



Antecedents, correlates, and consequences of feeling like you don't matter: Associations with maltreatment, loneliness, social anxiety, and the five-factor model



Gordon L. Flett ^{a,*}, Abby L. Goldstein ^b, Ingrid G. Pechenkov ^a, Taryn Nepon ^a, Christine Wekerle ^c

^a York University, Canada

^b Ontario Institute for Studies in Education, University of Toronto, Canada

^c McMaster University, Canada

ARTICLE INFO

Article history:

Received 15 July 2015

Received in revised form 4 December 2015

Accepted 9 December 2015

Available online xxxx

Keywords:

Mattering

Childhood maltreatment

Loneliness

Social anxiety

Five-factor model

ABSTRACT

While mattering to others is regarded as an essential element of personal adjustment, relatively little is known about the developmental origins and psychosocial correlates of mattering. The current research examined the extent to which a reported history of childhood maltreatment contributed to feelings of not mattering to others. We also examined the associations between mattering and measures of psychosocial adjustment (i.e., loneliness and social anxiety) and whether low perceived mattering was associated with these indices of adjustment after controlling for variance attributable to the broad personality traits comprising the five-factor model. A sample of 232 university students completed a general mattering measure and scales tapping childhood maltreatment, the five-factor model, loneliness, and social anxiety. As expected, mattering was associated negatively with reports of emotional maltreatment and emotional neglect with the strongest association being with emotional neglect. Additionally, low mattering was associated with loneliness and social anxiety and these findings held after taking into account the clear links that reduced mattering had with low extraversion and high neuroticism. We also showed that mattering mediates the links that maltreatment has with both loneliness and social phobia. The results illustrate the interpersonal antecedents and correlates of feeling insignificant and unimportant to other people.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

Research on abuse experienced during childhood and adolescence is replete with studies documenting consequences reaching into adulthood. Various forms of maltreatment and related adverse experiences early in life have been linked consistently with a host of negative outcomes including poor adjustment and greater psychological distress later in life (see Widom, 2014). Moreover, several studies now attest to the neurobiological consequences of maltreatment (Dannowski, Stuhmann, Beutelmann, Zwanzger, et al., 2012).

In the current paper, we examine how various forms of childhood maltreatment can lead to the perceived sense that one does not matter to others, and we demonstrate that the associations between childhood maltreatment and mattering are not simply a reflection of variance attributable to the personality trait dimensions captured by the five-factor model of personality. Although mattering has received constant attention in the literature over the last three decades, work on the mattering construct is limited in scope in some key respects. The current

study examined key unaddressed issues involving the etiology of individual differences in mattering. We also investigated the links that mattering has with critical psychosocial outcome variables (i.e., loneliness and social anxiety) and we conduct an initial test of the possibility that mattering is a key psychological resource that mediates the proposed link that low levels of mattering have with loneliness and social anxiety. This possibility would be in keeping with the general notion that the availability of important social supports plays a protective role when a person is confronted with adversity.

What is mattering? Rosenberg and McCullough (1981) first conceptualized mattering as the sense that other people depend on us, are interested in us, and actively care about what happens to us. This sense of mattering is viewed as a major component of the self that is related to, but distinguishable from, self-esteem. While much is known about the antecedents of self-esteem, relatively little is known about the developmental antecedents of mattering. One plausible hypothesis is that a history of being mistreated by others contributes to a sense of not mattering. To our knowledge, this basic premise has not been empirically evaluated, with the exception of data suggesting that girls in mutually violent relationships, relative to girls who had not experienced violence, tended to report lower levels of mattering in their communities (see Chiodo et al., 2012). In light of these observations, as indicated above,

* Corresponding author at: Department of Psychology, York University, 4700 Keele Street, Toronto, Ontario M3J 1P3, Canada.

E-mail address: gflett@yorku.ca (G.L. Flett).

the current study was designed to test some basic hypotheses related to the development of mattering and the likely psychosocial correlates of mattering. The notion that a history of childhood maltreatment is linked negatively with perceived mattering is in keeping with various conceptual models. For instance, according to symbolic interaction theorists (e.g., Baldwin, Cooley, and Mead), views of how the self is regarded by others are inferred from how people interact with us, especially in terms of verbal exchanges (for an overview, see Harter, 1999). It follows from this perspective that harsh interactions involving maltreatment should result in negative appraisals of mattering. What is less obvious is whether mattering is impacted to a comparable degree by physical, sexual, and emotional abuse, and whether more blatant forms of maltreatment have a stronger link with mattering than does emotional neglect. Our sense is that emotional abuse is particularly relevant to developing a low sense of mattering, in keeping with the psychological impact of negative social exchanges. Similarly, a history of emotional neglect should be particularly salient in the sense of not mattering to others. Indeed, one team of researchers who documented the highly destructive impact of childhood neglect among a sample of at-risk women concluded that “One of the uniquely harmful aspects of being neglected is the implied message that one does not matter, that one’s needs – like oneself – are insufficiently important to be attended to” (see Klein, Elifson, & Sterk, 2007, p. 49). The issues discussed above were explored in the current study by including a multifaceted maltreatment measure that assessed abuse and neglect.

As noted earlier, the current study also evaluated the extent to which mattering is associated negatively with key indices of poor psychosocial adjustment. Our emphasis on the associations that mattering has with loneliness and social anxiety was guided by several considerations. First, both loneliness and social phobia are associated with a host of negative consequential outcomes. For instance, longitudinal work has linked loneliness with health problems and earlier mortality (Cacioppo & Cacioppo, 2014), while persistent social phobia is seen as a contributor to various negative outcomes including unemployment, educational impairment, school dropout, physical health problems, and a lower quality of life (see Ranta, Kaitiala-Heino, Rantanen, & Marttunen, 2009; Stansfeld, Clark, Rodgers, & Caldwell, 2008; Stein & Kean, 2000). As for why mattering should be associated with lower levels of loneliness and social anxiety, feelings of mattering can promote a very positive sense of the self, but loneliness and social anxiety are associated with highly negative views of the self and less than ideal personal attributes (see Flett & Hewitt, 2014). People who have a strong sense of mattering should have some degree of confidence in interacting with others and they should be relatively low in social anxiety and loneliness. In contrast, people who feel like they don’t matter to others are likely to have the kind of negative personal identity that often underscores the self-views of people suffering from loneliness and social anxiety. Parenthetically, it should be noted that links have been established between not mattering and anxiety in general (see Dixon, Scheidegger, & McWhirter, 2009; Rosenberg & McCullough, 1981), but the proposed negative association between mattering and social anxiety has not been studied, with the exception of a recent study showing that mattering was linked negatively with social anxiety and social phobia in a sample of adolescents from China (Flett, Su, Ma, & Guo, 2014). This negative association between mattering and social anxiety should be generalizable and detectable in an individualistic culture as well.

The notion that mattering also mediates the association between maltreatment and poor psychosocial adjustment is consistent with our contention that mattering is a powerful psychological resource that acts as a resilience factor and coping resource. The sense of connection and care that comes from mattering to someone can conceivably go a long way toward lessening the impact of a prior history of maltreatment; for instance, someone who has been emotionally neglected is now having the need for care and warmth being addressed. Although this seems quite plausible, to our knowledge, previous researchers have not investigated the protective mediating role of mattering.

As alluded to earlier, in certain analyses reported below, we took into account the variance attributable to the five-factor model trait dimensions. This approach was taken in order to demonstrate the unique association between mattering and the psychosocial variables. However, we also included a brief measure of the five-factor model due to the general paucity of five-factor analyses of the mattering construct. At present, the extent to which mattering relates to broad trait dimensions is unknown. A broader understanding of the nature of individual differences in mattering is possible by examining its link with broader trait frameworks.

We tested these proposed associations in a sample of university students. Although difficult to estimate, college students have been reported to have considerable prevalence rates of childhood abuse (see Briere & Runtz, 1988; Graziano & Namaste, 1990).

2. Method

2.1. Participants

The sample consisted of 232 undergraduate students (91 men, 155 women, one undeclared). Their mean age was 20.3 years. Participants were paid \$10. Questionnaire booklets were administered to small groups of participants during scheduled research sessions. Participants were provided with a list of relevant community resources upon completion of the questionnaire and a consent form.

2.2. Measures

2.2.1. The General Mattering Scale (RMS; Rosenberg & McCullough, 1981)

The General Mattering Scale is a five-item measure of how much one perceives they matter to others. A sample item is, “How important do you feel you are to other people?” Respondents are required to indicate their level of agreement with each item on a Likert scale ranging from 1 (*A lot*) to 4 (*Not at all*). This measure has shown good internal consistency with an alpha coefficient of .85 (Taylor & Turner, 2001). Factor analysis confirmed that this measure is unidimensional with factor loadings ranging from .63 to .79 (Taylor & Turner, 2001) and all items have been shown to have moderate relation to one another (DeForge & Barclay, 1997; Taylor & Turner, 2001).

2.2.2. The Childhood Trauma Questionnaire (CTQ; Bernstein & Fink, 1998)

The CTQ is a 28-item screening tool used to screen people who have had childhood abuse and neglect, which assesses the five types of maltreatment: emotional, physical, and sexual abuse; emotional and physical neglect. Each item refers to childhood events of abuse and/or neglect. A sample item is, “I got hit so hard by someone in my family that I had to go see a doctor or go to the hospital.” Each item is scored using a five-point Likert scale (1 = *Never true* to 5 = *Always true*). The CTQ is reported to have good reliability and validity by independent studies (e.g. Paivio & Cramer, 2004; Scher, Stein, Asmundson, McCreary, & Forde, 2001; Wright et al., 2001).

2.2.3. UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980)

The UCLA Loneliness Scale is a 20-item self-report measure of loneliness as a function of desired and actual levels of social interaction. The internal consistency of this scale is reported to be between .89 and .94 across various populations including college students, nurses, and teachers (Russell & Cutrona, 1988), and has a test-retest reliability of .73 (Russell, Peplau, & Ferguson, 1978).

2.2.4. Social Phobia Inventory (SPIN; Connor et al., 2000)

The SPIN is a 17-item self-report scale assessing social phobia symptoms experienced over the past week. Items focus on the three components of fear, avoidance, and physiological arousal. Initial scale development work indicated that the scale has adequate internal consistency and discriminant validity. Clinical research indicates that the

SPIN is useful in assessing clinical levels of social phobia and treatment-related changes (Antony, Coons, McCabe, Ashbaugh, & Swinson, 2006).

2.2.5. Ten Item Personality Inventory (TIPI; Gosling, Rentfrow, & Swann, 2003)

The TIPI is a 10-item measure of extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience. This scale uses two items from each of the five domains. TIPI has adequate levels of convergent and discriminant validity as well as test–retest reliability (Gosling et al., 2003). For instance, Gosling et al. (2003) found convergent validity for the TIPI as each dimension was highly correlated ($r = .65$ to $r = .87$) with the corresponding personality dimensions from the 44-item Big Five Inventory (John & Srivastava, 1999).

3. Results

3.1. Zero order correlations

Table 1 presents the correlations with mattering, for men and women separately, and for the total sample. It can be seen that mattering was correlated negatively and significantly with all forms of childhood maltreatment for the total sample with the exception of sexual abuse, which was associated with reduced mattering only for women, $r = -.17$, $p < .05$. Correlations found with mattering were notably higher for women with a reported history of emotional abuse, $r = -.39$, $p < .01$, and emotional neglect, $r = -.52$, $p < .01$.

As shown in Table 1, the relations between mattering and conscientiousness, agreeableness, openness, and extraversion were positive and significant, and the correlation with neuroticism was negative and significant. The strongest associations were found between mattering and elevated levels of extraversion, $r = .37$, $p < .01$, and between mattering and lower levels of neuroticism, $r = -.33$, $p < .01$.

Finally, in terms of interpersonal outcomes, as indicated in Table 1, there was a particularly robust negative association between mattering and loneliness, $r = -.65$, $p < .01$. There was also a negative association between mattering and social anxiety, $r = -.44$, $p < .01$. The pattern of findings again indicated stronger associations among women.

3.2. Regression analysis

Table 2 presents the results of a multiple regression in which the role of mattering and the Big Five personality variables on loneliness and social anxiety were examined. The first analysis examined loneliness as the outcome measure. To test whether mattering predicts unique variance in loneliness and social anxiety, we examined mattering in a block of predictors along with the Big Five domains of personality. The

Table 1
Correlations with mattering for total sample, men, and women.

| | Total | Men | Women | M | SD |
|------------------------|--------|--------|--------|------|------|
| Maltreatment measure | | | | | |
| Physical neglect | -.23** | -.05 | -.33** | 6.8 | 2.6 |
| Physical abuse | -.18** | -.17 | -.18* | 7.0 | 3.1 |
| Sexual abuse | -.10 | -.03 | -.17* | 6.3 | 3.7 |
| Emotional abuse | -.30** | -.21* | -.39** | 8.9 | 4.3 |
| Emotional neglect | -.40** | -.22* | -.52** | 9.5 | 4.5 |
| Personality measure | | | | | |
| Extraversion | .37** | .35** | .37** | 8.9 | 2.8 |
| Agreeableness | .22** | .16 | .23** | 9.6 | 2.2 |
| Conscientiousness | .18** | .03 | .27** | 10.3 | 2.6 |
| Neuroticism | -.33** | -.31** | -.40** | 6.9 | 2.8 |
| Openness | .29** | .27* | .30* | 10.8 | 2.3 |
| Interpersonal outcomes | | | | | |
| Loneliness | -.65** | -.65** | -.66** | 41.9 | 10.5 |
| Social phobia | -.44** | -.39** | -.56** | 18.9 | 12.6 |

Note: $N = 232$.

** $p < .01$.

* $p < .05$.

Table 2
Multiple regression analyses predicting loneliness and social phobia.

| Variable | Loneliness | | Social phobia | |
|---------------------|------------|---------|---------------|---------|
| | β | t | β | t |
| Mattering | -.46 | -8.50** | -.22 | -3.57** |
| Personality measure | | | | |
| Extraversion | -.26 | -5.21** | -.30 | -5.26** |
| Agreeableness | -.08 | -1.72 | .12 | 2.24* |
| Conscientiousness | -.04 | -0.75 | -.08 | -1.53 |
| Neuroticism | .20 | 3.91** | .28 | 4.83** |
| Openness | -.00 | -0.04 | -.14 | -2.47* |

Note: $N = 232$.

** $p < .01$.

* $p < .05$.

analysis predicting loneliness found that the predictors accounted for 52% of the variance. As seen in Table 2, mattering significantly predicted loneliness when considered along with these other predictors. Indeed, mattering was the most robust predictor.

Next, the same analysis was conducted to predict levels of social anxiety. Overall, a significant 39% of the variance was predicted. As seen in Table 2, mattering, extraversion, neuroticism, and openness to experience were significant predictors of social anxiety. However, in this instance, mattering was significant but not the most robust predictor.

3.3. Mediation analyses

A structural equation model was tested with AMOS Version 18 software to test if mattering mediates the links that maltreatment has with loneliness and social phobia (see Fig. 1). In this model, the predictor was a latent maltreatment variable comprising physical neglect, physical abuse, sexual abuse, emotional abuse, and emotional neglect. The mediator in this model was mattering, and the outcomes were loneliness and social phobia. The correlation between loneliness and social phobia was also accounted for in this model. This model was a good fit to the data, $\chi^2(17) = 29.05$, $p = .034$, CFI = .98, TLI = .97, SRMR = .03, RMSEA = .06, 90% CI = .02, .09, $p_{close} = .362$. Maltreatment was negatively linked with mattering, which was, in turn, negatively related to both loneliness and social phobia. Maltreatment remained significantly and positively linked with loneliness and social phobia when the mediator (i.e., mattering) was included in the model. Lastly, loneliness and social phobia were positively correlated ($r = .29$, $p < .001$), as expected.

To test if the indirect (i.e., mediated) effects of maltreatment on loneliness and social phobia through mattering were significant, 2000 bootstrap samples were generated to obtain 95% bias-corrected bootstrap confidence intervals. The 95% confidence interval for the mediated effect of maltreatment on loneliness through mattering was .40 to .89, and the 95% confidence interval for the mediated effect of maltreatment on social phobia through mattering was .27 to .81. Because both of these intervals do not contain zero, the indirect effects were both significant. Thus, mattering mediated the links between maltreatment and both loneliness and social phobia.

4. Discussion

The current study addressed several unique issues pertaining to individual differences in mattering. Our central focus was on the proposed association between mattering and a history of maltreatment. Our results confirmed that a reduced level of mattering was associated with various forms of maltreatment. Analyses indicated that emotional abuse, physical abuse, and sexual abuse were all associated negatively with mattering in young women, with the strongest association found with emotional abuse. In contrast, among young men, the negative association with mattering was evident only with emotional abuse. Perhaps not surprisingly, the strongest association we found with the

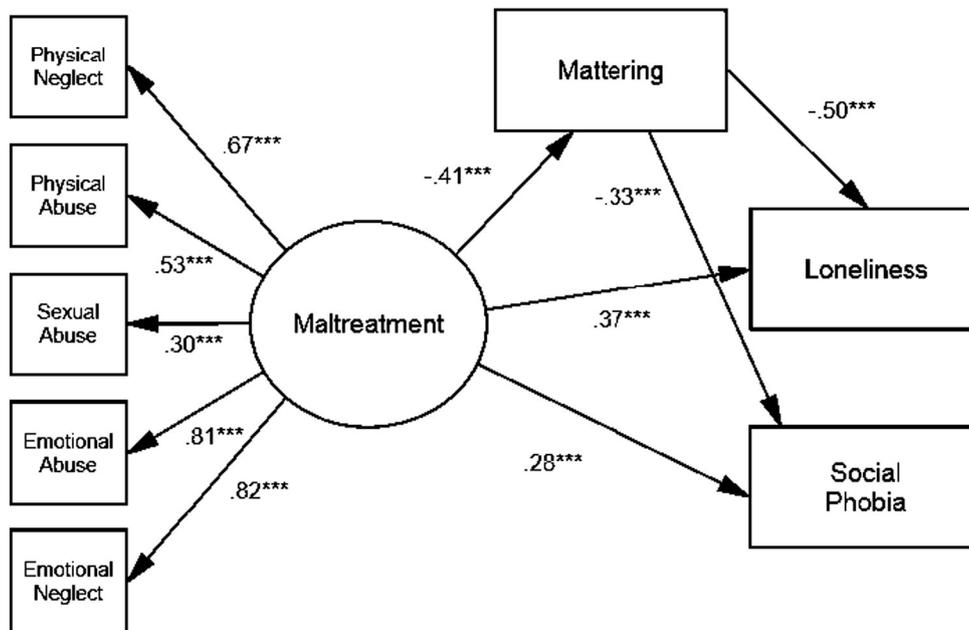


Fig. 1. Final model of maltreatment, mattering, loneliness, and social phobia. Note. *** $p < .001$. Standardized parameter estimates are shown. Error terms and the correlation between loneliness and social phobia have been omitted for ease of presentation.

maltreatment measures was between emotional neglect and reduced mattering, and among young women, both emotional neglect and physical neglect had negative correlations with mattering that were somewhat more robust than the negative links that mattering had with emotional, physical, and sexual abuse.

Although we did not explicitly test it in the current study, the pattern of results found with the various measures of maltreatment point to the possibility that the sense of not mattering will be highly salient for those unfortunate individuals who experience multiple forms of maltreatment, including physical or sexual abuse along with emotional neglect and emotional maltreatment. While our results address a clear void in the current literature, it is also evident from the magnitude of the obtained correlations that factors in addition to maltreatment must contribute to the development of a sense of mattering or not mattering, given that substantial variance in mattering still remains to be accounted for.

Additional analyses highlighted how deleterious a sense of not mattering can be in terms of associated psychosocial adjustment outcomes. We found fairly robust negative associations between mattering and both loneliness and social phobia, and these associations were found for both young men and women. Given the evidence cited earlier that loneliness is associated with health problems, it is quite conceivable that a reduced sense of mattering may underscore the link that loneliness has with both psychological distress and health problems. We also found a negative association between mattering and social phobia, thus replicating the results of research conducted in China with adolescents (Flett et al., 2014). There is, of course, an extensive literature that has linked low self-esteem with social anxiety, but to our knowledge, there is little research on the protective role of mattering in social anxiety and social phobia. One way of viewing the current results is that perhaps the social avoidance that characterizes the social phobia and anxiety of some people is clearly rooted in the sense of alienation that comes from the feeling of not mattering and being disconnected from other people. It seems essential to conduct future research that re-examines social anxiety and mattering from a longitudinal perspective involving several waves of data collection, given that social anxiety and social avoidance among people low in mattering likely reflect a longstanding pattern involving reciprocal influences (i.e., not interacting with people further amplifies the sense of not mattering, which, in turn, contributes to more social avoidance).

In addition, our analyses yielded support for a mediational model that links a history of maltreatment, levels of mattering, and both loneliness and social anxiety. One interpretation of our overall results has to do with the benefits that young people experience when someone treats them in a genuine way and promotes the sense that they truly matter. Clearly, there is much to be gained in terms of being buffered from stress and life problems when emerging adults encounter even one caring individual who convinces them that they truly care and they are significant. The association that mattering has with coping styles and coping resources is a topic that has not been addressed in past research; given our current findings, this would seem to be a promising area for future research, especially given suggestions that a sense of mattering is a key psychological resource that promotes resilience (see Flett et al., 2014).

The regression analyses displayed in Table 2 illustrate that the links that mattering has with loneliness and social phobia are not simply due to the associations that mattering, loneliness, and social phobia have with the personality traits comprising the five-factor model. Not surprisingly, the pattern of five-factor correlates that emerged with mattering was generally similar to the pattern found with indices of happiness and well-being; that is, mattering was associated with lower levels of neuroticism and higher levels of extraversion, agreeableness, openness, and conscientiousness. The regression analysis predicting loneliness showed that when all of the predictors were considered simultaneously, loneliness was predicted in the expected directions by mattering, extraversion, and neuroticism; importantly, mattering was the most robust predictor. Similarly, the regression analysis predicting social phobia showed that when all of the predictors were considered simultaneously, social phobia was also predicted in the expected directions by mattering, extraversion, and neuroticism, as well as by openness. However, in this instance, mattering was a significant unique predictor but it was not the most robust predictor.

While the current study addressed some key issues related to mattering and unique findings emerged, the limitations of this study need to be acknowledged. First, the current findings were based on self-report data that may be prone to subjective biases; this issue is always worth considering when self-report measures of maltreatment are included. Second, it is important to re-examine the associations found in the current study with multiple measures of mattering, and, in keeping with our use of the five-factor personality measures, to

then establish whether the associations with maltreatment, loneliness, and social anxiety are evident when other related factors are taken into account, such as self-esteem. It is also important in future research to conduct more fine-grained analyses that take related constructs into account; for instance, both maltreatment and low mattering are likely to involve maladaptive attachments to significant others and related working models of attachment and the self in relation to others. Accordingly, an empirical and conceptual focus on attachment issues should be quite revealing. Finally, the generalizability of these findings needs to be examined in people from various cultures and representing various ages. The need to assess people of varying ages is signified by suggestions that older adults, especially elderly adults, are prone to feelings of loneliness and a sense of social isolation due to developing a reduced sense of mattering (Fazio, 2009).

In summary, the results of the current study confirmed that a reduced sense of mattering is associated with a reported history of maltreatment, with the negative link between mattering and emotional neglect being most robust. Additional results showed that a reduced sense of mattering was associated to a substantial degree with loneliness and social phobia beyond the predictive utility of elements of the five-factor personality model that are linked with mattering, loneliness, and social phobia. Moreover, our data indicate that mattering mediates the links between maltreatment and both loneliness and social phobia. Collectively, our findings suggest that early adverse experiences involving mistreatment can have a substantial and lasting impact on the sense of being significant and cared for by others, and this orientation has negative implications for healthy psychosocial development. The good news is that people characterized by these attributes stand to gain significantly by exploring therapy and counseling contexts that promote a feeling that they matter in a genuine sense.

References

- Antony, M. M., Coons, M. J., McCabe, R. E., Ashbaugh, A., & Swinson, R. P. (2006). Psychometric properties of the Social Phobia Inventory: Further evaluation. *Behaviour Research and Therapy*, 44, 1177–1185.
- Bernstein, D. P., & Fink, L. (1998). *Childhood Trauma Questionnaire: A retrospective self-report manual*. San Antonio, Texas: The Psychological Corporation.
- Briere, J., & Runtz, M. (1988). Multivariate correlates of childhood psychological and physical maltreatment among university women. *Child Abuse and Neglect*, 12, 331–341.
- Cacioppo, J. T., & Cacioppo, S. (2014). Social relationships and health: The toxic effects of perceived social isolation. *Social and Personality Psychology Compass*, 8, 58–72.
- Chiodo, D., Crooks, C. V., Wolfe, D. A., McIsaac, C., Hughes, R., & Jaffe, P. G. (2012). Longitudinal prediction and concurrent functioning of adolescent girls demonstrating various profiles of dating violence and victimization. *Prevention Science*, 13, 350–359.
- Connor, K. M., Davidson, J. R. T., Churchill, L. E., Sherwood, A., Foa, E., & Wesler, R. H. (2000). Psychometric properties of the Social Phobia Inventory (SPIN). *British Journal of Psychiatry*, 176, 379–386.
- Dannlowski, U., Stuhrmann, A., Beutelmann, V., Zwanzger, P., ... Kugel, H. (2012). Limbic scars: Long-term consequences of childhood maltreatment revealed by functional and structural magnetic resonance imaging. *Biological Psychiatry*, 71, 286–293.
- DeForge, B. R., & Barclay, D. M. (1997). The internal reliability of a general mattering scale in homeless men. *Psychological Reports*, 80, 429–430.
- Dixon, A. L., Scheidegger, C., & McWhirter, J. J. (2009). The adolescent mattering experience: Gender variations in perceived mattering, anxiety, and depression. *Journal of Counseling & Development*, 87, 302–310.
- Fazio, E. M. (2009). Sense of mattering in late life. In W. R. Avison, C. S. Aneshenel, S. Schieman, & B. Wheaton (Eds.), *Advances in the conceptualization of the stress process: Essays in honor of Leonard I. Pearlin* (pp. 149–174). New York: Springer.
- Flett, G. L., & Hewitt, P. L. (2014). Perfectionism and perfectionistic self-presentation in social anxiety: Implications for assessment and treatment. In S. Hofmann, & P. DiBartolo (Eds.), *Social anxiety: Clinical, developmental, and social perspectives* (pp. 159–187) (3rd ed.). London: Elsevier.
- Flett, G. L., Su, C., Ma, L., & Guo, L. (2014). Academic buoyancy and mattering as resilience factors in Chinese adolescents: An analysis of shame, social anxiety, and psychological distress. *International Journal of Child and Adolescent Resilience*, 2, 37–45.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A very brief measure of the big-five personality domains. *Journal of Research in Personality*, 37, 504–528.
- Graziano, A. M., & Namaste, K. A. (1990). Parental use of physical force in child discipline. *Journal of Interpersonal Violence*, 5, 449–463.
- Harter, S. (1999). *Construction of the self: A developmental perspective*. New York: Guilford.
- John, O., & Srivastava, S. (1999). The big five trait taxonomy: History, measurement and theoretical perspectives. In L. A. Pervin, & O. P. John (Eds.), *Handbook of personality: Theory and research* (pp. 102–138). New York: Guilford.
- Klein, H., Elifson, K. W., & Sterk, C. E. (2007). Childhood neglect and adulthood involvement in HIV-related risk behaviors. *Child Abuse and Neglect*, 31, 39–53.
- Paivio, S. C., & Cramer, K. M. (2004). Factor structure and reliability of the Childhood Trauma Questionnaire in a Canadian undergraduate student sample. *Child Abuse & Neglect*, 28, 889–904.
- Ranta, K., Kaitiala-Heino, R., Rantanen, P., & Marttunen, M. (2009). Social phobia in Finnish general adolescent population: Prevalence, comorbidity, individual and family correlates, and service use. *Depression and Anxiety*, 26, 528–536.
- Rosenberg, M., & McCullough, C. B. (1981). Mattering: Inferred significance and mental health among adolescents. *Research in Community and Mental Health*, 2, 163–182.
- Russell, D. W., & Cutrona, C. E. (1988). Development and evolution of the UCLA Loneliness Scale. Unpublished manuscript, Center for Health Services Research, College of Medicine, University of Iowa.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology*, 39, 472–480.
- Russell, D., Peplau, L. A., & Ferguson, M. L. (1978). Developing a measure of loneliness. *Journal of Personality Assessment*, 42, 290–294.
- Scher, C. D., Stein, M. B., Asmundson, G. J., McCreary, D. R., & Forde, D. R. (2001). The Childhood Trauma Questionnaire in a community sample: Psychometric properties and normative data. *Journal of Traumatic Stress*, 14, 843–857.
- Stansfeld, S. A., Clark, C., Rodgers, B., & Caldwell, T. (2008). Childhood and adulthood socio-economic position and midlife depressive and anxiety disorders. *British Journal of Psychiatry*, 192, 152–153.
- Stein, M. B., & Kean, Y. M. (2000). Disability and quality of life in social phobia: Epidemiologic findings. *American Journal of Psychiatry*, 157, 1606–1613.
- Taylor, R., & Turner, J. (2001). A longitudinal study of the role and significance of mattering to others for depressive symptoms. *Journal of Health and Social Behavior*, 42, 310–325.
- Widom, C. S. (2014). Long-term consequences of child maltreatment. In J. E. Korbin, R. D. Krugman, & S. Miller-Fellows (Eds.), *Handbook of child maltreatment* (pp. 225–250). New York: Springer Dordrecht Heidelberg.
- Wright, K. D., Asmundson, G. J., McCreary, D. R., Scher, C., Hami, S., & Stein, M. B. (2001). Factorial validity of the Childhood Trauma Questionnaire in men and women. *Depression and Anxiety*, 13, 179–183.