The General Mattering Scale: Mattering Versus Self-Esteem in Predicting Distress and Psychosocial Adjustment Among Early Adolescents from China

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Abstract. *Objectives:* The current research examined the potentially protective role of mattering among early adolescents from China. This study also incorporated a comparative focus on the relative benefits of mattering versus self-esteem. In addition, possible associations of mattering and self-esteem with parental pressures (i.e., parental expectations and parental criticism) were evaluated. *Methods*: A sample of 172 early adolescents from China completed the General Mattering Scale (GMS), the Rosenberg Self-Esteem Scale, and measures of shame, loneliness, depression, anxiety, positive affect, and negative affect. Self-report measures of parental criticism and parental expectations were also completed to assess potential developmental antecedents of mattering. *Results*: General support for the psychometric properties of the GMS as unidimensional was obtained. Mattering was associated significantly with higher levels of positive affect and self-esteem, and lower levels of depression, negative affect, loneliness, and shame. However, mattering was unrelated to anxiety. Regression analyses indicated that mattering did not predict unique variance in depression beyond variance attributable to self-esteem. However, mattering did predict unique variance beyond self-esteem in positive affect, characterological shame, and loneliness. Self-esteem was typically more predictive of various outcome measures. Moreover, relative to mattering, self-esteem had a stronger negative link with parental criticism. *Conclusion and Implications*: The results confirm that mattering is a key protective resource, but it is clearly distinguishable from self-esteem among early adolescents from China. We discuss the need for a comprehensive cross-cultural approach to the study of mattering that considers its antecedents and consequences.

Keywords: Adolescents, Depression, Loneliness, Mattering, Self-esteem, Shame.

Introduction

The current research focuses on the emotional experience and benefits of feeling significant to the people who matter to you. Specifically, we examined individual differences among early adolescents from China in their levels of mattering. It is only in the past decade that research on mattering has begun to take hold even though the concept was introduced over four decades ago. Rosenberg and McCullough (1981) originated the mattering construct. Mattering is the feeling of being important to other people. We feel like we matter when people are paying attention to us and express a sustained interested in us (see Rosenberg & McCullough, 1981). Mattering is also experienced when we feel like others depend on us because we have a meaningful role or place in their lives. Young people will feel like they matter if they believe they are seen, heard, and valued, and others care about them. It is believed that this perceived mattering to others is typically internalized into the self-concept.

Mattering has been described as a powerful and complex construct (see Flett, 2022) with clear implications for the resilience and adaptability of young people (Flett, 2018a). The current research is the third of a series of investigations conducted with children and adolescents in China. The current work uniquely examines mattering in early adolescents from a psychometric focus and also from a substantive focus in terms of its well-being correlates. A central issue of this research was the extent to which mattering could be distinguished from self-esteem. Rosenberg and McCullough (1981) argued in their introductory chapter that mattering can and should be distinguished from self-esteem at the conceptual and empirical levels. They summarized results from four large samples of US adolescents showing that levels of perceived mattering to parents predicted depression after taking into account individual differences in levels of self-esteem. This led them to conclude that mattering is both consequential and unique. Subsequent research with university students from Canada has yielded additional evidence indicating that mattering and self-esteem are distinguishable (see Flett & Nepon, 2020) and research with adolescents from the US found that mattering and self-esteem both predicted unique variance in levels of wellness (see Watson, 2017/2018).

As noted above, the current study is a follow-up to two previous investigations that evaluated mattering and its correlates in Chinese children and adolescents. Flett et al. (2014) examined individual differences in mattering among 232 Chinese high school students from advanced and non-advanced high schools. They completed measures of mattering, depression, shame, and social anxiety. A measure of academic resilience (i.e., academic buoyancy) was also included. Flett et al. (2014) found that mattering was associated significantly with lower levels of depression, shame, and social anxiety and higher levels of academic buoyancy. In general, the results were comparable for students from both advanced and non-advanced high

schools.

A follow-study by this same team of investigators focused on younger participants and took an expanded approach. Flett et al. (2016) assessed individual differences among 218 children from China in Grade 5. This study focused on predictors of depression and included mattering and other potentially positive factors, such as self-esteem and unconditional self-acceptance. Flett et al. (2016) also assessed self-criticism and dependency given their established roles as depressive vulnerability factors. Analyses confirmed that mattering was associated negatively with depression scores, and it was associated positively with self-esteem. Depression was also linked with higher levels of dependency and self-criticism and lower levels of self-esteem and self-acceptance. Although mattering was associated significantly with self-esteem in this sample, it was not associated significantly with self-criticism, dependency, or unconditional self-acceptance. Finally, a regression analysis was conducted and showed that unique variance in depression was predicted by mattering, self-esteem, unconditional self-acceptance, and dependency. Evidence that mattering was not redundant with self-esteem in predicting depression was in keeping with the original work of Rosenberg and McCullough (1981) showing that mattering to parents went beyond self-esteem in predicting depression in large samples of adolescents from the United States.

The specific goals of the current study are outlined in more detail below. Clearly, as noted earlier, a central theme was to compare mattering versus self-esteem. When the broader research literature on Chinese children and adolescents is surveyed in general, it is perhaps here where the greatest difference between research on mattering and self-esteem is most evident. To our knowledge, at least in terms of English-language studies of young people in China, research on mattering is limited thus far to the studies cited above, but there are countless studies of self-esteem. Our decision to emphasize self-esteem versus mattering in the current study reflects intriguing research findings that highlight self-esteem among children and adolescents from China. For instance, it has been established that levels of self-esteem are comparatively lower in adolescents from China versus adolescents from the United States (Chen et al., 2021). Moreover, research has identified meaningful developmental trajectories involving levels of self-esteem (see Huang et al., 2022). This work has three classes including one group of Chinese adolescents with low and stable self-esteem and another group with high but decreasing self-esteem. Finally, in keeping with our emphasis in the current study on parental criticism and high parental expectations, other research has yielded initial evidence of how controlling parenting tendencies can be destructive. Harsh and controlling parenting and parental conflict are linked with lower self-esteem among Chinese adolescents (Bush et al., 2002; Tian et al., 2018; Wang et al., 2016). Collectively, these findings suggest that self-esteem is a highly salient construct among Chinese adolescents and, as a result, it is meaningful to compare and contrast mattering and self-esteem in early

adolescents from China. Given past evidence that mattering is not redundant with self-esteem, one overarching question for our investigation was, "Do levels of mattering predict unique variance in key outcomes beyond self-esteem when several variables are measured in a sample of early adolescents from China?"

To summarize, the current study had several goals. First, we evaluated the psychometric properties of the General Mattering Scale when completed by early adolescents from China. We evaluated among these early adolescents the degree to which mattering is associated with multiple indices of adjustment. Various indicators reflecting personal and psychosocial adjustment were incorporated. Specifically, we assessed levels of depression, anxiety, trait negative affect, and trait positive affect.

Second, we also included measures rooted in psychosocial themes (i.e., shame and loneliness) to evaluate their links with mattering. The previous study by Flett et al. (2014) established a significant negative association between mattering and shame among Chinese high school students. Regarding the association between mattering and loneliness, most research has focused on university students and confirmed that mattering is associated with lower levels of loneliness (e.g., Flett et al., 2016; McComb et al., 2020). To our knowledge, the proposed link between higher levels of mattering and lower levels of loneliness has not been studied in Chinese adolescents. However, Somers et al. (2022) did establish that feelings of not mattering were associated with higher levels of loneliness in high school students from the United States.

The third goal of this research was to examine how two parental variables studied extensively in perfectionism research relate to mattering and, by extension, self-esteem. We focused on parental criticism and high parental expectations. Frost et al. (1990) proposed these dimensions as facets of perfectionism in their multidimensional framework. A focus on parental criticism and parental expectations is warranted in the current study given the pressure to be perfect found among young people in China (see Flett et al., 2016) and mounting evidence of the destructiveness of excessive parental expectations, perceived parental criticism, and actual parental criticism (e.g., Ma et al., 2018; Michelini et al., 2021; Nelemans et al., 2021; Rapp et al., 2021). More generally, extensive research attests to the role of parenting styles in depression among Chinese children (Liu & Merritt, 2018).

The final goal of this research was to evaluate how mattering fares versus self-esteem when compared in Chinese early adolescents. As noted earlier, this issue was broadly considered by going beyond depression to also include other indices of adjustment and parental correlates. We hypothesized in general that mattering would predict beyond self-esteem in terms of accounting for unique variance in levels of adjustment.

Methods

Participants

Our sample consisted of 172 participants (86 boys, 86 girls). The students were in Grade 7 or Grade 8. They were recruited from a school in Anshan city in the north-east of China. Our participants had a mean age of 14.77 years (SD = 0.74).

All participants were volunteers. No student indicated that they did not wish to participate and no interested participant was excluded. Informed consent from each student and their parents was obtained. Once participants completed the survey, each participant was given a written debriefing form in Mandarin and a small monetary gift (approximately $5 Canadian) for taking part in this study.

Measures

The various measures used in the current study are described below. Participants were tested in class groups. Note that all measures were translated into simplified Mandarin from the original English version by the second author, who is qualified as a professional translator, and then, in accordance with established procedures, we confirmed the accuracy of the translations by having the measures back translated by another bilingual Mandarin-English speaker. The following measures were administered after a demographics questionnaire asking for date of birth, gender, and grade level in high school was completed:

The General Mattering Scale (GMS; Rosenberg & McCullough, 1981). The GMS is a five-item measure of how much one perceives they matter to others. The five questions are: (1) How important are you to others?; (2) How much do other people pay attention to you?; (3) How much would you be missed if you went away?; (4) How interested are others in what you have to say?; and (5) How much do other people depend upon you? The response options varied from strongly disagree to strongly agree using a four-point rating scale. This measure is the most widely used mattering scale and it has been used often with children and adolescents (e.g., Flett et al., 2022; Vaillancourt et al., 2022). This measure has good internal consistency with an alpha coefficient of .85 (Taylor & Turner, 2001). Factor analysis has confirmed this measure is unidimensional (Taylor & Turner, 2001).

Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). The RSES is a 10-item scale that is well-known and widely used. It is a measure of global self-esteem and has five items worded in the negative direction. Response options range from 1 (strongly disagree) to 4 (strongly agree). Cross-cultural research with adults indicates that the scale typically yields a pattern suggesting that positive self-evaluation is universal across cultures, though in collectivist cultures such as China, there is some evidence of a neutral response bias (see Schmitt & Allik, 2005).

The Experience of Shame Scale (ESS; Andrews et al., 2002). The ESS measures three areas of shame: characterological, behavioral, and bodily shame. However, 10 items assessing only characterological shame and behavioral shame was assessed in the current study. The use of a briefer version of the ESS reflected an emphasis on minimizing the questionnaire length and reading load on our participants. Higher scores reflect higher levels of shame proneness.

The UCLA Loneliness Scale (Russell et al., 1980). This 20-item self-report scale measures trait loneliness. However, we utilized a nine-item version. Participants are asked to indicate how often each of the statements listed is descriptive of themselves, ranging from 1 (never) to 4 (often). Higher scores are indicative of greater trait loneliness.

The Center for Epidemiologic Studies-Depression Scale (CES-D; Radloff, 1977). The CES-D scale is a 20-item measure of the level of depressive symptoms within the past week. The CES-D has shown adequate test-retest reliability and construct validity in both clinical and nonclinical samples (Radloff, 1977).

Spence Children's Anxiety Scale (SCAS; Spence, 1997). This well-known 45-item scale is a self-report questionnaire measuring anxiety disorders symptoms in children and adolescents. It taps symptoms that reflect generalized anxiety disorder, separation anxiety disorder, social phobia, panic disorder and agoraphobia, obsessive–compulsive disorder and physical-injury fears replacing specific phobias. Items are rated on a 4-point frequency scale: 0 (never), 1 (sometimes), 2 (often), and 3 (almost), the frequency with which they experience each symptom. We focused on the total score in the current study.

The Positive and Negative Affect Schedule for Children-Short Form (PANAS-C/SF; Ebesutani et al., 2012). The PANAS-C/SF is an abbreviated 10-item version of the PANAS-C (Laurent et al., 1999). Five items assess positive affect (e.g., happy, proud) and five items assess negative affect (e.g., afraid, sad). The five items per subscale were selected on the basis of several criteria, including item response theory (IRT) modelling and IRT analyses. These subscales are substantially briefer than the original subscales, but have adequate internal consistency (Ebesutani et al., 2012).

Parental Measures. As noted earlier, the parental expectations and parental criticism subscales were from the Frost Multidimensional Perfectionism Scale (FMPS; Frost et al., 1990). Chan (2009) confirmed the presence of these parental expectations and parental criticism factors in psychometric analyses of the responses of gifted Chinese adolescents. The parental expectations subscale has five items. A sample item is "My parents have expected excellence from me." Parental criticism has four items. A sample item is "As a child I was punished for doing things less than perfect." Psychometric results from the FMPS subscales are summarized in Flett and Hewitt (2022).

Results

Descriptive Information

Initially, we examined the psychometric properties of the General Mattering Scale. The alpha coefficient was acceptable at .78. This is comparable to the alpha of .80 found for the longer self-esteem scale and is impressive given that the General Mattering Scale consists of just five items. The overall mean was 13.73 (SD = 2.91) and this accords with previous samples of younger and older Chinese children and adolescents (see Flett, 2018b) as well as the mean of 13.88 in a recent representative sample from the US (see Watson et al., 2022).

There were no significant differences between boys and girls in terms of mean scores on the General Mattering Scale. The one significant difference was considerably higher depression among girls (CES-D Ms of 29.15 versus 24.31). These means signify substantially elevated levels of depressive symptoms overall among our participants.

Confirmatory Factor Analysis

A confirmatory factor analysis (CFA) was conducted with AMOS 27 software using maximum likelihood estimation procedures to evaluate the model fit of the General Mattering Scale (GMS) with data from early adolescents from China. Table 1 displays the results from this CFA with factor loadings for the five items. This analysis was performed to validate the one-factor solution that has already been established. The model was an adequate fit, $\chi^2 (5) = 16.07$, p = .007, CFI = .95, TLI = .90, SRMR = .05, RMSEA = .11, 90% CI = .05, .18, pclose = .040. As can be seen in Table 1, all items in this model had factor loadings of .54 or higher. Thus, the GMS was demonstrated to be a unidimensional scale, as was expected.

Table 1

Factor Loadings for the Items of the General Mattering Scale

Items	Factor Loadings
How important are you to others?	.54
How much do others pay attention to you?	.71
How much would you be missed if you went away?	.74
How interested are others in what you have to say?	.63
How much do other people depend upon you?	.62

Note. N = 172.

Correlations For Mattering and Self-Esteem

The correlations among the variables for the total sample are shown in Table 2. Mattering was correlated significantly with self-esteem (r = .51, p < .01). As anticipated, mattering was associated significantly with reduced levels of depression (r = -.30, p < .01). Mattering was also associated with lower levels of negative affect (r = -.27, p < .01), shame (r = -.29, p < .01), and loneliness (r = -.35, p < .01), as well as higher levels of positive affect (r = .39, p < .01).

Table 2 shows that the same general pattern of correlations was also found for self-esteem. Self-esteem was associated significantly with reduced levels of depression (r = -.54, p < .01). Self-esteem was also associated with lower levels of negative affect (r = -.35, p < .01), shame (r = -.40, p < .01), and loneliness (r = -.37, p < .01), as well as higher levels of positive affect (r = .45, p < .01). It was the case that the associations for self-esteem, relative to the associations for mattering, were either slightly stronger or considerably more robust in terms of their respective links with depression. Other analyses showed that there was a modest positive correlation between the two parental measures (r = .28, p < .001).

Supplementary analyses contrasted characterological shame and behavioral shame. Characterological shame was associated negatively with mattering (r -.34, p < .001), and self-esteem (r = -.42, p < .001). Lower levels of behavioral shame were not associated significantly with mattering, (r = -12, ns); however, there was a significant association between behavioral shame and self-esteem (r = -.24, p < .01).

Although it was not our central focus, other statistically significant correlates of depression, anxiety, and loneliness merit mention. Regarding the parental subscales, it can be seen in Table 2 that there was a weak negative association between parental expectations and depression, but not with anxiety or loneliness. In contrast, parental criticism was associated with depression and shame, but not with loneliness or anxiety. Depression was associated significantly with shame (r = .27, p < .001), loneliness (r =.27, p < .001), negative affect (r = .22, p < .01), positive affect (r = -.26, p < .001), and anxiety (r = .16, p < .05). Loneliness was associated with shame (r = .28, p < .001), negative affect (r = .22, p < .01), and positive affect (r = -.26, p < .001). Collectively, these associations were in the expected directions, but at a low enough magnitude to suggest these adjustment measures were not redundant with each other.

Table 2

Correlations for the Total Sample with Mattering, Self-Esteem, and the Parental Variables

	Mattering	Self-Esteem	Parental Expect	Parental Criticism
Mattering	1.00	.51**	.17*	-.18*
Self-Esteem	.51**	1.00	-.04	-.39**
Shame	-.29**	-.40**	.05	.28**
Loneliness	-.35**	-.37**	.06	-.10
Depression	-.34**	-.54**	-.14*	.31**
Positive Affect	.39**	.45**	-.25**	-.22**
Negative Affect	-.27**	-.35**	-.25**	.20**
Spence-Anxiety	.01	-.10	-.07	.12

Note. $N = 172$. *$p < .05$, **$p < .01$, two-tailed.

Regression Analyses

Finally, a series of regression analyses evaluated the relative ability of mattering and self-esteem to predict key outcomes. The analyses compared self-esteem and mattering in terms of their ability to predict unique variance in five outcome variables when self-esteem and mattering were entered simultaneously in the same predictor block. Overall, the analyses confirmed that self-esteem was a significant predictor in each analysis. The results showed in two of five analyses that mattering was not statistically significant when self-esteem was also considered. Self-esteem was a unique predictor of depression and negative affect, accounting respectively for 30.1% and 13.4% of the variance in these measures.

As for positive affect, the two predictors accounted for 24.1% of the variance. Self-esteem was significant ($t = 4.51$, $p < .001$), but mattering was significant as well ($t = 2.82$, $p < .01$). Similar results emerged with loneliness; the two predictors accounted for 17.3% of the variance in loneliness. Self-esteem was significant ($t = -3.81$, $p < .01$) as was mattering

(t = -2.84, p < .01). Finally, when we examined characterological shame, the two predictors accounted for 19.8% of the variance. Self-esteem was significant (t = -4.14, p < .001) and mattering was also significant (t = -2.31, p < .05).

Discussion

The current study focused on a sample of early adolescents from China as an extension of prior research on mattering conducted with children and adolescents. This research began with a psychometric focus and it established that the General Mattering Scale has acceptable psychometric properties when administered to early adolescents from China. Analyses confirmed that the measure has one factor and the General Mattering Scale has acceptable internal consistency when completed by students who are early adolescents in China. This is important to establish rather than presume given that this self-report measure continues to be the most widely used mattering measure (for a discussion, see Flett, 2018b).

Next, we examined how measures of mattering and self-esteem related to various indices of personal and social psychological adjustment (i.e., depression, anxiety, positive affect, negative affect, shame, and loneliness) and parental factors that represent potential antecedents of mattering and self-esteem. The pattern of correlations attested further to the protective role of mattering, though the results varied depending on how adjustment was measured. Mattering was linked significantly with lower levels of depression and negative affect and higher levels of positive affect. We adopted a variable-focused perspective in the current work. However, if viewed from a person perspective, there is reason to be greatly concerned about the early adolescents in our sample who had low levels of mattering. Many adolescents with a relatively low level of mattering would likely be characterized not only by depression, but also by loneliness, shame, and a preponderance of trait negative affect. Indeed, we conducted one supplementary analysis revealing that lower levels of mattering were predicted uniquely by shame, loneliness, negative affect, and low positive affect.

Other correlational results indicated that mattering was not associated significantly with anxiety. This lack of association runs counter to other findings linking lower levels of mattering with anxiety (see Flett, 2019). Perhaps the lack of an association in this research reflects focusing on current levels of mattering experienced at the time of assessment; anxiety is future-focused and there may be a need when it comes to anxiety to evaluate concerns about not mattering in the future, as was the case in recent research by Chen et al. (2022).

Regarding the psychosocial constructs, mattering was associated jointly with lower levels of shame and loneliness, with the caveat that the significant negative association was with characterological shame. The finding that mattering was associated with lower levels of loneliness accords with another recent study with high school students from the United

States showing that mattering was linked negatively with loneliness (see Somers et al., 2022). Unfortunately, most previous research on mattering and loneliness has focused on university students (e.g., Flett et al., 2022; McComb et al., 2020). This research has found that students often are characterized jointly by low mattering and high loneliness, and this has been referred to as a form of "double jeopardy" (see McComb et al., 2020).

There were clear similarities in terms of the pattern of correlations in the current study found with self-esteem versus mattering, and in many instances, stronger links were found with self-esteem (see Table 2). However, self-esteem was similar to mattering in terms of not being associated significantly with anxiety.

Parental Factors

Another aspect of this study sought to address the relative paucity of information about the developmental antecedents of individual differences in mattering. Here we focused on the potential roles of parental expectations and parental criticism given their hypothesized roles in the development of perfectionism (see Flett & Hewitt, 2022). Other research with gifted adolescents has linked aspects of perfectionism with feelings of not mattering in adolescents (see Hill & Madigan, 2022). Another reason for our focus is the rapidly accumulated evidence, cited above, linking parental criticism with depression in adolescents. Indeed, we found that parental criticism was linked with depression, shame, and greater negative affect and lower positive affect in the current study. We also found in terms of our primary focus that mattering had a weak but discernible positive association with high parental expectations and it had a small but significant negative association with parental criticism; this difference is noteworthy given the positive association between these two parental indices in the current study. One interpretation is that in early adolescents, parental expectations are perceived by early adolescents from China as an expression of parental interest among certain adolescents with parents who are invested and clearly care about how their children are doing. However, parental criticism clearly is experienced as harsh given its links in our investigation with distress and broad negative self-reactions in the form of shame.

The other noteworthy element of our results involving the parental subscales is that the correlation between self-esteem and parental expectations was not statistically significant, but there was a link between parental criticism and low self-esteem that was relatively robust (r = -.39) in comparison to the smaller association we found between parental criticism and lower mattering. One interpretation of these results is that in early adolescents from China, mattering and self-esteem may differ in some key respects in terms of parental influence. It is also apparent that there are subtle but very important differences between parental criticism and parental expectations.

The pattern of findings from our regression analyses illustrated the need to not automatically presume that mattering will inevitably and always

be a significant predictor of measures of adjustment, above and beyond the variance attributable to individual differences in levels of self-esteem. Our results indicated that self-esteem, but not mattering, was a significant predictor of depression, negative affect, and shame. Indeed, in this sample, self-esteem was a significant predictor of all outcome variables examined in regression analyses. The findings involving depression are at variance with other results with adolescents and university students, including the previous study conducted with Chinese children in Grade 5 (see Flett et al., 2016), and the original Rosenberg and McCullough (1981) study showing that mattering predicts depression beyond self-esteem. Why was self-esteem a more robust predictor in our current sample? It is quite possible that these results reflect differences between early adolescents in China versus the United States in terms of the salience of self-esteem and mattering and how they are experienced and expressed. One salient difference is that in China, early adolescents know they will be assigned to different high schools as a function of their academic performance and it is likely that this has implications for the salience of self-esteem and levels of mattering. Clearly, future research with a cross-cultural focus is needed and it is conceivable, if not likely, that the nomological networks of mattering and self-esteem will be found to vary in some noteworthy ways among adolescents in China.

It is important to underscore that in contrast to results discussed above, other analyses in the current study did establish that mattering and self-esteem were both significant and unique predictors in terms of levels of positive affect, characterological shame, and loneliness found among these early adolescents. It is worth underscoring that the results with loneliness in particular are understandable given the psychosocial nature of both mattering and loneliness and the likelihood of avoiding others due to a sense of feeling unimportant and perhaps expecting to not matter to other people in future interactions. The unique association between shame and lower levels of mattering is also noteworthy given that shame involves a broad sense that the self is inadequate and flaws, defects, and inadequacies are on public display for everyone to see. This sense of being exposed should be quite troubling for early adolescents who also feel insignificant and unimportant.

Limitations of the Current Study

Regarding the limitations of this research, it is important to reiterate that the data are cross-sectional and causal associations cannot be assumed. A longitudinal investigation across multiple timepoints would be highly beneficial in terms of illuminating the similarities and differences in self-esteem versus mattering among young people in China. Also, self-report data are subject to the influence of response bias and we did not evaluate this possibility in the current study. Finally, while studies examining mattering in participants where English is not the first language yield important and unique information, there is no basis for generalizing these

results beyond early adolescents from China. In general, there is a growing and urgent need for comparative cross-cultural research on mattering in people of various ages.

In summary, the results of the current study indicated that when mattering is assessed among adolescents in Grades 7 and 8 in China, it is measured reliably, and it is associated with important indices of personal well-being and psychosocial adjustment. Mattering seemed protective in terms of being associated with less loneliness, shame, depression, and negative affect, and it was associated with greater positive affect. However, it was not associated significantly with anxiety. Moreover, on the basis of our findings, it was evident that while there was some overlap, mattering and self-esteem can and should be distinguished and it is evident that both factors are aspects of the self-concept that warrant being studied. It is our hope that the current research will serve as a catalyst for including one or more measures that assess mattering in future research with children and adolescents from China that typically focuses exclusively on individual differences in self-esteem. New insights should emerge from research that jointly considers mattering and self-esteem.

Availability of data and material
Data will be made available upon reasonable request.

Conflict of Interest
All authors declare that they have no conflict of interest.

Author's contributions
All authors significantly contributed to the research and preparation of manuscript.

Informed Consent
Informed consent was obtained from all participants prior to participating and being included in the study.

Ethics Approval
This research was reviewed and approved for compliance to ethics protocols by the Human Participants Review Committee (HPRC) at York University.

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