study further clarifies and extends research regarding the mechanisms underlying relationships between two types of insecure attachment, avoidant and anxious attachment, and emotional distress as measured by depression and anxiety. It also contributes to the emerging literature base in this area and can provide direction for future studies focusing on ways that fear of self-compassion and self-compassion contribute to psychological distress. This study also contributes to the literature regarding self-compassion and fear of self-compassion in a context other than a Western culture. Finally, the results of the study provide us with greater clarity concerning of how the fear of self-compassion and self-compassion mediate depression and anxiety among insecurely attached individuals.

Ethical statement

- Authorship of the paper: The authorship of this paper was limited to those who made a significant contribution to the conception, design, execution, or interpretation of the reported study.
- Originality and plagiarism: The authors ensure that we have written
 entirely original works, and if the authors have used the work and/or
 words of others, that this has been appropriately cited or quoted.
- Data access and retention: If requested, we are willing to provide the raw data in connection with a paper for editorial review, and we are prepared to provide public access to such data.
- Multiple, redundant or concurrent publication: The authors have not published any manuscripts describing essentially the same research in any journal of primary publication.

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- **Disclosure and conflicts of interest:** No relationships exist that could be viewed as presenting a potential conflict of interest.
- Reporting standards: The authors have presented an accurate account of the work performed as well as an objective discussion of its significance.
- Hazards and human or animal subjects: The authors followed all
 ethical guidelines of the American Psychological Association
 concerning conducting research with human subjects. The first author
 obtained appropriate authorization to conduct research from her university. Informed consent was appropriately obtained, and all human
 subjects provided informed consent prior to participating in the
 research.

References

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411–423. http://dx.doi.org/10.1037/0033-2909.103.3.411.

- Barnard, L. K., & Curry, J. F. (2011). Self-compassion: Conceptualizations, correlates, & interventions. Review of General Psychology, 15, 289–303. http://dx.doi.org/10.1037/a0025754.
- Bollen, K. A. (2002). Latent variables in psychology and the social sciences. *Annual Review of Psychology*, 53, 605–634. http://dx.doi.org/10.1146/annurev.psych.53.100901. 135239.
- Bowlby, J. (1980). Attachment and loss: Vol. 3. Loss: Sadness and depression. New York: Basic.
- Browne, M. W., & Cudeck, R. (1993). Alternate ways of assessing model fit. In K. A. Bollen, & J. S. Long (Eds.), *Testing structural equation models* (pp. 137–138). London: Sage Ltd.
- Burnette, J. L., Davis, D. E., Green, J. D., Worthington, E. L., & Bradfield, E. (2009). Insecure attachment and depressive symptoms: The mediating role of rumination, empathy, and forgiveness. Personality and Individual Differences, 46, 276–280. http://dx.doi. org/10.1016/j.paid.2008.10.016.
- Campbell, D. R., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56, 81–105. http://dx.doi.org/ 10.1037/h0046016.
- Chon, K. K., Choi, S., & Yang, B. (2001). Integrated adaptation of CES-D in Korea. *Korean Journal of Health Psychology*, 6, 59–76 Retrieved from http://kisseng.kstudy.com
- Collins, N. L., & Read, S. J. (1994). Cognitive representations of attachment: The structure and function of working models. In K. Bartholomew, & D. Perlman (Eds.), Attachment processes in adulthood (pp. 53–90). London, England: Jessica Kingsley Publishers.
- Eysenck, H. J. (1952). The scientific study of personality. London: Routledge & Kegan Paul. Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. Journal of Personality and Social Psychology, 78, 350–365. http://dx.doi.org/10.1037//0022-3514.78.2.350.
- Gilbert, P. (2010). Compassion focused therapy: Distinctive features. London: Routledge. Gilbert, P., McEwan, K., Matos, M., & Rivis, A. (2011). Fears of compassion: Development
- Gilbert, P., McEwan, K., Matos, M., & Rivis, A. (2011). Fears of compassion: Development of three self-report measures. *Psychology and Psychotherapy: Theory, Research and Practice*, 84, 239–255. http://dx.doi.org/10.148/147608310X526511.
- Han, D. U., Lee, C. H., & Tak, J. K. (1993). The validation of the Korean-version of Spielberger's STAI. Journal of Student Guidance, 10, 214–222 Retrieved from http:// kisseng.kstudy.com/
- Hankin, B. L., Kassel, J. D., & Abela, J. R. Z. (2005). Adult attachment dimensions and specificity of emotional distress symptoms: Prospective investigations of cognitive risk and interpersonal stress generation as mediating mechanisms. Personality and Social Psychology Bulletin, 31, 136–151. http://dx.doi.org/10.1177/0146167204271324.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling, 6, 1–55. http://dx.doi.org/10.1080/10705519909540118.
- Joeng, J. R., & Turner, S. L. (2015). Mediators between self-criticism and depression: Fear of compassion, self-compassion, and importance to others. *Journal of Counseling Psychology*, 62, 453–463. http://dx.doi.org/10.1037/cou0000071.
- Joeng, J., Choi, S. A., Kim, E., Lee, Y. J., & Kim, J. K. (2015). Validation study of the Korean version of the fear of compassion scales. The Korean Journal of Counseling and Psychotherapy, 27, 881–903 Retrieved from http://kiss.kstudy.com/
- Kenny, D. A. (2015). Measuring model fit. Retrieved from http://davidakenny.net/cm/fit.htm Kim, J. T. (1978). The relation between trait anxiety and social abilities: Focusing on Spielberger's STAI. Unpublished master's thesis Seoul, South Korea: Korea University.
- Kim, S. H. (2004). Adaptation of the experiences in close relationships-revised scale into Korean: Confirmatory factor analysis and item response theory approaches. Unpublished master's thesis Seoul, South Korea: Seoul National University.
- Kim, K., Yi, G., Cho, Y., Chai, S. J., & Lee, W. (2008). The validation study of the Korean version of the self-compassion scale. *Korean Journal of Health Psychology*, 13, 1023–1044 Retrieved from http://kisseng.kstudy.com
- Kishton, J. M., & Widaman, K. F. (1994). Unidimensional versus domain representative parceling of questionnaire items: An empirical example. *Educational and Psychological Measurement*, 54, 757–765. http://dx.doi.org/10.1177/0013164494054003022.
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. Psychological Methods, 4, 84–99.
- MacKinnon, D., Coxe, S., & Baraldi, A. N. (2012). Guidelines for the investigation of mediating variables in business research. *Journal of Business and Psychology*, 27, 1–14. http://dx.doi.org/10.1007/s10869-011-9248-z.
- Mikulincer, M., & Shaver, P. R. (2007). Attachment in adulthood: Structure, dynamics, and change. New York, NY: Guilford Press.
- Mikulincer, M., Shaver, P. R., & Pereg, D. (2003). Attachment theory and affect regulation: The dynamics, development, and cognitive consequences of attachment-related strategies. *Motivation and Emotion*, 27, 77–102. http://dx.doi.org/10.1023/A: 1024515519160.
- Neff, K. D. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. Self and Identity, 2, 85–101. http://dx.doi.org/10.1080/15298860390129863.
- Neff, K. D. (2003b). The development and validation of a scale to measure self-compassion. Self and Identity, 2, 223–250. http://dx.doi.org/10.1080/15298860390209035.
- Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal of Research in Personality*, 41, 139–154. http://dx.doi.org/10.1016/j.jrp.2006.03.004.
- Neff, K. D., Pisitsungkagarn, K., & Hsieh, Y. (2008). Self-compassion and self-construal in the United States, Thailand, and Taiwan. *Journal of Cross-Cultural Psychology*, 39, 267–285. http://dx.doi.org/10.1177/0022022108314544.
- O'Rourke, N., & Hatcher, L. (2013). A step-by-step approach to using SAS® for factor analysis and structural equation modeling (2nd ed.). Cary, NC: SAS Institute, Inc.
- Pauley, G., & McPherson, S. (2010). The experience and meaning of compassion and self-compassion for individuals with depression or anxiety. Psychology and Psychotherapy: Theory, Research and Practice, 83, 129–143. http://dx.doi.org/10.1348/1476-83-0X471000.

- Pepping, C., Davis, P., O'Donovan, A., & Pal, J. (2015). Individual differences in self-compassion: The role of attachment and experiences of parenting in childhood. *Self and Identity*, 14, 104–117. http://dx.doi.org/10.1080/15298868.2014.955050.
- Pietromonaco, P. R., & Barrett, L. F. (2000). The internal working models concept: What do we really know about the self in relation to others? *Review of General Psychology*, 4, 155–175. http://dx.doi.org/10.1037//1089-2680.4.2.155.
- Radloff, L. S. (1977). The CES-D scale: A self-report, depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385–401. http://dx.doi. org/10.1177/014662167700100306.
- Raque-Bogdan, T. L., Ericson, S. K., Jackson, J., Martin, H. M., & Bryan, N. A. (2011). Attachment and mental and physical health: Self-compassion and mattering as mediators. *Journal of Counseling Psychology*, 58, 272–278. http://dx.doi.org/10.1037/a0023041.
- Rockcliff, H., Gilbert, P., McEwan, K., Lightman, S., & Glover, D. (2008). A pilot exploration of heart rate variability and salivary cortisol responses to compassion-focused imagery. Clinical Neuropsychiatry. 5, 132–139.
- ery. Clinical Neuropsychiatry, 5, 132–139.

 Shapira, L. B., & Mongrain, M. (2010). The benefits of self-compassion and optimism exercises for individuals vulnerable to depression. The Journal of Positive Psychology, 5, 377–389. http://dx.doi.org/10.1080/17439760.2010.516763.

- Spielberger, C. D., Gorsuch, R. L., & Lushene, R. E. (1970). Manual for the state-trait anxiety inventory. Palo Alto, CA: Consulting Psychologists Press.
- Stankov, L. (2010). Unforgiving Confucian culture: A breeding ground for high academic achievement, test, anxiety, and self-doubt? *Learning and Individual Differences*, 20, 555–563. http://dx.doi.org/10.1016/j.lindif.2010.05.003.
- Taylor, J. A. (1951). The relationship of anxiety to the conditioned eyelid response. *Journal of Experimental Psychology*, 42, 183–188 10/1037/h0059488.
 Wei, M., Mallinckrodt, B., Larson, L. M., & Zakalik, R. A. (2005). Adult attachment, depres-
- Wei, M., Mallinckrodt, B., Larson, L. M., & Zakalik, R. A. (2005). Adult attachment, depressive symptoms, and validation from self versus others. *Journal of Counseling Psychology*, 52, 368–377. http://dx.doi.org/10.1037/0022-0167.52.3.368.
- Wei, M., Liao, K. Y., Ku, T., & Shaffer, P. A. (2011). Attachment, self-compassion, empathy, and subjective well-being among college students and community adults. *Journal of Personality*, 79, 191–221. http://dx.doi.org/10.1111/j.1467-6494.2010.00677.x.