

The Influence of Coping Strategies and College Student Outcomes

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From emerging independence to changing relationships, there are many opportunities for college students to experience stress (Worthy, Jonkman, & Blinn-Pike, 2010). High stress levels can hinder college degree completion (Murff, 2005), which could later influence the ability to secure higher-paying jobs and overall job satisfaction (Bjarnason, 2000). Grade point average (GPA) is closely associated with graduation rates, particularly that of the first two years. Students with a GPA higher than 2.0 in their first two years of college are more likely to graduate than students with a GPA of 2.0 or lower (Hosch, 2008).

Theoretical Framework

From a cognitive appraisal theoretical perspective, after students assess the stress of a situation, they enter a secondary appraisal process to analyze the resources they have to prevent or overcome the threat (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). If there is a perceived lack of resources, negative stress occurs. In response to that stress, coping strategies are used to reduce stress. Under the transactional model of stress, it is expected that positive evaluations of resources and better coping strategies will be associated with higher GPA.

Methods

Data

Undergraduates from a large public university who were enrolled in at least six credit hours were e-mailed a link to an online Qualtrics survey during the Spring of 2014. A total of 16,675 e-mails were sent, with a response rate of 20% for partial data and 15.5% for mostly complete data. In order to omit first semester freshmen and transfer students who might bias the results as they have yet to form a GPA, the sample was limited to students with a GPA of 1.5 or higher. The sample used in this study represents the university population well, with the exception of the overrepresentation of females and a slightly higher GPA.

Variables

Unweighted GPA ranged from 1.5 (low) to 4 (high) with a mean of 3.22 ($SD = .59$) for this sample. The respondent's reaction to the primary appraisal stage was measured with a subjective financial stress scale and a measure of peer financial comparison. Subjective financial stress was measured on a Likert-type scale ranging from 1 (not at all stressed) to 10 (extremely stressed). Student's perceived resources were measured using income, feelings of income adequacy, credit card debt, subjective and objective financial knowledge, mastery, religious affiliation, and age.

Coping strategies were measured from the Adolescent Coping Orientation for Problem Experiences (A-COPE) instrument (Patterson & McCubbin, 1987). Respondents were asked to indicate how often they engaged in a set of 25 items when they face difficulties or feel tense, where 1 = never and 5 = most of the time (the original scale was reduced from 54 to 25 items due to space constraints). Problem-focused and emotion-focused coping strategies were developed through a series of confirmatory factor analyses. The first factor comprised (a) organize your life and what you have to do and (b) try on your own to figure out how to deal with your problems or tension. This factor was used to measure problem-focused coping ($\alpha = 0.75$). The second factor consisted of (a) try to reason with others and talk things out/compromise, (b) try to think of the good things in your life, (c) hang out with friends, and (d) try to help other people solve their problems. This factor was used to measure emotion-focused coping ($\alpha = 0.68$).

Results

The results from the primary appraisal measures are consistent with theory. For every unit increase in the subjective financial stress scale, GPA declined by 0.04 points ($p < .001$). When compared to respondents who perceived their financial status as better off than their peers, respondents who perceived their financial status as worse off had a 0.10 lower GPA ($p < .01$).

There were mixed results from the perceived resources measurements. Income and credit card debt had negative influences on respondent GPA. For every dollar increase in reported income, GPA declined by 0.03 points ($p < .001$). For every dollar increase in revolving credit card debt, GPA decreased by 0.03 points ($p < .001$). Objective financial knowledge had a significantly positive impact on respondent GPA. For every additional question answered correctly, respondent GPA increased by 0.05 points ($p < .001$). Mastery resulted in a minimal, but statistically significant increase in GPA ($B = .01$; $p < .05$). Feelings of income inadequacy, subjective financial knowledge, and religious affiliation did not significantly influence respondent GPA.

Emotion-focused coping strategies did not significantly influence respondent GPA. However, problem-focused coping strategies had a positive influence on respondent GPA and was one of the strongest contributors of GPA as measured by the standardized beta coefficient ($B = 0.04$; $p < .001$; $\beta = .11$). This result is consistent with past studies that found problem-solving skills were significantly predictive of study habits and academic achievement (Elliott, Godshall, Shrout, & Witty, 1990).

Both controlling variables were significantly related to respondent GPA. Males had 0.23 lower GPAs ($p < .001$) when compared to their female counterparts. When compared to non-whites, being white was associated with GPAs of approximately 0.08 points higher ($p < .05$). Overall, the variables included in the regression model explained 16% of respondent GPA (adjusted $R^2 = .16$).

Theoretical Discussion

Respondents who reported lower levels of financial stress (1-5) are likely to skip the secondary appraisal stage and avoid the use of coping strategies. As a result, these respondents had higher overall mean GPA when compared to respondents who reported higher levels of financial stress (6-10). Respondents who reported their subjective financial stress level between 1 and 5 on the scale had an overall mean GPA of 3.36. Respondents who reported their subjective financial stress level between 6 and 10 on the scale had an overall mean GPA of 3.12.

The results show support that students who felt “worse off” are likely to enter secondary appraisal and use coping strategies. Respondents who felt “better off” had an overall GPA of 3.35. Respondents who felt “about the same” had an overall mean GPA of 3.25. Respondents who believed they were “worse off” had an overall mean GPA of 3.02.

Income had a significant negative influence on GPA ($B = -0.03$). This was opposite of our expectation that income is an important resource used to handle stressful situations. One explanation for this result is that the income variable measured student earned income and not parent income. Students who could not rely on parental income as a resource needed their own income. Students who worked more hours, and thus, earned more income had less time to devote to their academic studies. Therefore, income influenced available time as a resource, which had a negative influence on GPA. Feelings of income adequacy was not significant. This suggests that a student’s belief in their ability to meet certain income demands does not play a factor in influencing GPA. This was unexpected from the theoretical lens.

We expected higher subjective financial knowledge scores to be positively associated with GPA, although it showed no significance in the model. Objective financial knowledge was significant, which suggests that objective resources may matter more than feelings about the available cognitive resource.

Respondents with adequate resources use favorable coping strategies such as problem-focused coping strategies (Curtis & Trice 2013). The use of favorable copings strategies leads to positive stress, which yields better outcomes than negative stress. The showed support that problem-focused coping strategies are positively associated with GPA. There was no statistical significance between emotion-focused coping and GPA.

Based on prior research, problem-focused coping strategies were predicted to have a favorable effect on GPA (Curtis & Trice 2013). Indeed, our empirical model explained that problem-focused coping strategies were positively associated with increases in GPA ($B = 0.04$). Students who entered the secondary appraisal stage of the transactional model assessed the available resources to handle stress. Results from post-hoc chi square tests were mixed with what was expected from the theoretical lens. Students with no credit card debt, high subjective and objective financial knowledge scores, and high mastery were more likely to use problem-focused coping strategies. Students with no credit card debt, feelings that they had enough income, high mastery, and religious affiliation were more likely to use emotion-focused coping strategies. Older students were least likely to use emotion-focused coping strategies compared to younger students. The results were mostly consistent with our prediction that those with adequate

resources or perceptions of adequate resources were more likely to use problem-focused coping strategies, which was associated with higher GPAs.

Conclusion and Relevance

Given the influence of problem-focused coping strategies and objective resources in predicting GPA, students should utilize the resources available to them to reduce their stress to possibly assist with academic achievement. Adequate resources may lead to the use of more favorable coping strategies to deal with stress such as problem-focused coping strategies, which are associated with better GPA outcomes. Students should be aware that there may be a trade-off between earning income through employment and maintaining a high GPA. Colleges and universities may want to consider implementing work hour restrictions or offer on-campus employment that pays well so that students can work less and focus more of their attention towards their academics.

The problem-focused coping factor utilized in this study that was associated with higher GPAs was comprised of items measuring organization skills and self-reflection on problems and potential solutions. Colleges and universities may encourage such coping habits through curricula that incorporate such things as time management skills, prioritization techniques, organization, introspective thinking, and quiet reflection on problems and potential solutions. Additionally, curricula may benefit from including personal finance coursework as objective financial knowledge was linked to improvements in overall GPA.

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