Self-esteem instability and academic outcomes in American and Chinese college students

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ABSTRACT
The connection between self-esteem instability and various academic outcomes was examined across two studies. Study 1 (N = 419) found that unstable self-esteem was associated with poor academic performance for American undergraduate college students. Further, unstable self-esteem was associated with higher levels of academic disengagement and devaluation for individuals with high levels of self-esteem. Study 2 included college students from the United States (N = 167) and China (N = 178). As in Study 1, unstable self-esteem was associated with poor academic performance and higher levels of academic devaluation for individuals with high levels of self-esteem. However, the association between unstable self-esteem and academic disengagement emerged only for American college students with high self-esteem.

1. Introduction

The association between self-esteem and important life outcomes has been the focus of considerable debate in recent years (e.g., Baumeister, Campbell, Krueger, & Vohs, 2003; Swann, Chang-Schneider, & Larsen McClarty, 2007; Trzesniewski et al., 2006). This debate has included the connection between self-esteem and academic outcomes such as engagement and performance. The debate concerning this connection is of considerable importance given that the educational system in the United States has focused significant effort toward protecting or improving the self-esteem of students in the hope that high levels of self-esteem should be associated with academic outcomes. Empirical results concerning the connection between self-esteem level and academic outcomes have generally indicated that self-esteem is positively associated with academic outcomes but the strength of these associations have often been modest (Bowles, 1999; Davies & Brember, 1999; Hansford & Hattie, 1982; Wylie, 1979; see Baumeister, Campbell, Krueger, & Vohs, 2003, for a review). Taken together, these studies suggest that individuals with high levels of self-esteem may have more positive academic outcomes than those with low self-esteem but it is important to note that the differences between those with low and high levels of self-esteem appear to be relatively small.

We believe that the relatively weak connections that have been observed between self-esteem and academic outcomes may be
due, at least in part, to an exclusive focus on overall self-esteem level to the neglect of other important aspects of self-esteem. The exclusive focus on self-esteem level is problematic because high self-esteem is a heterogeneous construct that consists of both a secure form and a fragile form (see Kernis, 2003, for a review). Secure high self-esteem reflects positive attitudes toward the self that are realistic, well-anchored, and resistant to threat. As a result, individuals with secure high self-esteem are thought to be better able to accept themselves as they are rather than feeling the need to create positive illusions about themselves. In contrast, fragile high self-esteem refers to feelings of self-worth that are vulnerable to challenge, require constant validation, and rely upon some degree of self-deception. Individuals with fragile high self-esteem are believed to be preoccupied with protecting and enhancing their vulnerable feelings of self-worth. The distinction between secure high self-esteem and fragile high self-esteem is important because these forms of high self-esteem often have very different associations with constructs such as aggression (Kernis, Grannemann, & Barclay, 1989), psychological adjustment (Zeigler-Hill & Wallace, 2012), and interpersonal behavior (Zeigler-Hill, Clark, & Beckman, 2011).

To extend what is currently known about the connection between self-esteem and academic outcomes, the present studies distinguished between secure and fragile forms of high self-esteem using self-esteem instability (i.e., fluctuations in moment-to-moment feelings of self-worth over time; see Kernis, 2005, for a review) as a marker of self-esteem fragility. Self-esteem instability is considered to be a marker of fragile high self-esteem because frequent changes in moment-to-moment feelings of self-worth suggest that the positive views expressed by these individuals are uncertain (Kernis, 2005). The previous research concerning self-esteem instability has examined its associations with various outcomes including defensiveness (Kernis, Lakey, & Heppner, 2008; Myers & Zeigler-Hill, 2008; Zeigler-Hill, Chadha, & Osterman, 2008), increased sensitivity to social events (Greenier et al., 1999), and an impoverished self-concept structure (Zeigler-Hill & Showers, 2007). These studies suggest that the feelings of self-worth possessed by those with unstable high self-esteem are constantly at risk which leads to heightened reactivity and defensiveness (Kernis, Paradise, Whitaker, Wheatman, & Goldman, 2000).

1.1. Overview and predictions

The purpose of the present studies was to examine whether the associations that self-esteem level had with academic outcomes would be moderated by self-esteem instability. We asked participants across two studies to report their self-esteem level, self-esteem instability, academic performance, and academic engagement. Our general prediction was that individuals with stable high self-esteem would report better academic performance and more positive academic attitudes than individuals with unstable high self-esteem or low self-esteem (either stable low self-esteem or unstable low self-esteem). The basic rationale for this prediction was that unstable high self-esteem may fail to provide the sort of protection offered by stable high self-esteem because those with unstable high self-esteem do not appear to possess adequate coping resources and appear to be uncertain about the positivity of their self-views (Zeigler-Hill & Wallace, 2012).

2. Study 1

The purpose of Study 1 was to examine whether self-esteem instability moderated the association that self-esteem level had with academic performance and academic attitudes. We expected individuals with unstable high self-esteem to report poorer academic performance and less positive academic attitudes than those with stable high self-esteem.

2.1. Method

2.1.1. Participants and procedure

Participants were 800 undergraduates (157 men and 643 women) at a university in the southern region of the United States who were enrolled in psychology courses and participated in return for partial fulfillment of a research participation requirement. Participants completed measures of self-esteem level and academic outcomes during laboratory sessions of no more than five participants during any session. At the conclusion of the laboratory session, participants were offered the opportunity to participate in another study in which they would receive additional research credit in exchange for completing a measure of state self-esteem via the internet each evening at approximately 10 pm for seven consecutive days. In order to assess self-esteem instability, it is essential that participants complete multiple measures of state self-esteem. As a result, some minimum number of completed state self-esteem measures must be established in order for participants to be included in the analyses. We decided to include only participants in the final analyses who contributed data for three or more days which follows the convention established in previous research (e.g., Zeigler-Hill & Showers, 2007; Zeigler-Hill & Wallace, 2012). Of the 800 participants who completed the initial questionnaires, 419 participants (83 men and 336 women) completed these additional daily measures for three or more days. Preliminary analyses using more stringent criteria (e.g., including only participants who completed daily measures for five or more days) revealed very similar patterns so we decided to use the cutoff that would allow us to adequately assess self-esteem instability while excluding as few participants as possible.

The mean age of the final participants was 21.33 years (SD = 5.96) and their racial/ethnic composition was 59% White, 35% Black, 2% Hispanic, 1% Asian, and 3% Other. These participants did not differ from those who did not complete the daily measures in terms of gender (x^2[11] = 20, p = .89), self-esteem level (f(798) = .68, p = .50), academic engagement (f(798) < 1.36, ps > .18), or grade-point average (f(798) = 1.24, p = .22). These participants contributed a total of 2308 daily reports (i.e., an average of 5.51 reports for each participant).

2.1.2. Measures

2.1.2.1. Self-esteem level. The Rosenberg Self-Esteem Scale (Rosenberg, 1965) is a 10-item measure of global self-esteem (e.g., “On the whole, I am satisfied with myself”). Participants were instructed to complete the instrument according to how they typically or generally feel about themselves. Responses were made on scales ranging from 1 (strongly disagree) to 5 (strongly agree). This instrument is regarded as a well-validated and reliable measure of global self-regard (e.g., Blascovich & Tomaka, 1991). The internal consistency of this measure for the present study was α = .88.

2.1.2.2. Self-esteem instability. The method for measuring self-esteem instability was adapted from the procedure that was initially developed by Kernis and colleagues (e.g., Kernis, Grannemann, & Barclay, 1989). Participants were asked to complete a modified version of the Rosenberg Self-Esteem Scale via the internet at the end of each day for 7 consecutive days. This instrument was modified to capture state self-esteem by asking participants to provide the response that best reflected how they felt at the moment when they completed the measure rather than how they generally felt about themselves. Responses to these items were made on scales ranging from 1 (strongly disagree) to 10 (strongly agree). The
within-subject standard deviation across the repeated assessments of state self-esteem served as the index of self-esteem instability with higher standard deviations indicating higher levels of self-esteem instability.

2.1.2.3. Academic performance. Academic performance was measured by asking participants to provide their high school grade-point average (GPA) using a 4-point scale. We used the high school GPA of participants because the vast majority of our participants were first semester college students who had not yet established a college GPA.

2.1.2.4. Academic engagement. We measured academic engagement with the Intellectual Engagement Inventory (Major & Schmader, 1998) which is a 12-item measure that asks participants to rate their level of agreement with statements concerning academic engagement. The Intellectual Engagement Inventory consists of three subscales: academic disengagement (three items; e.g., “How I do intellectually has little relation to who I really am”; \(a = .74\)), academic devaluing (five items; e.g., “It usually does not matter to me one way or the other how I do in school”; \(a = .70\)), and academic discounting (four items; e.g., “I feel that standardized achievement tests are definitely biased against me”; \(a = .72\)). Participants were asked to respond to each item using scales that ranged from 1 (disagree strongly) to 7 (agree strongly).

2.2. Results

The means, standard deviations, and intercorrelations for the measures in Study 1 are presented in Table 1. Moderational analyses were conducted to determine whether self-esteem instability qualified the association between self-esteem level and academic outcomes. This was accomplished by conducting a series of hierarchical multiple regression analyses in which each academic outcome was regressed onto self-esteem level, self-esteem instability, and sex (0 = female, 1 = male). We included sex in these analyses because it has been found to moderate the association that self-esteem instability has with outcomes such as interpersonal style (Zeigler-Hill, Clark, & Beckman, 2011) and aggression (Webster, Kirkpatrick, Nezlek, Smith, & Paddock, 2007). Preliminary analyses included sex as a potential moderator but none of those interaction terms approached conventional levels of significance. As a result, sex is included as a main effect on the first step of the model but its interaction terms have been trimmed from the subsequent steps in the interest of parsimony. The main effect terms for self-esteem level, self-esteem instability, and sex were entered on Step 1 and the two-way interaction of self-esteem level and self-esteem instability was entered on Step 2. The continuous predictor variables were centered for the purpose of testing interactions (Aiken & West, 1991). The results of these analyses are presented in Table 2. These regression analyses were followed by the simple slopes tests recommended by Aiken and West (1991) to describe the interaction of continuous variables. These simple slopes were conducted using values that were one standard deviation above the mean to represent those with high self-esteem and one standard deviation below the mean to represent those with low self-esteem.

2.2.1. Academic performance

The results of the analysis concerning academic performance revealed a main effect for self-esteem instability \(\beta = –.12, t = –2.49, p = .01\) such that individuals with unstable self-esteem reported lower GPAs than those with stable self-esteem. The other main effects and the interaction of self-esteem level and self-esteem instability failed to approach conventional levels of significance.

2.2.2. Academic disengagement

The results of the analysis concerning academic disengagement found main effects for self-esteem level \(\beta = .11, t = 2.33, p = .02\) and self-esteem instability \(\beta = .11, t = 2.26, p = .03\) that were qualified by their two-way interaction \(\beta = .11, t = 2.28, p = .02\). The predicted values for this interaction are presented in Panel A of Fig. 1. Simple slopes tests found that the slope of the line representing the association between self-esteem instability and academic disengagement was significant for those with high levels of self-esteem \(\beta = .23, t = 3.12, p = .002\) but not for those with low levels of self-esteem \(\beta = .02, t = 2.8, p = .78\). These results show that individuals with low levels of self-esteem report modest levels of academic disengagement regardless of the stability of their self-esteem. In contrast, self-esteem instability was associated with greater academic disengagement for those with high levels of self-esteem such that individuals with unstable high self-esteem reported higher levels of academic disengagement than those with stable high self-esteem or low self-esteem.

2.2.3. Academic devaluation

The results of the analysis concerning academic devaluation found a main effect for self-esteem instability \(\beta = .11, t = 2.18, p = .03\) that was qualified by the two-way interaction of self-esteem level and self-esteem instability \(\beta = .14, t = 2.89, p = .004\). The predicted values for this interaction are presented in Panel B of Fig. 1. Simple slopes tests found that the slope of the line representing the association between self-esteem instability and academic devaluation was significant for those with high levels of self-esteem \(\beta = .28, t = 3.68, p < .001\) but not for those with low levels of self-esteem \(\beta = .01, t = 1.0, p = .92\). These results show that individuals with low self-esteem report high levels of academic devaluation regardless of the stability of their self-esteem. In contrast, self-esteem instability was associated with greater academic devaluation for those with high levels of self-esteem such that individuals with unstable high self-esteem reported levels of academic devaluation that were higher than those with stable high self-esteem. In fact, the levels of academic devaluation reported by those with unstable high self-esteem were comparable to those reported by individuals with low levels of self-esteem.

2.2.4. Academic discounting

The results of the analysis concerning academic discounting revealed no significant main effects, nor did the interaction of self-esteem level and self-esteem instability approach significance.

2.3. Discussion

Our results provided partial support for our prediction that self-esteem instability would moderate the association between self-esteem level and academic outcomes. This is the first study to
Table 2
Study 1: Regressions of academic outcomes on self-esteem level, self-esteem instability, and sex.

<table>
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<th></th>
<th>Academic performance</th>
<th>Academic disengagement</th>
<th>Academic devaluation</th>
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<td>Sex</td>
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<td>.09</td>
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<td>Step 2</td>
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<td>SEL × SEI</td>
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<td>.01</td>
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*Step 1: F(3,415) = 4.35, p = .005; Step 2: F(4,414) = 4.24, p = .005.  
**Step 1: F(3,415) = 4.44, p = .004; Step 2: F(4,414) = 4.67, p = .001.  
***Step 1: F(3,415) = 2.77, p = .04; Step 2: F(4,414) = 4.20, p = .002.  
****Step 1: F(3,415) = .62, p = .61; Step 2: F(4,414) = .54, p = .71.

Fig. 1. Study 1 (American Sample): Predicted values for academic disengagement (Panel A) and academic devaluation (Panel B) illustrating the interaction of self-esteem level and self-esteem instability at values that are one standard deviation above and below their respective means. Scores for academic disengagement and academic devaluation may range from 1 to 7.

Self-esteem would be more likely to report withdrawing from academic pursuits than would those with stable high self-esteem.

3. Study 2

The purpose of Study 2 was to extend the findings of Study 1 by examining whether self-esteem level and self-esteem instability had similar associations with academic outcomes across cultures. We decided to examine Chinese participants because a number of studies have compared the self-esteem levels of individuals from collectivistic cultures (e.g., East Asian countries) with those from individualistic cultures (e.g., Western countries). The results of these studies have been mixed with some studies finding that individuals from individualistic cultures reported higher levels of self-esteem than those from collectivistic cultures (e.g., Brown, Cai, Oakes, & Deng, 2009; Heine, Lehman, Markus, & Kitayama, 1999; Schmitt & Allik, 2005), whereas other studies did not observe these differences (Cai, Wu, & Brown, 2009). Similar mixed results have emerged for the connections that low self-esteem has with important outcomes such as psychopathology in these cultures (see Cai, Wu, & Brown, 2009 for a review). We believed it would be informative to compare American and Chinese college students because East Asian cultures place considerable emphasis on human malleability and tend to value self-improvement more than Western cultures (e.g., Chen & Uttal, 1988). East Asian cultures also tend to emphasize the benefits of high self-esteem and are more likely to celebrate humility compared to Western cultures (Heine, Lehman, Markus, & Kitayama, 1999; Yik, Bond, & Paulhus, 1998). Another relevant cultural difference is that Chinese culture places a greater emphasis on educational outcomes than American culture (Ross, Chen, & Zhou, 2011). Taken together, these cultural differences suggest the possibility that self-esteem may have different connections with academic outcomes for American and Chinese students. We believed that Chinese cultural values may motivate Chinese college students to work more diligently than their American counterparts. Therefore, self-esteem instability may not be as strongly associated with negative academic attitudes (e.g., academic disengagement and devaluation) in a Chinese sample. The present study was intended to examine whether the connection between feelings of self-worth and academic outcomes would differ between American and Chinese college students.

3.1. Method

3.1.1. Participants and procedure

The procedure for Study 2 was very similar to our procedure for Study 1 such that participants completed initial measures of examin...
self-esteem level and academic engagement before being invited to take part in another study in which they would be asked to complete a measure of state self-esteem via the internet each evening at approximately 10 pm for seven consecutive days. The questionnaires were translated from their original English versions for the Chinese participants using the back-translation method. Our final participants consisted of 345 undergraduates (167 American participants from the southern region of the United States and 178 Chinese participants from the southwestern region of China) who completed at least three daily measures of state self-esteem. These participants consisted of 92 men (47 Americans, 45 Chinese) and 253 women (120 Americans, 133 Chinese) with a mean age of 20.31 years ($SD = 5.09$). These participants contributed a total of 2180 daily reports (i.e., an average of 6.32 reports for each participant).

3.1.2. Measures

Study 2 utilized the same measures of self-esteem level, self-esteem instability, and academic engagement as Study 1.

3.1.2.1. Academic performance. Academic performance was measured by asking American participants to provide their high school GPA using a 4-point scale as in Study 1. However, we measured academic performance among the Chinese students by relying on their self-reported scores on the National Higher Education Entrance Examination which is more commonly referred to as their “Gaokao score”. We used the Gaokao scores for our Chinese participants because this is the primary factor that determines whether participants because this is the primary factor that determines whether they are accepted into the university system. These two indicators of academic performance were standardized within each sample before being used as a general indicator of academic performance (i.e., higher scores reflect higher levels of academic performance relative to the other participants from that country).

3.2. Results

The means, standard deviations, and intercorrelations for the measures in Study 2 are presented in Table 3. Compared with the American participants, the Chinese participants reported lower levels of self-esteem ($t[343] = 2.46, p < .02$), higher levels of academic devaluation ($t[343] = -11.03, p < .001$), and lower levels of academic discounting ($t[343] = 3.75, p < .001$). The American and Chinese participants did not differ in terms of self-esteem instability ($t[343] = .08, p = .94$) or academic disengagement ($t[343] = .34, p = .74$). It is important to note that the measures employed in this study had similar psychometric properties (e.g., estimates of internal consistency) for both samples which is essential for making comparisons between cultural groups (Chen, 2008). The data analytic strategy for Study 2 was similar to that used in Study 1 with the exception that the nationality of the participants ($0 = \text{American}, 1 = \text{Chinese}) was added as a main effect to Step 1 of the regression and as a potential moderator in Steps 2 and 3 (see Table 4).

### 3.2.1. Academic performance

The results of the analysis concerning academic performance revealed a main effect for self-esteem instability ($\beta = -.12, t = -2.49, p = .01$) such that individuals with unstable self-esteem reported lower academic performance than those with stable self-esteem. The other main effects and the interaction of self-esteem level and self-esteem instability failed to approach conventional levels of significance.

### 3.2.2. Academic disengagement

The results of the analysis concerning academic disengagement found main effects for self-esteem level ($\beta = .28, t = 5.34, p < .001$), self-esteem instability ($\beta = .17, t = 3.20, p = .002$), and sex ($\beta = .10, t = 2.00, p = .05$). However, the main effects of self-esteem level and self-esteem instability were qualified by their three-way interaction with nationality ($\beta = -.13, t = -2.01, p = .05$). The predicted values for this interaction are presented in Fig. 2. As suggested by Cohen, Cohen, West, and Aiken (2003), this interaction was probed by first examining whether the two-way interaction of self-esteem level and self-esteem instability was significant for Americans and Chinese separately. These analyses found that this two-way interaction emerged for the American participants ($\beta = .16, t = 2.35, p = .02$) but not the Chinese participants ($\beta = -.04, t = -.48, p = .63$). Simple slopes tests were then conducted for the American sample which found that the slope of the line representing the association between self-esteem instability and academic disengagement was significant ($\beta = .43, t = 4.54, p < .001$) but the slope of the line representing the association between self-esteem instability and academic disengagement was not significant ($\beta = .08, t = .77, p = .45$). Taken together, these results show that Americans with unstable high self-esteem report higher levels of academic disengagement than other individuals.

### 3.2.3. Academic devaluation

The results of the analysis concerning academic devaluation revealed main effects for self-esteem instability ($\beta = .10, t = 2.22, p = .03$) and nationality ($\beta = .52, t = 11.18, p < .001$) such that individuals with unstable self-esteem and Chinese individuals reported the highest levels of academic devaluation. The main effect of self-esteem instability was qualified by its interaction with self-esteem level ($\beta = .14, t = 3.11, p = .002$). The predicted values for this interaction are presented in Fig. 3. Simple slopes tests found that the slope of the line representing the association between self-esteem instability and academic disengagement was significant for those with high levels of self-esteem ($\beta = .29, t = 3.96, p < .001$) but not for those with low levels of self-esteem ($\beta = -.01, t = -.09, p = .93$). These results show that individuals with low self-esteem report high levels of academic devaluation regardless of the stability of their self-esteem, whereas self-esteem instability was associated with greater academic devaluation only for those with high levels of self-esteem. As a result, individuals with unstable high self-esteem reported high levels of academic devaluation that were higher than those reported by individuals with stable high self-esteem and were comparable to the levels of academic devaluation reported by those with low self-esteem. This pattern was not moderated by nationality.
Table 2: Regressions of academic outcomes on self-esteem level, self-esteem instability, sex, and nationality.

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|                        | $a$ Step 1: $F(4, 340) = 3.35, p = .01$; Step 2: $F(7, 337) = 3.12, p = .02$; Step 3: $F(8, 336) = 2.98, p = .03$.  
|                        | $b$ Step 1: $F(4, 340) = 9.26, p < .001$; Step 2: $F(7, 337) = 8.67, p < .001$; Step 3: $F(8, 336) = 8.15, p < .001$.  
|                        | $c$ Step 1: $F(4, 340) = 32.56, p < .001$; Step 2: $F(7, 337) = 21.24, p < .001$; Step 3: $F(8, 336) = 18.89, p < .001$.  
|                        | $d$ Step 1: $F(4, 340) = 4.13, p = .003$; Step 2: $F(7, 337) = 2.70, p = .01$; Step 3: $F(8, 336) = 2.41, p = .02$.  
|                        | $p < .05$.  
|                        | $p < .01$.  
|                        | $p < .001$. 

3.2.4. Academic discounting

The results of the analysis concerning academic discounting revealed a main effect for nationality ($\beta = -20, t = -3.77, p < .001$) such that Americans reported higher levels of academic discounting than their Chinese counterparts.

3.3. Discussion

The results of Study 2 provided additional support for our hypothesis that self-esteem instability would moderate the association between self-esteem level and academic outcomes. As in Study 1, self-esteem instability had a significant association with academic performance such that individuals with less stable self-esteem reported lower levels of academic performance. Self-esteem instability was also found to moderate the association between self-esteem level and academic devaluation such that self-esteem instability was associated with higher levels of academic devaluation for those with high levels of self-esteem. These results are important because they replicate the pattern that emerged from Study 1 and suggest that similar patterns emerged for American and Chinese college students with regard to academic devaluation. In contrast, we found the moderating role that self-esteem instability plays in the connection between self-esteem level and academic disengagement to be limited to the American college students. That is, self-esteem instability was positively associated with academic disengagement for American college students with high levels of self-esteem but this pattern did not emerge for Chinese college students. This cultural difference may be due to the fact that Chinese students are confronted with greater pressure...
to remain engaged with academic pursuits even if these activities pose a potential threat to their feelings of self-worth. However, despite remaining engaged, Chinese students may devalue the academic aspects of their lives. Thus, we observed an association between unstable high self-esteem and academic devaluation in both cultures but unstable self-esteem was only associated with disengagement from academic pursuits for the American students. Although the primary purpose of the study was to examine cultural differences in the association between unstable self-esteem and academic outcomes, it is also important to acknowledge some basic cultural differences in academic attitudes that emerged. Compared with their American counterparts, the Chinese participants reported higher levels of academic devaluation and lower levels of academic discounting even though they reported similar levels of academic disengagement. One reason for these mixed attitudes may be the difficulties confronting college students in both cultures. For example, it is not uncommon for college graduates in the United States and China to either be unemployed or underemployed when they complete their studies. That is, students are often uncertain about whether the investments they make in their college educations will translate into success following graduation. As a result, students in both cultures often struggle to find ways to make themselves more competitive in the job market after graduating through strategies such as accepting multiple internships to gain experience or by studying abroad. However, the actual utility of many of these strategies is uncertain. As an example, Chinese students used to be encouraged to study abroad because this was believed to make them more desirable to employers upon graduation (these students used to be referred to as Hai gui which translates as “sea turtles” and was an informal designation of honor; Hao & Welch, 2012). This has changed in recent years such that Chinese society now generally devalues study abroad experiences (these students are now referred to as Hai dai which translates as “sea weed” and denotes a mild form of contempt). We believe that the current uncertainty among college students in both cultures concerning the value of their educational experiences may be partially responsible for the mixed attitudes we observed in the present study.

4. General discussion

The purpose of the present studies was to examine whether distinguishing between stable and unstable forms of high self-esteem would clarify the connections that feelings of self-worth have with academic outcomes. The results of the present studies reveal that self-esteem level has only weak associations with academic outcomes when it is considered in isolation. One exception is that high levels of self-esteem were consistently associated with academic disengagement for American students. This is potentially important because it suggests that positive feelings of self-worth are tied to low levels of engagement in academic pursuits for these students. It is possible that relatively poor academic attitudes – such as academic disengagement – may explain the weak association that is often observed between self-esteem level and indicators of academic performance for American students.

The inclusion of self-esteem instability in these studies revealed a more nuanced connection between feelings of self-worth and academic outcomes than would have been observed if we had focused only on self-esteem level. First, self-esteem instability was associated with academic performance for both American and Chinese students such that those who possessed unstable feelings of self-worth reported poorer levels of academic performance. This finding is important because it suggests that the certainty of feelings of self-worth may be associated with individuals’ academic performance. Second, self-esteem level and self-esteem instability interacted to predict academic devaluation and academic disengagement such that those college students with unstable high self-esteem tended to report less positive academic attitudes. The pattern for academic devaluation was similar for both the American and Chinese students such that self-esteem instability was associated with academic devaluation for those with high levels of self-esteem. The same basic pattern was observed for academic disengagement but only among the American college students.

There were important similarities in the connections between self-esteem and academic outcomes among the American and Chinese college students. For example, self-esteem instability was associated with academic performance in both cultures such that those with unstable feelings of self-worth reported poorer levels of academic performance. This suggests the intriguing possibility that self-esteem instability may be at least as important as self-esteem level for predicting academic performance. The American and Chinese samples were also similar with regard to the fact that self-esteem instability moderated the association that self-esteem level had with academic devaluation such that self-esteem instability was associated with greater academic devaluation for those with high levels of self-esteem in both cultures.

Despite these similarities, an important difference emerged between the American and Chinese students such that self-esteem instability was associated with greater academic disengagement for American college students with high self-esteem but this pattern did not emerge for the Chinese students. We believe this difference may be due to the cultural values of the Chinese students. Education has been one of the most important means of personal advancement and upward mobility in China for more than a thousand years with the Gaokao simply being the most recent manifestation of an ancient tradition focused on standardized test performance (see Chen & Uttal, 1988 for a review). There are a number of Chinese cultural values that may lead Chinese students to strive for success in their academic pursuits but two of the most likely are the focus on the potential for individuals to change over time and the belief in the importance of self-improvement. Exposure to these cultural values may be partially responsible for the lack of association that emerged between unstable high self-esteem and academic disengagement for the Chinese students.

Another important feature of the present research is that it is the first comparison of the self-esteem instability reported by American and Chinese participants. Although the American participants reported higher levels of self-esteem than the Chinese participants, there were no differences in the self-esteem instability reported for these two samples. This suggests that the cultural processes that lead to differences in the self-esteem levels between individuals from these cultures do not necessarily impact the stability of their feelings of self-worth. It is important that future studies continue to explore cultural differences in the various features of self-esteem and how these cultural differences impact the connections that self-esteem has with important life outcomes. For example, it would be helpful to know how the process of acculturation impacts the connection between self-esteem instability and academic outcomes among immigrants.

The present studies had a number of strengths (e.g., large samples from America and China, inclusion of self-esteem instability as well as self-esteem level) but it also had a number of limitations. The first limitation is that we were unable to determine whether self-esteem instability causes academic outcomes due to the correlational nature of our data. Our underlying process model was that unstable high self-esteem would lead individuals to withdraw from academic pursuits but this cannot be clearly established using the present data. That is, we cannot rule out the possibility that the direction of causality may be either bidirectional or reversed. For example, some studies have suggested that academic performance may influence the development of self-esteem (e.g.,
Skaalvik & Hagtvet, 1990). It is also possible that both self-esteem instability and academic outcomes are by-products of some third variable such as the structure of the self-concept. Consistent with this possibility, previous research has shown that individuals who compartmentalize their self-concepts (i.e., create self-aspects that consist of either all positive or all negative self-beliefs) are more likely to experience unstable self-esteem (Zeigler-Hill & Showers, 2007). Although it has yet to be examined, it is possible that this sort of self-concept structure could be associated with the academic performance and engagement of individuals by influencing how they perceive themselves in the academic domain. Future research should attempt to clarify the causal nature of the connections between self-esteem instability and academic outcomes.

The second limitation concerns the generalizability of the present findings. This is a potential issue because we relied on undergraduate participants from the United States and China. It is unclear, for example, whether similar patterns would emerge for students of different ages (e.g., elementary school students) or from other cultures (e.g., Israel). Future studies should attempt to extend the present results beyond undergraduate students and include participants from countries other than the United States and China.

The third limitation is that we captured a relatively narrow range of academic outcomes. Although indicators of academic performance and academic attitudes are clearly important academic outcomes, it would be helpful if future researchers included other features connected with educational experience. For example, it seems likely that self-esteem instability may be associated with the choices that students make with regard to taking difficult courses, selecting a major in college, and eventually graduating from college. Future research that collected this additional information—along with indicators of academic attitudes and academic performance—would be very helpful in gaining a more nuanced understanding of the connection between feelings of self-worth and academic outcomes.

The fourth limitation of the present research is that we relied exclusively on self-reports. Cultural differences in the sanctioning of positive self-attributions may be at least partially responsible for the lower levels of self-esteem reported by the Chinese students. Similar cultural differences in the acceptability of reporting certain experiences (e.g., academic attitudes) may also have influenced the results of the present research. It may be helpful for future studies to utilize strategies such as implicit measures in an attempt to avoid culturally desirable response distortions. A final limitation of the present research is that the effect sizes of the present analyses were relatively modest. This suggests that even though self-esteem level and self-esteem instability were associated with outcomes, most of the variation in these outcomes is not associated with feelings of self-worth.

4.1. Conclusion

The findings of the present studies suggest that self-esteem instability is associated with academic outcomes for both American and Chinese students. More specifically, unstable self-esteem is linked with poor academic performance and less positive attitudes toward academic pursuits for both American and Chinese students. However, our findings reveal that unstable high self-esteem is associated with academic disengagement for American students but not Chinese students. This may reflect Chinese cultural values concerning the importance of education that prevent Chinese students from disengaging from academic pursuits even though these values may not necessarily prevent them from devaluing their educational experiences.

References


