

Life Stressors and Non-Cognitive Outcomes in Community Colleges for Mexican/Mexican American Men

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The purpose of the study was to determine the effect of life stressors on non-cognitive outcomes (e.g., locus of control, self-efficacy, degree utility) for community college Mexican/Mexican American men after controlling for age, income, dependents, high school grade point average, and time status. Bean and Metzner's (1985) Model of Nontraditional Student Attrition served as the guiding theory in this study. Using the Community College Survey of Men (CCSM[®]) data instrument, findings indicated that life stressors had a significant effect on locus of control, and degree utility for community college Mexican/Mexican American men. Implications for student affairs practice are extended.

INTRODUCTION

Latinos are the largest ethnic minority in the United States and are projected to be the largest ethnic group by 2040 (Vazquez Urias, 2012). The highest concentration of Latinos reside in the western United States, primarily composed of individuals of Mexican/Mexican-American descent (Pew Hispanic Center, 2011). Despite the population growth, Latinos do not succeed in education at the same rate as their ethnic counterparts. According to Saenz and Ponjuan (2009), Mexican-American male students are less likely to attend pre-school and more likely to be labeled with a learning disability. This is coupled with the fact that these students are increasingly concentrated in K-12 schools with limited financial resources that offer subpar academic preparation. Moreover, the high school graduation rate for Mexican American students (78%) lags behind White (95%) and Asian/Pacific Islander (96%) students (National Center for Education Statistics, 2014). For the Latino men who do pursue a postsecondary education, many will enroll in community colleges due to their open access policies and potential benefits for upward social mobility.

However, while Latino men enroll in high proportions in community colleges, these institutions struggle to facilitate their success. Although individual students do succeed, most men of color (76.9%) do not persist past the first year (Wood & Turner, 2011). Dismal success rates for community college completion is cause for concern and has drawn attention from policy

makers and academic leaders nationally (Harris III & Wood, 2013). Gender differences can be found within the Mexican community as females are outpacing their male counterparts in college enrollment and completion rates (National Center for Educational Statistics, 2007; Saenz & Ponjuan, 2009).

The reasons for low success rates are complex and dynamic. Some scholars have attributed poor outcomes to academic experiences which can be described as traumatic (Rendón, 2002). For instance, some men of color receive direct and indirect messages of invalidation from faculty, staff, and peers (Rendón, 2002). Life stress has also been found to play a significant role in the academic success for men of color. Specifically, researchers have found life stress to be a significant negative predictor of student persistence (Mason, 1998; Wood & Williams, 2014). Life stressors have been defined as part of several environmental factors that limit students' ability to engage in the academic social system of an institution (Astin, 1999; Lundberg, 2014; Wood & Williams, 2013; Harris III & Wood, 2013), and can occur in both the form of external pressures and stressful life events. External pressures are life stressors that occur over time. They can include employment concerns, financial woes, family commitments, and commuting challenges. Stressful life events (the focus of this study) can include a host of challenging events that occur in students' external lives, such as: loss of a job, death in the family, health concerns, and divorce. Life stressors intensify the challenges experienced by some Mexican-American students who are often already taxed with full-time work, external obligations, and financial pressures (Santiago, 2011).

As such, the purpose of the study was to determine the effect of life stressors on the outcomes for Mexican/Mexican American men in community colleges. Specifically, this study was interested in non-cognitive outcomes (e.g., locus of control, self-efficacy, and degree utility) which have been identified as strong determinants of academic success for men of color (Harris & Wood, 2014). This study employed an ANCOVA design to determine differences in these non-cognitive outcomes by levels of stressful life events, after controlling for respondents' age, income, dependents, high school grade point average, and time status. This study is a significant contribution to extant research as few studies, if any, have explored the relationship between life stressors and non-cognitive outcomes for men of color in community colleges. The next section discusses the theoretical framework employed in this study.

THEORETICAL FRAMEWORK

Bean and Metzner (1985) developed a conceptual model of nontraditional undergraduate student attrition. They identified non-traditional students as those who were part-time, older, and commuter students. Similar to the traditional student attrition model developed by Tinto (1975), Bean and Metzner hypothesized that academic (e.g., study habits, use of student services, attendance, certainty of major) and background (e.g., age, enrollment status, educational goals, prior academic performance) variables influenced student retention. However, they also stated that non-academic environmental "pull" factors were unique to nontraditional students' success (Mason, 2008). The model was conceptualized on the premise that a student's decision to withdraw is dependent on: "1) academic performance, 2) intentions to leave, 3) educational goals, and 4) environmental variables" (p. 490). Amongst the two outcome variables (academic and psychological), perceived utility of a college degree and life stress were identified as factors that positively influenced student retention. However, Bean and Metzner did not identify relationships between these variables. Extending upon this work, this study sought to explore

how stress in one's life resulted in differential outcomes for utility, as well as other integral non-cognitive variables (e.g., self-efficacy, locus of control). The hypothesis guiding this study is that greater levels of life stress will negatively affect non-cognitive outcomes.

METHODOLOGY

The Community College Survey of Men (CCSM) was used as the data instrument for this study. This tool was designed to measure factors influencing outcomes for historically underrepresented and underserved men in education. Community colleges use the tool to “establish student outcome benchmarks, monitor student performance, and identify areas [in need] of enhanced attention” (Wood & Harris, 2013, p. 334). The survey has been completed nationally by over 7,000 men at 40 community college campuses. The dataset for this study was delimited to Mexican/Mexican American students enrolled in select urban colleges (N=372).

The outcome variables of this study included three non-cognitive measures: locus of control, self-efficacy, and degree utility. Locus of Control gauged students' internal belief that they have control over their academic success (4 items, $\alpha = .90$). Self-Efficacy assessed students' belief in their ability to succeed academically (4 items, $\alpha = .92$). Degree Utility evaluated students' perception of the value of college (4 items, $\alpha = .89$). Stressful life events served as the independent variable in this study. Specifically, respondents were asked to indicate the total number of stressful life events that occurred in the past two years. Examples of these events included: divorce in family, loss of job, eviction, relationship breakup, incarceration, major change at work, illness in family, death of a close friend or family member (Harris III & Wood, 2013). Students responded to this question on a scale ranging from none to seven or more. Survey responses for this variable were collapsed into three categories: low (none or 1 event), medium (2 or 3 events) and high (4 or more events). Five covariates were also used in the model. These included age, household income, total financial dependents, high school grade point average, and time status (full time or part-time) (see Appendix A for descriptive data).

Three separate analyses of covariance (ANCOVA) were employed for each of the outcome variables in this study. Homogeneity of regression slopes assumptions were examined using custom models. Full model test of between-subjects effects were interpreted using partial eta squared (partial η^2) and R^2 . Partial η^2 effect sizes were interpreted as follows: small (.01), medium (.06), and large (.14) (Green & Salkind, 2009). Omnibus and post-hoc tests were evaluated at .05. To adjust for Type 1 errors, post-hocs were examined using the Bonferroni procedure. Missing values from the dataset were replaced using expectation maximization.

RESULTS

While the test of between-subjects effects for self-efficacy was not significant, $F(2,329) = 2.958$, $MSE = 10.076$, $p = .053$, partial $\eta^2 = .018$, the remaining two variables examined in this study had significant differences based on levels of life stress. In the second analysis, using the outcome variable degree utility, a preliminary analysis evaluating the homogeneity of slopes assumption indicated that the relationship between the covariate variables and the dependent variable did not differ significantly as a function of the independent variable. Thus, the homogeneity of slopes assumption was satisfied. The test of between-subjects effects was significant, $F(2,329) = 3.447$, $MSE = 10.200$, $p = .033$, partial $\eta^2 = .021$. The strength of the relationship between the factor (stressful life events) and the dependent variable (degree utility)

was small, as assessed by a partial η^2 . The factor accounted for 2.1% of the variance in the dependent variable, holding constant the variables of age, household income, dependents, high school grade point average, and time status.

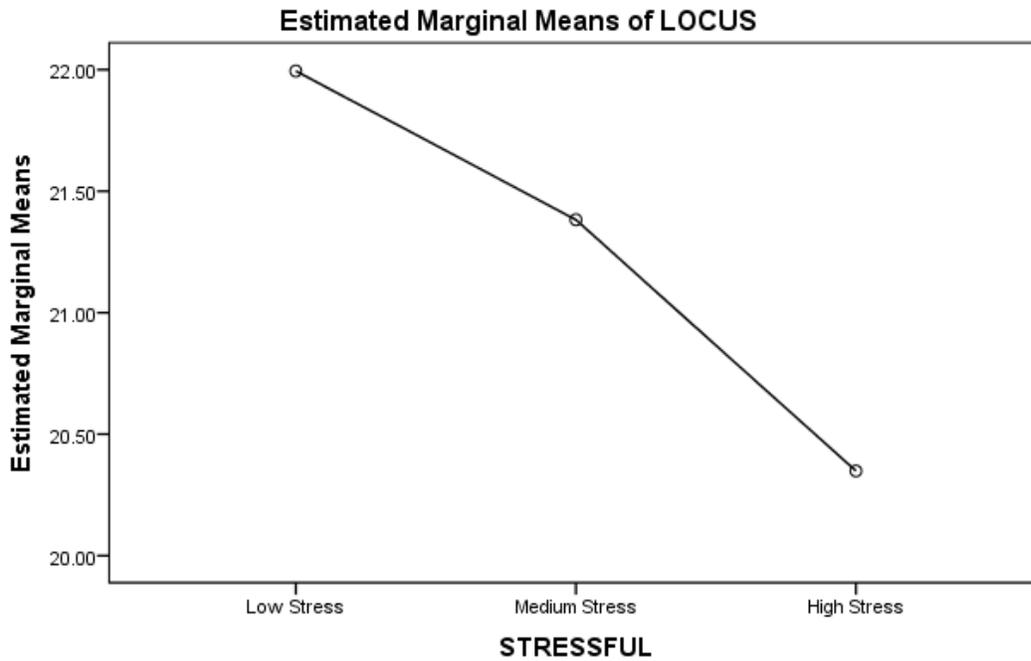


Figure 1. Estimated marginal means of locus of control by stressful life events for Mexican/Mexican American men

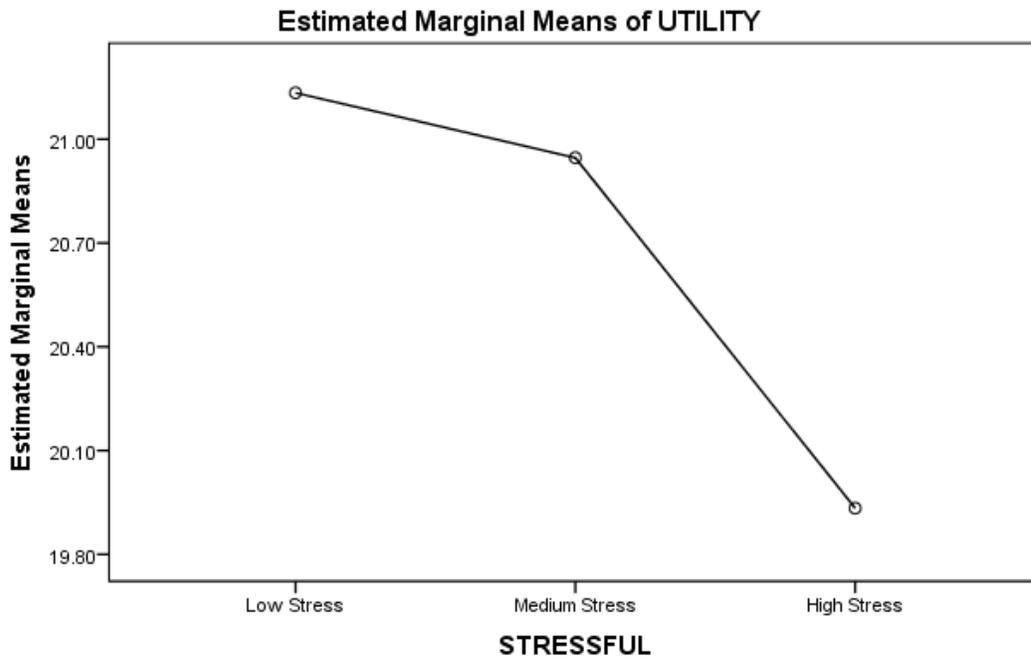


Figure 2. Estimated marginal means of degree utility by stressful life events for Mexican/Mexican American men

Prior to adjustment, the means for each life stressor were categorized as follows: Low Stress (M=21.10), Medium Stress (M=20.94), and High Stress (M=19.96). After adjustment, controlling for age, income, dependents, high school grade point average, and time status, the mean scores were Low Stress (M=21.13), Medium Stress (M=20.94), and High Stress (M=19.93). Follow up tests were conducted to evaluate pairwise differences among the adjusted means. Based on the Bonferroni procedure, the comparisons illustrated that students with Low Stress had a higher level of degree utility than students with High Stress by a mean point difference of 1.201 ($p < .05$). No other significant differences were evident (See Figure 2.)

In the third analysis using the outcome variable locus of control, a preliminary analysis evaluating the homogeneity of slopes assumption was met. The test of between-subjects effects was significant, $F(2,329) = 5.846$, $MSE = 9.755$, $p = .003$, partial $\eta^2 = .034$. The strength of the relationship between the factor (stressful life events) and the dependent variable (locus of control) was small. According to partial η^2 , the factor accounted for 3.4% of the variance in the dependent variable, holding constant respondents' age, household income, dependents, high school grade point average, and time status. Prior to adjustment, the means for each life stressor were categorized as follows: Low Stress (M=22.00), Medium Stress (M=21.38), and High Stress (M=20.36). After adjustment, controlling for age, income, dependents, high school grade point average, and time status, the mean scores were, Low Stress (M=22.0), Medium Stress (M=21.38), and High Stress (M=20.35). Follow up test were conducted to evaluate pairwise differences among the adjusted means. Based on the Bonferroni procedure, the comparisons illustrated that students with Low Stress had a higher locus of control than students with High Stress by a mean point difference of 1.646 ($p < .05$). (See Figure 1).

DISCUSSION & RECOMENDATIONS

These findings are significant for academic practitioners who work with men of color as major life stressors can negatively consume students' mental, physical, and emotional well-being, which threaten students' locus of control and degree utility. While the community college system cannot control the environmental stress factors of their students, they can help Mexican-American men view their academic institution as a place of refuge. According to Mason (2008), students that have a positive perception of their environment, are more likely to have higher levels of satisfaction and view of self. Community colleges can retain students by creating a welcoming environment where students feel validated and are not subject to high levels of anxiety.

Proactively creating a positive environment for students, especially men of color can be achieved through proactive outreach, resource centers, student groups, and special events. Positive images of accomplished Mexican-American male alumni showcased around campuses might also help students connect their current goals and dreams to academic success, hence supporting degree utility. Community colleges can further assist students through curriculum and support services. For example, personal development courses can help students employ positive coping strategies that increase students' ability to effectively manage their stressors (Wirth & Padilla, 2010), thus limiting the psychological and physical effects of stress. This is important as two year students are more likely to manage multiple responsibilities (e.g., student, employee, care takers) that compete for their time (Giancola, Grawitch, & Borchert, 2009). Additionally, college counselors can play a critical role in helping students facilitate decisions that have long-

term benefits for students in crisis, as opposed to decisions that may be only sensible in the interim.

These high impact interventions could serve as mechanisms for positive non-cognitive outcomes. As this study has found, Mexican-American men who perceive a sense of control over their stressors can minimize the negative effects of stress, and strengthen their locus of control and degree utility. This can hopefully increase the academic performance for men of color, and lead to the completion of their educational goals.

REFERENCES

- Astin, A. W. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development, 40*(5), 518-529.
- Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research, 55*(4), 485-540.
- Giancola, J. K., Grawitch, M. J., & Borchert, D. (2009). Dealing with the stress of college: A model for adult students. *Adult Education Quarterly, 59*(3), 246-263.
- Green, S. B., & Salkind, N. J. (2009). *Using SPSS for Windows and Macintosh: Analyzing and understanding data* (5th ed.). Upper Saddle River, NJ: Pearson.
- Harris III, F., & Wood, J. L. (2013). Student success for men of color in community colleges: A Review of published literature and research from 1998-2012. *Journal of Diversity in Higher Education, 6*(3), 174-185.
- Lundberg, C. (2014). Peers and faculty as predictors of learning for community college students. *Community College Review, 42*(2), 79-98.
- Mason, H. P. (2008). A persistence model for African American male urban community college students. *Community College Journal of Research and Practice, 22*(8), 751-760.
- Nakajima, M. A., Dembo, M. H., & Mossler, R. (2012). Student persistence in community college. *Community College Journal of Research and Practice, 36*(8), 591-613.
- National Center for Education Statistics. (2014). Retrieved from Educational Attainment: <http://nces.ed.gov/fastfacts/display.asp?id=27>
- National Center for Educational Statistics. (2007). Digest of Educational Statistics. Retrieved from Table 6: Available from <http://nces.ed.gov/>
- Pew Center on the States and the Public Safety Performance Project. (2008). One in 100: Behind Bars in 2008. Washington, DC.
- Pew Hispanic Center. (2011). Statistical Portrait of Hispanics in the United-States. Retrieved from <http://www.pewhispanic.org/2013/02/15/statistical-portrait-of-hispanics-in-the-united-states-2011/>
- Rendón, L. (2002). Community College Puente: A validating model of education. *Educational Policy, 16*(4), 642-667.
- Saenz, V. B., & Ponjuan, L. (2009). The vanishing Latino male in higher education. *Journal of Hispanic Higher Education, 8*(1), 54-89.
- Santiago, D. (2011). *Roadmap for Ensuring America's Future by Increasing Latino College Completion*. Washington, D.C.: Excelencia in Education: <http://www.edexcelencia.org/research/roadmap-ensuring-america's-future>.
- Tinto, V. (1975). Dropout from higher education: a theoretical synthesis of recent research. *Review of Educational Research, 45*(1), 89-125.

- Vazquez Urias, M. (2012). The impact of institutional characteristics on Latino male graduation rates in community colleges. *Center for African American Research & Policy*, 3(1), 1-12.
- Wirth, R. M., & Padilla, R. (2010). College student success: A qualitative modeling approach. *Community College Journal of Research and Practice*, 32(9), 688-711.
- Wood, J. L., & Harris III, F. (2013). The community college survey of men: An initial validation of the instrument's non-cognitive outcome construct. *Community College Journal of Research and Practice*, 37, 333-338.
- Wood, J. L., & Turner, C. S. (2011). Black males and community college: Student perspectives on faculty and academic success. *Community College Journal of Research and Practice*, 35, 135-151.
- Wood, J. L., & Williams, R. C. (2013). Persistence factors for Black males in the community college: An examination of background, academic, social, and environmental variables. *Spectrum*, 1(2), 1-28.

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APPENDIX A
Descriptive Data

Variable	Coding	Descriptives
Degree Utility	Composite measure, 4 items on a 6-point scale, ranged from 4 to 24	M= 20.73 SD= 3.29
Locus of Control	Composite measure, 4 items on a 6-point scale, ranged from 4 to 24	M= 21.17 SD=3.33
Self-Efficacy	Composite measure, 4 items on a 6-point scale, ranged from 4 to 24	M= 20.28 SD=3.39
Stressful Life Events	1= low; 2= medium; 3= high	Low=27.0%; Medium=49.9%; High =23.1%
Age	1=under 18; 2=18 to 24 years old; 3=25 to 31; 4=32 to 38 years old; 5=39 to 45 years old; 6=46 to 52 years old; 7=53 to 59 years old; 8=60 to 66 years old; 9=67 and older	M= 2.72 SD= 1.105
Income	1=under \$10,000; 2=\$10,001-20,000; 3=\$20,001-30,000; 4=30,001-40,000; 5=\$40,001-50,000; 6=\$50,001-60,000; 7=\$60,001-70,000; 8=\$70,001-80,000; 9=\$80,001-90,000; 10=\$90,001-100,000; 11=\$100,001-110,000; 12=>\$110,001 or more	M= 2.80 SD= 2.27
Time Status	1="Full-time 12 credits/units or more"; 2="Less than full-time (less than 12 credits/units)"	M= 1.41 SD= .49
Total Dependents	1="none"; 2="1"; 3= "2"; 4="3"; 5="4"; 6="5 or more"	M= 2.81 SD= 2.33
High School GPA	1="0.5-0.9 (F to D)"; 2="1.0-1.4 (D to C-)"; 3="1.5-1.9 (C- to C)"; 4="2.0-2.4 (C to B-)"; 5="2.5-2.9 (B- to B)"; 6= "3.0-3.4 (B to A-)"; 7= "3.5-3.9 (A- to A)"	M= 5.13 SD= 1.36