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How the Stresses of Generational Status Predict the Self-Efficacy and Academic Performance of Undergraduate Students

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Abstract
Recent studies have shown that first-generation college students tend to exhibit lower levels of self-efficacy than non-first-generation college students. These studies have also shown that first-generation college students tend to underperform academically when compared to non-first-generation college students. However, these studies fail to take into account the factors that predict such trends. Thus, the focus of the present research is to measure how well generational status predicts students’ ability to handle stress. In addition, the study measures the extent to which time management helps students to alleviate such stress, to increase levels of self-efficacy, and to improve academic performance. Participants completed questionnaires that measured the amount and intensity of their daily stresses, their perceived self-efficacy, and their time management skills. Five factorial ANOVAs and an independent-samples t test were utilized in accordance with SPSS. Results supported the first hypothesis by showing that first-generation college students are significantly better able to handle large amounts of stress than non-first-generation college students. It appears that first-generation college students respond better to increased levels of stress. Further research can be conducted using a longitudinal study.

Key Terms:
- Generational Status
- Academic Performance
- Self-Efficacy
- Stress
College students may sometimes encounter periods within their careers when they feel that their best may not be good enough. Their social lives may decline, the pressures of personal responsibilities begin to weigh heavily, and no matter how hard they try, they cannot seem to attain the coveted grade point average that will allow them to progress to the next level in their academic tenure. Many people believe that because some are fortunate to go to college, they should stop at absolutely nothing to ensure that they succeed in college at all costs. This notion does not apply to everyone. What happens when students are doing the best they can, but it simply is not enough? Their circumstances should be taken into account before people pass judgment against them. First-generation college students, for instance, may endure more personal stress than non-first-generation college students. Such stresses can negatively impact their academic performance.

Prior research has shown a significant link between generational status, self-efficacy, and academic performance. Generational status refers to two specific groups of students on a college campus: first-generation college students and non-first-generation college students. First-generation college students are those whose parents did not graduate from a 4-year university, whereas non-first-generation students (traditional college students) have at least one parent who graduated from a 4-year university. The self-efficacy construct can be defined from a variety of viewpoints. It can be defined as an evaluative attitude toward one’s self; as a behavioral manifestation of one’s perceived self-value; or as a combination of two dimensions, namely, competence and worthiness. More specifically, academic self-efficacy refers to a belief in one’s ability to perform the tasks necessary for success in school. It may be helpful to examine this link by evaluating the types of goals students set for themselves and how they pursue those goals. Ferrari, McCarthy, and Milner (2009) examined the association between students’ perceptions of the goals of their university, their perception of their own personal goals, and their engagement in academic and non-academic activities on and off campus. Ferrari et al. (2009) found that students, particularly in a religious institution, were more engaged in institutional goals that were similar to their own goals. As a result, those students exhibited more motivation in pursuing such goals. The activities in which the students engaged in outside of school attested to this reasoning. They took part in activities that reflected the values of their personal goals.

Sometimes, students may choose to employ one goal orientation over the other. As they grow and develop, so will the manner in which they choose to achieve their goals. Martin, Marsh, Debus and Malmberg (2008) focused on comparing and evaluating the popularity of mastery-oriented goals and performance-oriented goals among college students and high school students. They found that while the overall preference for mastery orientation was significantly higher than the overall preference for performance orientation, college students favored mastery orientation more than high school students. Researchers allude to an evolutionary premise underlying the principle of mastery versus performance orientation. The goals students choose to pursue in life tend to change as they matriculate. Most high school students place less priority on adopting mastery-oriented goals to attain academic achievement than college students. They are more concerned with experiencing life and having fun than making good grades. They rely on the immature notion that their academic performance in high school has no effect on their future. They have yet to reach college and are still many years away from pursuing their career goals. Thus, they believe that there is nothing wrong with doing just enough schoolwork to make average grades.
As students mature, their attitudes change. They begin to set more responsible goals; they favor the goal orientation they once neglected. Gehlbach (2006) examined the types of goals students set for themselves and how those goals changed over time. He also sought to discover whether students’ will to learn academic material for knowledge’s sake, rather than simply to get a good grade, affected their overall outlook on education and academic progress. He found that students who learned material to master the concepts possessed a more positive outlook on education and displayed more advanced academic capabilities than those who memorized material only to do well on an assignment. His findings also revealed that students set goals that catered to their own personal beliefs; those goals changed as students acquired more knowledge and were better able to make well-informed decisions. Students mature as they expand upon the education they obtain both in the classroom and in their personal experiences.

University campuses, churches, friends, teammates, and coaches are additional sources that students can depend upon to sustain motivational environments. Smith, Smoll and Cumming (2009) sought to examine the effects of an encouraging environment on the achievement levels and goal orientations of a group of adolescents. Their findings revealed that a motivating, encouraging environment positively influences the achievement levels and personal goals set by young athletes. If people are encouraged by a support system to pursue a certain goal, they feel courageous enough to attempt that goal in order to master it for themselves. They realize that they have found their niche and take pride in the fact that others recognize and support that niche as well.

The chief motivational environment should be the home. Gonzalez, Greenwood and WenHsu (2001) examined how the type of parenting style students were accustomed to determined whether they chose to legitimately master a skill or temporarily do well. The parenting styles encompassed three categories: authoritative, authoritarian, and permissive. Findings revealed that authoritarian fathers who placed a significant emphasis on obedience yielded students who were more concerned with performing well and proving themselves to others (performance orientation). Authoritative mothers who emphasized self-sufficiency and independence produced students who were concerned with learning a skill and mastering it because it was fundamental to them personally (mastery orientation). Students of permissive parents possessed neither mastery orientation nor performance orientation. They simply did what they felt when they felt like it. Based on results, the type of home environment plays a major role in students’ upbringing and significantly affects their decision-making.

Psychological state and self-efficacy provide some insight in determining why non-first-generation students tend to academically excel over first-generation students. Wang and Castañeda-Sound (2008) analyzed the differences between first-generation college students and non-first-generation college students on the basis of their psychological well-beings. They also examined how well self-esteem, academic self-efficacy, and support from family and friends served as predictors for the psychological well-beings of each group. They found that first-generation college students experienced lower levels of academic self-efficacy, higher stress levels, and lower levels of self-esteem than non-first-generation college students. Although there were no reports of differences in social support between the groups, Wang and Castañeda-Sound (2008) concluded that the psychological well-beings of first-generation college students faced much more negativity and were further in jeopardy than that of non-first-generation college students.

There are a variety of factors that can be correlated to generational status to ascertain the
differences in self-efficacy and academic performance between first-generation college students and non-first-generation college students. Ramos-Sánchez and Nichols (2007) studied how well self-efficacy mediated the association between students’ academic performance and generational status based on their adjustment into college. Surprisingly, Ramos-Sánchez and Nichols (2007) found no interaction between self-efficacy, academic performance, and generational status. However, high levels of self-efficacy indicated more positive adjustment into college for both groups. Their findings also suggested that despite being confident in their academic abilities, first-generation college students generally underperformed academically when compared to non-first-generation college students.

Engagement in course-related assignments and concepts is essential to any student’s academic success. Such success can yield increased levels of self-efficacy in the student. By examining the factors that affect students’ engagement in their respective courses, we can determine how the presence or lack of those factors correlates to the self-efficacy and academic performance of those students. Caldwell, Harrison, Adams, Quin, and Greeson (2010) examined whether students’ attentiveness increased after enrolling in physically active courses. They also analyzed whether self-efficacy, mood, and stress mediated the relationship between increased attentiveness and improved sleep. Their results revealed that over the course of one semester, students who participated in at least one physically demanding course demonstrated increased levels of mental alertness. In addition, high levels of self-efficacy, positive mood, and low levels of stress strengthened the positive relationship between increased alertness and improved sleep quality.

The ability to cope with stressful situations is important to any college student’s academic career. Poor coping techniques or a lack of coping techniques can make the difference between a student’s graduation from college and a student’s withdrawal from college. The findings of Devonport and Lane (2006) presented self-efficacy as an instrumental factor for assessing coping techniques and retention rates among undergraduate students. The study found that those students with higher levels of self-efficacy were more likely to resort to methods of coping when plagued by stressful situations. Those students were also less likely to withdraw from their universities.

Motivation, like engagement, influences the improvement of students’ self-efficacy and academic performance. Hsieh, Sullivan and Guerra (2007) examined college students’ motivation toward learning as a predictor of their academic achievement. More specifically, the study examined differences among the perceived self-efficacies and goal orientations of two distinct groups of college students: those students with considerably good academic grades and those students with poor academic grades who were placed on academic probation. Results of the study revealed that self-efficacy and adopting mastery-oriented goals were positively correlated to academic achievement, whereas self-efficacy and adopting performance goals were negatively correlated to academic achievement. Those students in good academic standing indicated higher rates of self-efficacy and were more likely to implement mastery orientation as a method of learning than those students placed on academic probation, who reported implementing performance orientation more frequently.

It may be of no surprise that first-generation college students tend to possess lower levels of self-efficacy and demonstrate poorer academic performance than do non-first-generation college students. Many people fail to take into account the various stresses that separate the two groups. More specifically, do first-generation college students and non-first-generation college students respond differently to increased levels of stress? The focus of the present research is to measure how well generational
status predicts students’ ability to handle stress. Thus, I hypothesize: (1) first-generation college students are better capable of handling large amounts of stress than non-first-generation college students; (2) a stronger correlation between time management and improved self-efficacy for first-generation college students than non-first-generation college students; (3) a stronger correlation between time management and improved academic performance for first-generation college students than non-first-generation college students; and (4) first-generation college students are better able to manage time than non-first-generation students.

Method

Participants

Students who are enrolled at Xavier University of Louisiana, an urban, Catholic institution in New Orleans, Louisiana were permitted by the university’s Institutional Review Board to participate in the present study. The sample included 30 subjects (26 women, 4 men) from various classifications (0 freshmen, 9 sophomores, 7 juniors, and 14 seniors), all ranging from ages 19 to 28. Because the population is concentrated on a historically black university’s campus, the prevalent race is displayed in the sample (26 Black/African American, 0 American Indian/Native American, 0 Asian/Pacific Islander, 0 White/Caucasian, 2 Hispanic, 2 Multi-racial). Students of all majors and classifications were welcome to participate. A vast majority of the participants were psychology majors or non-psychology majors enrolled in at least one psychology course at the institution. They were given course credit from their respective professors as an incentive for their participation in the study. Although direct solicitation of participants was not employed, students were notified by an informational flyer posted in the Psychology Department suite. Completion of the study took place during one session, which lasted approximately 30 minutes.

Personal identifiers were not used when analyzing the surveys to ensure the confidentiality of each participant.

Materials

Participants completed a total of five questionnaires. Thirty-one items from the Student Stress Scale, an adaptation for college students from the Holmes-Rahe Social Readjustment Rating Scale (Holmes & Rahe, 1967) assess the types and amounts of stresses that students often encounter in their lives. The Intensity of Experience scale, an adapted form of the Inventory of College Students’ Recent Life Experiences (ICSRLE; Kohn, Lafreniere, & Gurevich, 1990), consists of 49 Likert-type items that measure the extent to which daily stresses impact students’ lives. The General Self-Efficacy Assessment scale, a 23-question, Likert-type questionnaire, is composed of two different adapted forms of the original GSE scale (Schwarzer & Jerusalem, 1995). The oddly-numbered items measure students’ perceived self-efficacy in relation to taking initiative, putting forth effort, and being persistent. The evenly-numbered items measure students’ abilities to cope with the various difficult demands of life. The Time Management scale, an adaption of Britton and Tesser’s Time Management Scale (Britton & Tesser, 1991), uses 27 Likert-type items that measure how well students manage their time when bombarded with a variety of tasks, what methods they employ to effectively manage that time, and how they view their time management methods. The demographic questionnaire allows students to provide basic background, academic, and enrollment status information.

Procedure

As participants entered the study, they received consent forms. The purpose of the study was discussed without details that would reveal the hypotheses, and the consent forms were read aloud to all participants. After an opportunity to
ask questions, participants were given the option of completing the study. They were informed that they were free to leave the study at any time without facing prejudice or penalty. The primary researcher administered the surveys to all participants and discussed each one to ensure that participants knew how to complete them. The participants were instructed that the surveys were designed for individual completion only and should be completed in one session. Those who chose not to participate in the study were allowed to leave, while those who chose to complete the study were asked to sign the consent form. After the study, participants signed credit sheets in accordance to their respective professors. They were cordially thanked for their participation and given debriefing forms upon exiting the room.

Results

To examine the various relationships among self-efficacy, academic performance, amount of stress, intensity of stress, time management, and generational status, a Pearson r Correlation Coefficient was used. Self-efficacy, time management, amount of stress, and intensity of stress emerged as interesting variables. There was a significant negative relationship between self-efficacy and stress intensity, \( r(29) = -0.483, p = 0.008 \). In addition, there was a significant negative relationship between time management and amount of stress, \( r(30) = -0.383, p = 0.037 \). Also, there was a significant positive relationship between amount of stress and intensity of stress, \( r(29) = 0.450, p = 0.014 \). Thus, I conducted a median split to dichotomize all four variables to determine how they interact to predict academic performance. Five factorial ANOVAs and an independent-samples \( t \) test were conducted to analyze the data. A 0.05 alpha level was used as the standard of significance.

In predicting academic performance, there was a significant two-way interaction between the amount of stress incurred by students and generational status, \( F(1, 24) = 5.254, p = 0.031 \). There was also a significant main effect of stress intensity, \( F(1, 24) = 7.617, p = 0.011 \), that was qualified by a significant two-way interaction between stress intensity and generational status in predicting academic performance, \( F(1, 24) = 8.920, p = 0.006 \). Data supported the first hypothesis. Amount of stress handled by students, stress intensity, and generational status served as suitable predictors of academic performance.

In predicting self-efficacy, a two-way interaction between time management and generational status that was not significant was found, \( F(1, 25) = 0.005, p > 0.05 \). Data did not support the second hypothesis. Time management and generational status did not interact to predict academic performance.

Nonetheless, the results yielded further findings. A significant main effect of time management, \( F(1, 26) = 4.041, p = 0.055 \), and a significant main effect of the amount of stress encountered by students, \( F(1, 26) = 6.095, p = 0.020 \), were discovered. Acting as separate entities, time management and amount of stress encountered by students serve as suitable predictors of academic performance.

There was a two-way interaction between time management and generational status that was not significant in predicting academic performance, \( F(1, 24) = 0.151, p > 0.05 \). Data did not support the third hypothesis. Time management and generational status did not interact to predict academic performance.

No significant difference was recovered, \( t(27) = 0.165, p > 0.05 \), between the time management skills of first-generation students (\( m = 90.143, sd = 14.28 \)) and the time management skills of non-first-generation students (\( m = 91.000, sd = 13.65 \)). Data did not support the fourth hypothesis. Researchers cannot compare the time
management skills of a group of students based solely on their generational status.

**Discussion**

The results of the present study may help to expose differences in first-generation students’ ability to handle stress and non-first-generation students’ ability to handle stress. A significant two-way interaction presented amount of stress incurred by students and generational status as predictors of academic performance. First-generation students respond better to increased levels of stress than non-first-generation students. First-generation students attain high grade point averages when under high stress; non-first-generation students attain high grade point averages when under low stress. In addition, there was a significant main effect of stress intensity. Despite generational status, students who experience higher stress intensity report lower grade point averages than students who experience low stress intensity. The main effect was qualified by a significant two-way interaction that presented stress intensity and generational status as predictors of academic performance. Stress intensity seems to have no effect on first-generation students. They report similar grade point averages whether they were under high stress intensity or low stress intensity. Interestingly, non-first-generation students who experience high stress intensity report lower grade point averages than students of the same generational status who experience low stress intensity. The difference is by almost one letter grade.

In the present study, there are no significant interactions between time management, generational status, self-efficacy, and academic performance. A non-significant two-way interaction did not present time management and generational status as predictors of self-efficacy. In addition, a non-significant two-way interaction did not present time management and generational status as predictors of academic performance. There was no significant difference between the time management skills of first-generation students and the time management skills of non-first-generation students. Therefore, no assumptions can be made regarding the relationships between these variables until further research is conducted. However, the data produced additional findings. Significant main effects of both time management and the amount of stress encountered by students were discovered. Students who employ time management techniques have higher levels of self-efficacy than students who do not employ time management techniques. Likewise, students who handle small amounts of stress have higher levels of self-efficacy than students who handle large amounts of stress.

Ferrari, McCarthy and Milner (2009) introduced a central point that may help us to understand why students, regardless of generational status, do well in certain courses and not in others. If the objectives of those courses are in accordance with the ideals of the students, the students may be more likely to do well in that course and actually master the material. Thus, professors should emphasize goals within the course curriculum that students can identify with in order to engage them. Martin, Marsh, Debus and Malmberg (2008) presented an evolutionary premise underlying the principle of mastery versus performance orientation. The goals students choose to pursue in their lives tend to change as they mature. For instance, most high school students place less priority on adopting mastery-oriented goals to attain academic achievement than college students. Thus, it may be interesting to conduct a study in which generational status is eliminated as a variable and examine the relationships of the other variables (academic performance, self-efficacy, stress, and time management).

Though the results of the present research support the first hypothesis, there are quite a few
limitations that may account for the non-significant results of the remaining hypotheses. Some of the limitations are sample-related limitations. For instance, the vast majority of participants received course credit as an incentive for participation in the study. There is a possibility that they could have felt obliged to answer each item in a certain manner to reflect positively on their responses. This is a common form of subject bias. In addition, the university has a large gap in its male to female student ratio. The sample of the present research included only four males. Thus, I would not be aware of any gender-related differences present within the study. Had the study been conducted at a public university or on a more diverse college campus, the population of participants would have been more diverse, composed of students from a mixed ratio of each generational status.

Other limitations are implication-related limitations. There are various interactions between many variables of the present study, but results significantly support only two interactions. These findings impart a rather appealing connotation. While interactions may take place between different variables, there is no way to discern the manner in which one variable affects another. For example, results exhibited a significant two-way interaction between stress intensity and generational status in predicting academic performance. However, there is no way to determine if the interaction represents a positive or negative correlation between stress intensity and generational status. Thus, it is not possible to argue causation. Conducting a longitudinal study can eliminate this limitation. More specifically, future researchers can place students in a stressful situation, give them a lengthy academic assignment to complete, and measure their accuracy in completing the assignment. Such a modification allows them to witness first-hand how one variable affects the other.

There is also a survey-related limitation. This limitation involves measuring stress in two different ways, using two different scales. Though it was this study’s intention to measure the amount and intensity of stress incurred by students, two different surveys should not have been used to measure the variables. The error occurred when one scale included stresses that had occurred in students’ lives within the past year and the other scale included stresses that occurred in students’ lives daily. To accurately measure amount of stress encountered by students and stress intensity, this study should have used only the scale that included daily stresses and asked participants to rate the intensity of those particular stresses. Making this correction would have allowed an accurate measurement of how amount of stress and stress intensity are correlated to time management, self-efficacy, academic performance, and generational status, respectively.

Results of the study will allow participants to understand how employing a technique such as time management can help them alleviate stress, increase their levels of self-efficacy, and improve their academic performance. The information presented can also enable participants to incorporate proper time management and other stress relief techniques into their daily lives to balance the stresses of personal and academic life. It can also persuade various campus-wide organizations and departments to institute activities that emphasize time management and stress relief throughout the campus.

References


Retrieved from http://userpage.fuberlin.de/health/engscal.htm


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