Self-compassion as a moderator of the relationship between academic burn-out and psychological health in Korean cyber university students

Lee Woo Kyeong *

Department of Counseling Psychology, Seoul Cyber University, 193-15, Mia-dong, Gangbuk-gu, Seoul 142-700, Republic of Korea

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A B S T R A C T S

The moderating effect of self-compassion was examined in the relationship between academic burden and psychological health. The participants were students (N = 350) from a cyber university in Korea. At the beginning of the fall 2011 semester, the participants were surveyed using items from the academic burn-out, self-compassion, depression, and psychological well-being measures. Multiple regression analysis showed that self-compassion moderated the relationship between academic burn-out and psychological well-being. And self-compassion also moderated the relationship between academic burn-out and depression. This study presents an empirical framework for the research through investigating the relationship among academic burden, self-compassion, and psychological health for cyber university students.

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1. Introduction

College life has many factors challenging students’ psychological well-being, demanding that they manage academic goals as well as their emotional reactions to both academic success and frustration (Schneiderman, Ironson, & Siegel, 2005; Towbes & Cohen, 1996). Besides traditional learning, distance education courses such as e-learning have recently become widespread and are meeting the needs of many adult learners.

Korea’s cyber universities, which started with nine universities and 6,220 students in 2001, are now developing at an incredible rate, awarding about 92,188 undergraduate degrees in February of 2010 (Korean Ministry of Education, Science, & Technology, 2010). Now a total of 21 cyber universities began to establish their identities and get to obtain legal status as higher educational organizations. The 54.7% of the Korean cyber university undergraduate students are adult learners in their thirties and forties. And the majority of the students (70.4%) have jobs (Ministry of Education, Science (2010). Therefore, these adult students suffer from various psychological distress and burdens especially inherent in both work and academic pursuit.

Many psychologists have endeavored to find factors buffering various forms of psychological distress. Recently, interest in the construct of self-compassion has been fueled by a larger trend towards integrating Buddhist constructs such as mindfulness with western psychological approaches. According to the definition proposed by Neff (2003a; 2003b), self-compassion entails three main components which overlap and mutually interact: self-kindness versus self-judgment, feelings of common humanity versus isolation, and mindfulness versus over-identification.

The construct of self-compassion offers an alternative approach to psychological well-being. Self-compassion can be a powerful predictor of psychological well-being and mental health (Neff, 2003b). It shows positive association with markers of psychological well-being, such as self-acceptance, life satisfaction, social connectedness, self-esteem, mindfulness, autonomy, environmental mastery, purpose in life, reflective and affective wisdom, curiosity and exploration in life, and happiness and optimism (Neff, 2003b). It has also demonstrated negative associations with self-criticism, depression, anxiety, rumination, thought suppression, and neurotic perfectionism (Kirkpatrick, 2005). Increased self-compassion has been found to predict enhanced psychological health over time (Gilbert & Procter, 2006), and to explain reduced stress following participation in a widely implemented stress-reduction program (Shapiro, Astin, Bishop, & Cordova, 2005).

Self-compassion has been found to be positively related to mastery goals and negatively associated with performance goals, a relationship that was mediated by the lesser fear of failure and greater perceived competence. Self-compassion has also been found to have a positive correlation with academic success (Neff, Hsieh, & Dejitterat, 2005).

In addition to these results, self-compassion can predict emotional and cognitive reactions to negative events in everyday life. It buffers people against negative self-feelings when imagining distressing social events, and moderates negative emotions after receiving ambivalent feedback, particularly for those who have low self-esteem. Researchers found that self-compassion predicted...
emotional and cognitive reactions to negative events in everyday life and also that self-compassion buffered people against negative self-feelings when imagining distressing social events (Leary, Tate, Adams, Allen, & Hancock, 2007). Leary et al. (2007) suggest that self-compassion attenuates people's reactions to negative events.

Findings using Neff's self-compassion scale with college students (Neff, Kirkpatrick, & Rude, 2007) suggest that it is a strong and unique predictor of well-being, negatively related to depression and anxiety, and positively related to wisdom, happiness, optimism, extraversion and conscientiousness.

Taken together, our current study goals were to introduce self-compassion as a factor that might contribute to cyber university undergraduate students' well-being. We conducted this study to address whether students' psychological health would be moderated by self-compassion when faced with academic burn-out. Because the research on self-compassion is relatively new, studies that examine the relationships between self-compassion and psychological variables, academic burn-out, and psychological well-being are needed. The main reason for using self-compassion as a moderator in this study is that recent reviews of the research literature suggest that self-esteem may not be the panacea it is made out to be (Baumeister, Campbell, Krueger, & Vohs, 2003; Crocker et al., 2003). Another reason is that the concept of self-compassion is relatively new and study of this issue is in its infancy in Korea.

The aim in this research was to explore the moderating effects of self-compassion on the relationship between academic burn-out and psychological health. Being a supposedly stable cognitive and emotional orientation towards negative life experiences (Neff, 2003a, 2003b), self-compassion will reduce negative effects of academic burn-out on psychological health. Therefore, it is hypothesized that self-compassion may moderate the relationship between academic burn-out and psychological health. As indicators of psychological health, the authors used the widespread concepts of psychological well-being and depressive symptoms.

2. Methods

2.1. Participants

Study participants were 350 university students who were taking one of several undergraduate courses in counseling psychology (80 men, 270 women) at the Seoul Cyber University during the 2011 fall academic semester. Descriptive statistics of the subjects are presented in Table 1. 76.9% of the subjects were female and 22.8% were male. Mean age of the sample was 38.61 years (SD = 9.58 year) old.

2.2. Measures

2.2.1. Maslach Burnout Inventory-Student Survey (MBI-SS)
The authors used a 15-item version of the MBI-SS (Schaufeli, Martez, Marques Pinto, Salanova, & Bakker, 2002) to assess the level of stress or burn-out among students. In the present study, we used a version of the scale that had been translated into Korean (Kim, Yi, Cho, Chai, & Lee, 2008). Kim et al. reported a Cronbach's alpha coefficient of .87.

2.2.2. Beck Depression Inventory (BDI)
The BDI (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) is a self-rated scale that was developed to assess the severity of depression. Twenty-one items are rated on a 4-point scale with the total score obtained from the sum of all items. Lee and Song (1991) assessed the validity and the reliability of the Korean version of the BDI. The Cronbach's alpha coefficient of the Korean version of the BDI was .92.

2.2.3. Psychological Well-Being (PWB)
The PWB ( Ryff & Keyes, 1995) is a self-report inventory that measures six dimensions of psychological well-being, such as environmental mastery, self-acceptance, purpose in life, and personal growth. We used the reduced 18-item version of the scale that had been translated into Korean (Kim et al., 2008). The Cronbach's alpha coefficient of the Korean version of the PWB was .89.

2.3. Procedure

This research was conducted during the fall semester of the 2011 academic year. The measures were administered to students via the internet during class periods. Permission for students' participation was obtained from the relevant heads of departments, and students participated voluntarily in the research. Completion of the questionnaires was anonymous and there was a guarantee of confidentiality. Prior to administration of the measures, all participants were told about the purposes of the study.

3. Data analysis

Data were analyzed using multiple regression. Before conducting the regressions, we examined scatter plots of the data and tested for normality, linearity, and homoscedasticity. Results indicated that the assumptions needed for regression were met. All statistics were tested at an alpha level of .05. SPSS/PC version 18 was used for statistical analysis.

4. Results

The correlations among study variables are presented in Table 2. As expected, inter-correlations showed that academic burn-out
#### Table 2
Correlation among related variables.

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 MBI (academic burn-out)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 SCS total</td>
<td>-0.37*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 PWB</td>
<td>-0.37*</td>
<td>0.63*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4 BDI</td>
<td>0.38*</td>
<td>-0.51*</td>
<td>-0.45*</td>
<td>1</td>
</tr>
<tr>
<td>Mean</td>
<td>38.89</td>
<td>89.30</td>
<td>80.56</td>
<td>6.85</td>
</tr>
<tr>
<td>SD</td>
<td>14.25</td>
<td>16.02</td>
<td>10.43</td>
<td>6.46</td>
</tr>
</tbody>
</table>

Note: SCS, Self-Compassion Scale; PWB, Psychological Well-Being; BDI, Beck Depression Inventory.

* p < .01.

#### Table 3
Hierarchical regression analysis for moderating effect of self-compassion on the relationships between academic burn-out and psychological well-being.

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>R²</th>
<th>R change</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong> Academic burn-out</td>
<td>-0.37*</td>
<td>0.082</td>
<td>0.082</td>
<td>31.36*</td>
</tr>
<tr>
<td><strong>Step 2</strong> Self-compassion</td>
<td>0.45*</td>
<td>0.370</td>
<td>0.288</td>
<td>156.79*</td>
</tr>
<tr>
<td><strong>Step 3</strong> Academic burn-out x self-compassion</td>
<td>0.276</td>
<td>0.452</td>
<td>0.082</td>
<td>68.04*</td>
</tr>
</tbody>
</table>

* p < .01.

#### Table 4
Hierarchical regression analysis for moderating effect of self-compassion on the relationships between academic burn-out and depression.

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>R²</th>
<th>R change</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong> Academic burn-out</td>
<td>0.726</td>
<td>0.139</td>
<td>0.139</td>
<td>55.30*</td>
</tr>
<tr>
<td><strong>Step 2</strong> Self-compassation</td>
<td>-0.185</td>
<td>0.295</td>
<td>0.156</td>
<td>71.38*</td>
</tr>
<tr>
<td><strong>Step 3</strong> Academic burn-out x self-compassion</td>
<td>-0.485</td>
<td>0.335</td>
<td>0.04</td>
<td>49.26*</td>
</tr>
</tbody>
</table>

* p < .05,  ** p < .01.

was negatively associated with total psychological well-being (r = -0.37, p < .01) and positively associated with depression (r = 0.38, p < .01). Self-compassion was positively associated with psychological well-being (r = 0.63, p < .01) and negatively associated with depression (r = -0.51, p < .01). Preliminary analyses indicated non-significant gender, age, and occupation for psychological well-being and depression. Therefore, these demographic variables were excluded in regression analyses. The statistically significant results of multiple regression analyses are presented in Tables 3 and 4. A hierarchical regression analysis was conducted to test the hypothesis that self-compassion could moderate the association between academic burn-out and emotional well-being. As results revealed, after entering the interaction term (moderating effect of self-compassion) in step 3, in the link between academic burn-out and psychological well-being, there was a .082 increase in R² (B = 0.276, p < .01) (see Table 3). Furthermore, in the relationship between academic burn-out and depression, a .04 increase in R² was indicated (B = 0.485, p < .01) (see Table 4). So there was significant interaction between academic burn-out and emotional well-being and the results showed that sequentially 8.2% and 4.0% of the variance in psychological well-being and depression could be attributable to the moderating role of self-compassion in this relationship.

#### 5. Discussion

This study examined the moderation effect of self-compassion in the relationship between academic stress and mental health in cyber university students. As expected, the correlational findings of the study indicate that psychological well-being and depression are associated with self-compassion. Self-compassion sub-scales were positively associated with psychological well-being and negatively associated with depression. These results are consistent with earlier studies reporting a relationship between self-compassion and well-being (Neff, 2004).

The study result, that the association between academic burn-out and emotional well-being might be moderated by self-compassion, suggests that high levels of self-compassion function to attenuate the link between burn-out and psychological well-being. High levels of self-compassion also function to attenuate the relationship between academic burn-out and depression. In this regard, recent research has found that self-compassion is associated with health psychological functioning. For example, Neff, Kirkpatrick, and Dejitterat (2004) found that self-compassion was linked to adaptive coping strategies. Self-compassion was positively associated with problem-focused coping strategies and also positively

![Fig. 1.](image1.png)

**Fig. 1.** The moderating effect of SCS on the relationship between academic burn-out (MBI) and PWB.

![Fig. 2.](image2.png)

**Fig. 2.** The moderating effect of SCS on the relationship between academic burn-out (MBI) and depression.

To illustrate the Academic burnout × self-compassion interaction for psychological well-being, we plotted the regression of PWB on Academic burn-out at high and low levels of self-compassion (see Fig. 1). As Fig. 1 shows, the relationship between academic burn-out and psychological well-being was more strongly positive for high levels of self-compassion. As Fig. 2 shows, although the interactions were significant across two levels of self-compassion, the effects of academic burn-out on BDI were especially pronounced for students with low levels of self-compassion.
linked with adaptive emotion-focused strategies, such as positive reframing of one’s problems. When examining the relationship between self-compassion and coping with a perceived academic failure, they found that self-compassion was significantly associated with the tendency to cope with one’s negative feelings by using the adaptive emotion-focused strategies of positive reinterpretation and acceptance.

Several limitations should be noted regarding this study. First, the participants in the study were largely adult women students of the specific cyber university, and they were undertaking a counseling psychology course, where it is much more likely that concepts such as self-compassion would be encountered than other courses. In addition, students who enroll for this course are likely to be thinking in a way that is open to the concept of self-compassion. Therefore, it should not be assumed that the same pattern of findings would hold in a more diverse sample of university students. The study was also limited in its ability to examine variables because of its cross-sectional design. Furthermore, it relied entirely on self-report measures; therefore experimentally-based methods should be pursued to provide additional insight into the role of self-compassion in academic stress and mental health. In this regard, researchers are now starting to use experimental inductions of self-compassion to determine how it changes behaviors (Adams & Leary, 2007; Leary et al., 2007), and further studies along these lines are needed to gain a better understanding of how self-compassion relates to the emotional well-being of students.

Despite these limitations, this study makes several contributions. First, it demonstrates that self-compassion is associated with students’ psychological well-being and depression. However, all participants were cyber university students only, so the extent to which its results can be generalized is limited. Replication of this study should target other populations in order to generate more solid relationships among the constructs examined herein.

The results of the current study support the idea that self-compassion plays a role in students’ psychological well-being and mental health. Given the difficulties of the cyber university students who engaged in both work and study, it may be that attempts to help students develop greater self-compassion would be beneficial. Self-compassion may provide a way for students to experience positive feelings towards themselves without engaging in self-judgment and self-criticism. Self-compassion could also mitigate the suffering associated with their academic burn-out, see their problems as universal matters that all students suffer, and recognize that all stresses and conflicts are universal and shared aspects of human experiences. For these reasons, efforts are currently underway to develop a self-compassion intervention for individuals who suffer from emotional distress (Neff et al., 2007).

In conclusion, this study presents an empirical framework for the research through examining the relationship among academic burn-outs, self-compassion and psychological well-being for cyber university students with the negative and positive indicators of mental health. The results of the study suggest that other potential mechanisms stronger than self-compassion may exist in the relationship between academic burn-out and mental health for university students. Nevertheless, considering that self-compassion moderates the burn-out of the students, it can be stated that self-compassion enhancement programs, if implemented by school counseling services, may also have a beneficial effect on students who report academic burn-out and depressive symptoms. We suggest that self-compassionate individuals are more likely to employ adaptive coping strategies when confronted with academic burn-out and failure. The limited number of these studies does not confirm a comment on whether these results relate to a specific pattern particular to cyber university students. For these reasons, cross-sectional and longitudinal studies that would examine the relationships among academic burn-out, self-compassion and emotional well-being in university students will provide us the better understanding of these variables from various perspectives.

Acknowledgements

The study and all protocols were approved Seoul Cyber University Institutional Review Board. The number of the certification which verified approval of the study is AR10000-000054.

References


