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# Factors Predicting Academic Achievement Among Hispanic Community College Students

Lisa Marcelino  
*Walden University*

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# Walden University

College of Social and Behavioral Sciences

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Lisa Marcelino

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Walden University  
2018

Abstract

Factors Predicting Academic Achievement Among Hispanic Community College

Students

by

Lisa Anne Marcelino

MA, Kean University, 2008

BA, Kean University, 2006

BA, Kean University, 2005

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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## Abstract

Hispanic college students are more at risk of poor academic performance and dropping out than any other racial group. The Hispanic college population continues to grow, yet rates of retention and achievement for this group continue to decline. Previous research on Hispanic college students has examined factors that contribute to underachievement and declining graduation rates, but they are limited to students attending 4-year institutions. This study examined if grade point averages (GPAs) were affected by levels of self-efficacy, resiliency, and sensation seeking. Bandura's self-efficacy and social cognitive theories along with Zuckerman and Kuhlman's theory of sensation-seeking were the theoretical frameworks that guided the present study. Hispanic students with high levels of self-efficacy were expected to have higher GPAs than students with low levels of self-efficacy. Students who were high sensation seekers were hypothesized to have lower GPAs than low sensation seekers. Lastly, it was hypothesized that sensation-seeking behaviors would be correlated with lower GPAs and lower levels of self-efficacy. The resiliency aspect "coping with stress makes me stronger" was a significant predictor of GPA. Sensation-seeking activities such as roller coaster riding, sex before marriage, and skiing were shown to correlate with lower GPAs. College self-efficacy did not have a relationship to Hispanic community college students' GPAs. These findings may be important to educators, administrators, and others directly involved in promoting student success in college because students at risk for low academic performance and dropping out of college can be identified earlier and therefore early intervention strategies can be implemented.

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## Dedication

I hereby dedicate this dissertation to my wonderful husband Carlos, who has been by my side for the entire journey and has provided endless amounts of encouragement and support. Thank you, Carlos, for being such a wonderful husband and father and for always being there for me when I needed you. I am such a lucky woman to have you in my life and I thank God for you every day.

I also dedicate this dissertation to the memory of my grandmother, Irene Hinko, who always pushed for me to finish my education. My grandmother, who I referred to as “Nan” always encouraged me to give my very best in all that I did, and she reminded me that one day my hard work would pay off. Thank you, Nan, for being such a loving, caring, giving grandmother, best friend, mentor, and supporter of all that I did! I miss you every day and I know you are watching me from Heaven and cheering me on as I complete this educational journey.

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## Chapter 1: Introduction to the Study

### **Introduction**

The present study examined factors affecting the academic achievement of the Hispanic American population. Academic achievement of Hispanic Americans is an important area to be researched because the Hispanic population is showing steady growth, yet high school and college graduation rates are lower for this group than for any other race (US Census Bureau, 2012). The present study was important because it provided insight for teachers, parents, administrators, psychologists, and students by uncovering factors that contributed to the problem of underachievement of Hispanic-American undergraduate college students. As factors are identified that link to underachievement, changes can be made in high schools and colleges across America to address these factors so that Hispanic Americans can be more readily equipped to succeed in their academic endeavors, thus promoting positive social change.

In this chapter I discussed the prevalence of underachievement for Hispanic Americans in junior high school, high school, and college settings. I also discussed factors that have previously been identified as having an effect on academic achievement for this particular group. In this chapter I identified sensation-seeking as a factor which had previously not been explored to examine its possible connection to academic achievement. I identified the study's hypotheses in this chapter as well as the operational definitions used and the theoretical frameworks of Bandura, Zuckerman, and Kuhlman from which the present study originated. Additionally, I explored the quantitative nature of the study and discussed the current study's scope and limitations. Finally, I elaborated

in the chapter on how the present study will provide a substantial contribution to the existing literature on achievement of Hispanic American college students and in turn help to shape the ever-evolving field of educational psychology.

### **Background**

In recent years, various explanations have surfaced which attempted to explain why Hispanic undergraduate college students do not attain the same level of academic achievement as other ethnic groups. There is not one single factor that leads to Hispanic college students' underachievement, but rather an array of factors (Cavazos et al., 2010; Romero, 2009). Some of these factors include parental involvement and encouragement and characteristics such as motivation and confidence (Cavazos et al., 2010). Familial support has been noted as an important factor in helping Hispanic students reach success in college (Zalaquett, 2006). Strong emotional bonds with parents have also been shown to facilitate Hispanic students' abilities to deal with the demands placed upon them in college (Kalsner & Pistole, 2003).

The existing body of literature does not address whether or not Hispanic Americans' academic achievement in college is affected by the factor of sensation-seeking. Sensation-seeking, for the purposes of this study, was defined as "the seeking of novel situations and the willingness to take risks for the sake of such stimulation" (Zuckerman & Kuhlman, 2000, p.1015).

The reason why the factor of sensation-seeking was examined in the present study is because sensation-seeking behaviors provoke heightened arousal and immediate gratification, whereas schoolwork does not provide immediate gratification and can be

limited in terms of arousal. Therefore, it would be reasonable to believe that a person who has high sensation-seeking behaviors would be less enthusiastic about doing schoolwork, and therefore would possess a lower GPA.

Recent studies have examined ethnicities other than Hispanics in relation to sensation-seeking and academic achievement. In fact, in a study by Simpson & Pychyl (2009), it was discovered that Caucasian, Asian, Middle-Eastern and African-American first-year university students who were high sensation-seekers were also general procrastinators, and these individuals believed that their procrastination was due to schoolwork having a limited arousal affect. Simpson & Pychyl (2009) also discussed the possibility of high sensation-seekers procrastinating on schoolwork in order to obtain a “rush” by attempting to complete their work at the last minute. Doing schoolwork at the last minute can result in less effort being put forth, and less time devoted to studying, which could result in lower GPA’s. Moreover, according to Pedersen, Molina, Belendiuk, and Donovan (2012), European-American youth had higher rates of sensation-seeking behaviors than African-American youth. Furthermore, European-American youth were also found to have their sensation-seeking behaviors correlate with risky problem behavior such as academic underachievement. Therefore, the present study sought to examine whether sensation-seeking behaviors affected Hispanic community college students in a similar way with relation to GPA.

Sensation-seeking behaviors were measured using the 40-item Sensation Seeking Scale (SSS-V; 1978). The SSS-V, which used a forced-choice format, examined participants’ feelings regarding their likelihood to participate in various sensation-seeking

behaviors, or whether or not they had participated in various sensation-seeking behaviors in the past. Participants were asked questions regarding sensation-seeking behaviors that fell into four different categories: (a) thrill and adventure seeking, (b) experience seeking, (c) disinhibition, and (d) boredom susceptibility (Zuckerman & Kuhlman, 2000). Thrill and adventure seeking items on the SSS-V included statements regarding behaviors such as roller coaster riding, water skiing, surfboard riding, and scuba diving. Experience seeking items included behaviors such as taking a road trip, trying different drugs, exploring unknown cities, and dressing in individual ways. Disinhibition items included behaviors such as drinking liquor or smoking marijuana, enjoying the company of swingers, and participation in unconventional or illegal activities. Lastly, boredom susceptibility included behaviors such as seeing a movie more than once, having exciting and unpredictable friends, spending time at home, and feelings regarding the predictability of others.

### **Gaps in Knowledge**

The present study sought to fill the gap in the existing literature by exploring whether or not sensation seeking, self-efficacy, and resiliency played a significant role in the academic achievement of Hispanic American community college students. The present study was needed because the Hispanic American population is the least likely of all ethnic groups in America to succeed in high school and college. Therefore, it was very important that research be conducted to further investigate this phenomenon so that necessary changes could be made in high schools and colleges to facilitate academic success for this particular population.



## **Problem Statement**

According to the U.S. Census Bureau (2010), during the decade from 2000 to 2010, more than 50% of the growth in the U.S. population was attributed to an increase in the Hispanic population. Although the Hispanic population is growing significantly with each passing year, the high school and college graduation rates for Hispanics are the lowest of any race in the United States (U.S. Census Bureau, 2012). The Obama administration set forth the American Graduation Initiative in 2010, which outlined a national goal of producing double the number of community college graduates in the United States by 2020 (Heiman, 2010). Therefore, in order for the American Graduation Initiative to be fulfilled, it is imperative that researchers investigate which factors lead to academic achievement for the Hispanic population.

Previous studies on Hispanic community college students have not adequately explored the many of factors that may play a part in students' academic achievement. In particular, previous studies on Hispanic community college students have not examined whether involvement in sensation-seeking behaviors predicts academic achievement. Therefore, in the present study I intended to examine whether involvement in sensation-seeking behaviors predicted academic achievement for Hispanic community college students after controlling for variables that had been shown to correlate with students' academic performance such as self-efficacy (Bong, Cho, Seon Ahn, & Jin Kim, 2012). Lastly, the factor of resiliency was examined to see if it had an effect on Hispanic community college students' academic achievement. Previous research had investigated the resiliency of Hispanic college students in relation to intragroup marginalization from

family members but not specifically how resiliency levels affected Hispanic community college students' academic achievement (Llamas & Consoli, 2012).

### **Purpose of Study**

The purpose of the present quantitative study was to explain the relationship between college self-efficacy, resiliency, involvement in sensation-seeking behaviors, and academic achievement among Hispanic community college students. Data was collected from participants using self-report surveys and then analyzed using a hierarchical regression model. This model was used because the present study examined various predictor variables and their effects on academic achievement. The present study sought to determine the ability of each predictor variable (i.e., college self-efficacy, involvement in sensation seeking, resiliency, and demographic variables) to foretell the dependent variable (i.e., academic achievement).

### **Research Questions and Hypotheses**

The present study addressed the following research questions:

RQ1: Does level of college self-efficacy predict academic achievement for Hispanic community college students?

*H<sub>0</sub>1*: The level of college self-efficacy does not predict academic achievement for Hispanic community college students.

*H<sub>a</sub>1*: Higher levels of college self-efficacy will predict higher grade point averages (GPAs) for Hispanic community college students.

RQ2: Does involvement in sensation-seeking behaviors predict poor academic achievement?

*H*<sub>02</sub>: Involvement in sensation-seeking behaviors does not predict poor academic achievement.

*H*<sub>a2</sub>: High levels of sensation-seeking behaviors will predict lower GPAs for Hispanic community college students.

RQ3: Does resiliency level predict academic achievement for Hispanic community college students?

*H*<sub>03</sub>: Resiliency level does not predict academic achievement for Hispanic community college students.

*H*<sub>a3</sub>: High levels of resiliency will predict higher GPAs for Hispanic community college students.

### **Theoretical Frameworks**

One underlying framework for the present study was derived from Bandura's (1977) theory of self-efficacy. Bandura's model proposed that a person's self-efficacy expectations could be established through four distinct and important sources of information, which were: "performance accomplishments, vicarious experience, verbal persuasion, and physiological states" (p. 191). According to Bandura, the more dependable one of these sources of information was to someone, the greater the change would be with regard to their feelings of self-efficacy. Changes to peoples' behavior occur when they anticipate feelings of satisfaction from accomplishing something that is important to them. Likewise, individuals tend to change their behaviors when they perceive their performance in a negative light or as insufficient (Bandura, 1977).

The second underlying framework for the present study was derived from Bandura's (1986) social cognitive theory. According to Bandura, an individual would not engage in behaviors that they had witnessed others engage in that resulted in negative consequences. Social cognitive theory also asserted that individuals engage in a process of reciprocal determinism when assessing their personal beliefs and their behaviors (Bandura, 1986). In other words, individuals' present beliefs about themselves affect which behaviors they choose to engage in, which in turn changes their future beliefs about themselves and their capabilities (Bong et al., 2012). Bandura's social cognitive theory (1977) also addressed the role that resilience had on a person's future behaviors and attitudes. Resilience surfaces when behavioral, personal, and environmental factors interact together in a specific way (Harvey & Delfabbro, 2004). In particular, internal and external influences come together to create an individual's expectations of success, which is related to their future achievement. For more information on Bandura's social cognitive theory, refer to Chapter 2.

Zuckerman and Kuhlman's (2000) theory of sensation seeking, the third theoretical framework from which the current study stemmed, explained why some individuals took risks and others chose not to. Some individuals may evaluate a specific behavior as being "risky" while others may not find it risky at all. The evaluation as to whether or not a behavior is considered risky is determined subjectively. In addition, individuals are more likely to admit to engaging in a specific behavior if it is called a "sensation-seeking" behavior rather than a "risk-taking" behavior due to the negative connotation of the latter (for more information on these behaviors, see Chapter 2).

Bandura's theories were linked to the present study's research questions and hypotheses in that much of human behavior can be explained by the self-efficacy and social cognitive theories. Humans engage in activities and behaviors with which they are confident in their abilities to execute those activities and behaviors. If individuals lack self-efficacy, it is possible that they will avoid activities and behaviors that will exemplify that deficiency. Likewise, as individuals witness someone else going through a particular situation, if the situation is determined to result in negative consequences, the individual is more likely to avoid that particular situation themselves.

Zuckerman and Kuhlman's (2000) theory of sensation seeking was linked to the present study in that people tend to engage in behaviors that suit their preference for sensation seeking. Certain behaviors that provide high levels of sensation and excitement can also deter a person from completing homework assignments and studying for tests. For example, attending a wild party late at night with friends at a club can affect a student's performance in school the next day. Perhaps attending a party meets the need for sensation seeking, but it can have negative consequences for someone who must be alert, punctual, and mentally prepared for a class the following morning. Sensation seeking can serve as a distraction from the reality and responsibilities of life. In this case, a student's academic performance may be affected by a lack of sleep, a possible hangover, lack of study time due to attending the party, and possible emotional turmoil due to an event (or events) that occurred at the party.

Many variables come together to play a role in individuals' processes of becoming motivated, sticking to their plans, and achieving their goals. Therefore, it was

vital to examine the variables of college self-efficacy, resiliency, and involvement in sensation-seeking behaviors to explore which of these factors had the most significant impact on Hispanic community college students' academic achievement.

### **Nature of the Study**

Previous studies on Hispanic community college students have not examined whether involvement in sensation-seeking behaviors predicts academic achievement. Therefore, the present study examined whether involvement in sensation-seeking behaviors predicted academic achievement for Hispanic community college students after controlling for variables that had been shown to correlate with students' academic performance such as self-efficacy (Bong et al., 2012; Reid, 2013).

In the present study I used a quantitative design employing the survey method. The present study involved a hierarchical regression analysis in which I explained the relationship between college self-efficacy, resiliency, involvement in sensation-seeking behaviors, and academic achievement (as measured by GPA) among Hispanic community college students. Data was collected from participants using self-report surveys and then analyzed using a hierarchical regression model. This model was used because the present study examined various predictor variables and their effects on academic achievement. The present study sought to determine the ability of each predictor variable (i.e., college self-efficacy, involvement in sensation-seeking, resiliency, and demographic variables) to foretell the dependent variable (i.e., academic achievement as measured by GPA).

The present study involved 154 Hispanic community college students from two specific community colleges in central New Jersey. In order to participate in the present study, participants were required to be over 18 years of age, of Hispanic origin, enrolled in a 2-year community college, and capable of reading and understanding the English language. Participants were to have taken at least three college courses prior to participation in the present study. Data was collected and then analyzed using SPSS software.

### **Operational Definitions**

*Sensation-seeking*: “[T]he seeking of novel situations and the willingness to take risks for the sake of such stimulation” (Zuckerman & Kuhlman, 2000, p.1015).

Sensation-seeking behaviors were measured using the SSS-V (1978).

*Self-efficacy*: Peoples’ beliefs that they could successfully conduct the behavior required to produce a desired outcome (Bandura, 1977). College self-efficacy was measured using the 20-item College Self-Efficacy Inventory (1993).

*Resiliency*: “[T]he ability to overcome challenges of all kinds and to bounce back stronger, wiser and personally more powerful” (Henderson, para.1, 2012). Resiliency was measured using the Connor-Davidson Resilience Scale (CD-RISC) (2003).

*Academic achievement*: For the purpose of this study, as measured by the cumulative GPA earned during a student’s first year of enrollment in college courses.

## **Assumptions, Limitations, Scope, and Delimitations**

### **Assumptions**

The present study made the following assumptions: (a) the individuals who participated in the study were willing to participate, (b) the participants were honest when answering questions posed on all surveys in the study, (c) the participants obtained were representative of the Hispanic community college student population, and (d) Hispanics would include a broad categorization of ethnicities that can be traced back to 20 Spanish-speaking countries in Latin America and Spain (Passel & Taylor, 2009).

The first assumption was made because participants were given a consent form in which to read about the study prior to participation. The consent form explained to potential participants that their participation was entirely voluntary and that they could withdraw at any time without a reason. Secondly, I assumed that most people would answer honestly on the self-report surveys because the information gathered would be kept strictly confidential and could not be linked back to any personal identifying information, as was stated on the consent form. Third, I assumed participants were representative of the Hispanic community college student population as these students were selected from Hispanic-serving institutions and were given an equal opportunity to participate in the study regardless of what day and time they attended classes.

Lastly, Hispanics include a broad range of ethnicities as there are many countries throughout the world which have Spanish-speaking residents. The U.S. Census Bureau (2010) defined Hispanic individuals as people who classified themselves in one of the specific Spanish, Hispanic, or Latino categories listed on the Census 2010 questionnaire –



Mexican, Puerto Rican, or Cuban, or those individuals who specified that they were of "another Hispanic, Latino, or Spanish origin" (U.S. Census Bureau , 2010, para. 2).

Individuals who do not choose one of the specific origins listed on the 2010 U.S. Census questionnaire but indicated that they were "another Hispanic, Latino, or Spanish origin" were individuals whose origins were from Spain, one of the Spanish-speaking countries of Central or South America, or the Dominican Republic. Designations of "Hispanic," "Latino," and "Spanish" are used interchangeably in the United States (U.S. Bureau of the Census, 2010).

### **Limitations**

The present study was limited in that participants were chosen from two specific community colleges in central New Jersey and therefore results could not be generalized to the entire Hispanic population attending community college in the United States.

Another limitation of this study was the design, which relied on self-report surveys. Self-report surveys allowed participants to choose how and what they answered and there was the potential for participants to provide false or misleading responses to appear more socially acceptable in their ways of thinking and behaviors.

### **Scope and Delimitations**

The present study utilized 154 Hispanic community college students from two specific community colleges in central New Jersey. In order to participate in the present study, participants had to be over 18 years of age, of Hispanic origin, enrolled in a 2-year community college, and capable of reading and understanding the English language.

Participants were also required to have taken at least three college courses prior to participation in the present study.

The delimitations in this study included data collection occurring on just three specific days (Monday, Wednesday, and Saturday) and the geographic location being only within central New Jersey. In addition, only students who completed at least three college courses were eligible to complete the study. Therefore, students attending their first semester of college were not included in the present study. Additionally, only students that were present during the summer session of 2016 were used in this study, which could have affected which types of students participated in the study. For example, some students only take courses in the summer for specific reasons (financial, occupational, familial, or wanting a shorter semester). Furthermore, students who were unable to read in English and understand the English language were not included in the present study.

### **Significance**

In the present study I sought to fill the gap in the existing literature by exploring whether or not sensation seeking played a significant role in the academic achievement of Hispanic American college students. The present study was needed because although the Hispanic American population is the fastest growing in the nation, it is also the least likely to succeed in high school and college. Additionally, in order for the American Graduation Initiative to be fulfilled, it is imperative that researchers understand the relationship between various factors that may lead to academic achievement for the

Hispanic population. This research may lead to proposals for change in high schools and colleges that will facilitate academic success for this particular population.

### **Summary**

The preceding chapter presented the importance of exploring which factors lead to academic success for the Hispanic American college student population. Previous studies have failed to include the possibility of sensation seeking having a relationship to a student's academic success in college. Therefore, in this study I investigated whether there was a relationship between sensation seeking and academic achievement in college. The present study used a quantitative approach, and was grounded in theories from Bandura, Zuckerman, and Kuhlman. The study utilized a hierarchical regression analysis in which the relationship between college self-efficacy, resiliency, involvement in sensation-seeking behaviors, and academic achievement (as measured by GPA) among Hispanic community college students was explained. Data was collected from participants using self-report surveys and then analyzed using a hierarchical regression model. This model was used because the present study examined various predictor variables and their effects on academic achievement. In the present study I sought to determine the ability of each predictor variable (i.e., college self-efficacy, involvement in sensation seeking, resiliency, and demographic variables) to foretell the dependent variable (i.e., academic achievement as measured by GPA).

## Chapter 2: Literature Review

### Introduction

Although the Hispanic population is growing significantly with each passing year, the high school and college graduation rates for Hispanics are the lowest of any race in the United States (U.S. Census Bureau, 2012). Research indicates that Hispanics are less likely to persist to the second semester and second year of college than their European American peers (Greene, Marti & McClenney, 2008). Hispanic college students also have lower grade point averages (Fischer, 2010) and graduation rates than their European American counterparts (Elfman, 2010; Fischer, 2010; O'Connor, 2009; Pyne & Means, 2013). Furthermore, Hispanic college students who graduate are less likely to graduate on time (within four years of matriculation) than their European American and Asian American peers (Fischer, 2010).

The present study's literature review was conducted using the following databases: Ebsco, PsycInfo, and Eric. Searches on the following search engines also yielded information used in this literature review: Yahoo, Google, Bing, and Google Scholar. Search terms used to uncover previous studies included *self-efficacy theory*, *risk-taking*, *sensation-seeking*, *academic achievement of Hispanics*, *GPA of Hispanics*, *sensation-seeking trait*, *sensation-seeking theory*, *achievement in school for Hispanic-Americans*, *academic performance and Hispanics*, *factors associated with achievement for Hispanic college students*, and *risk-taking behaviors among Hispanic college students*. Most of the sources in this literature review came from journal articles, educational websites, and government websites. Literature in this review is primarily

dated within the last 5 years, although some sources are slightly older. The theoretical frameworks used for the present study are from the 1970s up until the 2000s.

In this literature review I discuss previous studies that have revealed various factors leading to academic underachievement for Hispanic college students. Additionally, an explanation of the sensation-seeking trait will be discussed and its possible influence on a student's academic achievement. Finally, I discuss the theoretical frameworks of Bandura (1977, 1986) and Zuckerman and Kuhlman (2000) as these relate to the present research study.

### **Factors Leading to Academic Underachievement for Hispanic College Students**

In recent years, various explanations have surfaced that attempt to explain why Hispanic undergraduate college students do not attain the same level of academic achievement as other ethnic groups. There is not one single factor that leads to Hispanic college students' underachievement, but rather an array of factors (Cavazos et al., 2010; Romero, 2009). Some of these factors include parental involvement and encouragement and characteristics such as motivation and confidence (Cavazos et al., 2010). Familial support has been noted as an important factor in helping Hispanic students reach success in college (Zalaquett, 2006). Strong emotional bonds with parents have also been shown to facilitate Hispanic students' abilities to deal with the demands placed upon them in college (Kalsner & Pistole, 2003).

Despite positive implications for familial involvement in Latino college students' lives, families can also inflict intragroup marginalization on students. Intragroup marginalization refers to differential treatment given to an individual based on their

nonconformity to the cultural group's norms, which in turn negatively shapes students' college adjustment (Llamas & Consoli, 2012). Family members of Latino college students may feel that the student's progress through academia threatens the uniqueness and stability of their cultural group, and this perception of threat may lead to intragroup marginalization. Latino students are less likely to thrive and adjust well to college when they experience high levels of intragroup marginalization from family members. These students also exhibit low levels of resilience when they report greater levels of intragroup marginalization from family members. Perceived familial support does not appear to mediate the negative impact that intragroup marginalization has on the student's resiliency. Therefore, families can sometimes be helpful in supporting students' goals of positively adjusting to college, and other times their feedback can be detrimental (Llamas & Consoli, 2012).

Some studies suggested that students' social adjustment to college improved when peer support networks were established within the university setting (Cerezo & McWhirter, 2012). Peer support networks were found to facilitate Hispanic students' success and retention rates (Cerezo & McWhirter, 2012). Peer support was also found to help Hispanic students' adjustment to college (Grant-Vallone, Reid, Umali & Pohlert, 2003; Toews & Yazedjian, 2010).

One study suggested that Hispanic students who were mentored during a particular semester maintained their academic motivation, whereas Hispanic students who were not mentored had a decline in their academic motivation (Phinney, Torres Campos, Padilla Kallemeyn, & Kim, 2011). Likewise, Thile and Matt (1995) found that

Latino college students had higher GPAs and higher retention rates than a control group when they received formal mentoring from faculty. In addition, Campbell and Campbell (2007) found that Latino college students who received mentoring by faculty had earned more college credits than a control group that did not receive mentoring. Finally, Sorrentino (2006) found that peer mentoring helped to raise the GPAs of Latino college students.

Research suggests that Hispanics who possess a high level of academic ethic in high school possess a high level of academic ethic in college; however, having high academic ethic does not necessarily correspond with high levels of academic success as measured by GPA (Pino, Martinez-Ramos & Smith, 2012). One study found that Hispanic students' self-esteem, acculturation, and ethnic identities were major predictors of overall adjustment in college (Toews & Yazedjian, 2010). Likewise, Hispanic students appear to adjust better in college settings that recognize and promote their cultural pride (Torres, Winston & Cooper, 2003). Another study revealed that Latinos who held negative stereotypical beliefs about their abilities to perform well academically as an ethnic group had lower expectations about their individual success in college (Devos, Cruz Torres, 2007). In addition, Gonzalez (2007) found that Latino doctoral students experienced professors who held strong negative stereotypical beliefs about their abilities, which in turn called for them to be resilient and persistent. These students noted that the culture of academia in the United States was one of low expectations for students of color.

Baker (2008) found that Latino college students involved in religious activities performed better academically due to the connection that existed between religion and social life in Latino communities. Similarly, political involvement had a positive effect on the academic performance of Latino college students. Previous research suggested that political activities promoted self-esteem and self-efficacy, which in turn benefited the student academically (Bobo & Gilliam, 1990). Baker (2008) also found that athletic participation had a negative impact on the grades of female Latino students. Consequently, Baker (2008) hypothesized that this negative impact may be due to the conservative gender roles that Latino females are expected to fulfill in society, which makes participation in a sport much more challenging for them (Baker, 2008).

Additionally, a lack of information about college in general has shown to be a significant barrier to academic success for Hispanic students (O'Connor, 2009; O'Connor Hammack, & Scott, 2010). Hispanic students are much more likely to be first-generation college students than European American or African-American college students (Pino et al., 2012). In addition, most Hispanic college students have parents who did not finish high school.

Other barriers to Hispanic students' academic success include working more hours, not having financial support to pay for college, part-time enrollment (as opposed to full-time), and delayed enrollment in college (Crisp & Nora, 2010). One study found that Hispanic college students who dropped out reported higher scores on "drive for thinness" measures, suggesting that eating disorders may play a role in levels of attrition among Hispanic students (Pidcock, Fischer & Munsch, 2001, p. 815). Moreover, research



has shown that a student's prior academic achievement (or lack thereof) is not necessarily a definitive predictor of future performance (Cavazos et al., 2010). Likewise, Torres and Solberg (2001) found that Hispanic students' GPA was not a predictor of academic persistence.

### **Sensation Seeking**

Although there are many factors that have been found to negatively impact Hispanic college students' academic success, one possible factor that has yet to be explored is sensation seeking. Sensation seeking can be defined as "the seeking of novel situations and the willingness to take risks for the sake of such stimulation" (Zuckerman & Kuhlman, 2000, p. 1015). Sensation seeking is further categorized as a personality trait that strongly predicts whether or not an individual engages in risk-taking behaviors (Zuckerman, 1994). For example, sensation seeking is associated with participation in various activities that involve risk such as playing sports, criminal activities, smoking, gambling, sexual behavior, reckless driving, driving while intoxicated, heavy drinking, and drug use and abuse (Zuckerman & Kuhlman, 2000).

Individuals who are considered to be high sensation seekers are more likely to smoke (Zuckerman, Ball, & Black, 1990) and choose careers that are dangerous (Zaleski, 1984). High sensation seekers are also at risk for health problems due to having sex with various partners (Zuckerman, Tushup & Finner, 1976). Sensation-seeking has also been shown to predict adolescent drug use (Zuckerman et al., 1990), pro-drug discussions amongst adolescents (Yanovitzky, 2005), drinking alcohol and driving (Arnett, 1990), participation in risky sexual behavior (Sheer & Cline, 1994), and alcohol use (Donohew

et al., 1999). Furthermore, sensation seeking has also been found to positively correlate with online gaming addiction (Mehroof & Griffiths, 2010). Lastly, one study found that Caucasian sensation-seekers were more likely to be general procrastinators in the area of academics, and these individuals believed that their procrastination was due to schoolwork having a limited arousal effect (Simpson & Pychyl, 2009).

**Sensation seeking trait.** Taking risks is a significant issue in society today due its association with mortality (Eaton et al., 2010), and financial burden (DiClemente, Santelli & Crosby, 2009). While all activities involve risks of varying degrees and it can be argued that decision-making skills play a large role, previous research has indicated that sensation seeking is an inherited trait that is influenced by enzymes found within the brain (Zuckerman & Kuhlman, 2000). The first time a gene was discovered to be associated with a particular personality trait was in 1996, when it was discovered that D4 Dopamine Receptor (D4DR) was linked to “novelty seeking” (Ebstein et al., 1996). However, Thomson, Rajala, Carlson & Rupert (2014) found that certain variants within the D4DR gene did not correlate with sensation seeking for proficient snowboarders and skiers of Northern European ancestry. Therefore, not all sensation seekers possess similar genetic makeup, and it is possible that other factors play a role in whether or not someone decides to seek out sensation.

Monoamine oxidase has been found to be low in high sensation-seekers and those who participate in various types of risky behaviors such as “smoking, drinking, drug use and criminal activity” (Zuckerman & Kuhlman, 2000, p.1024). Furthermore, some individuals may be more prone to making poor choices and decisions to engage in risky

behavior due to possession of the sensation-seeking trait and the impact that certain enzymes have on it (Zuckerman & Kuhlman, 2000).

Studer, Pedroni, & Rieskamp (2013) found that hemispherical balance in the prefrontal cortex area of the brain was responsible for differences in choices made involving risk-taking behaviors. Likewise, it was also discovered that personality factors played a significant role in determining which risk-taking behaviors were engaged in.

In one study of sixth, seventh, and eighth graders, it was found that Hispanic students were more likely to fall into the categories of moderate to high sensation seeking than low sensation seeking (Lynne-Landsman, Graber, Nichols & Botvin, 2011). This study revealed that sensation-seeking behaviors varied depending on a person's ethnicity. In addition, over time, high and low sensation seekers either had their sensation-seeking behaviors stabilize or increase. Over time, more than half of the students in the study exhibited increases in sensation-seeking behaviors. Furthermore, this study suggested that while inherited sensation-seeking traits may affect a person's decision-making process when it comes to engaging in risky behaviors, interventions can be made in terms of changing how sensation seeking is fulfilled. In other words, sensation seekers may be able to find a satisfying level of thrill or stimulation in activities that are less risky or dangerous than ones in which they have previously engaged (Lynne-Landsman et al., 2011).

Current research on personality has discovered that sensation seeking, like many other personality traits, undergoes developmental changes throughout a person's lifespan

(Caspi, Roberts & Shiner, 2005). Moreover, sensation-seeking tendencies strengthen with age but level off around the 20s (Zuckerman & Neeb, 1979).

### **Bandura, Zuckerman, and Kuhlman Explain Achievement**

A person's incentive to take action and change behavior comes from negative appraisals of performance made by the individual or anticipated feelings of satisfaction that will come from accomplishing one's goals. Moreover, once an individual has achieved a certain level of personal accomplishment, it is only natural to set the bar higher and expect more of oneself (Bandura, 1977).

Social cognitive theory (Bandura, 1986) contends that it is much more difficult to stop someone from engaging in a particular behavior once an individual has already engaged in that behavior previously. Furthermore, if an individual finds a particular behavior to be rewarding or functional in their life, it is more likely that the individual will continue to engage in that particular behavior.

According to Bandura's social cognitive theory (1977), resilience surfaces when behavioral, personal, and environmental factors interact together in a particular way (Harvey and Delfabbro, 2004). Internal and external influences come together to create an individual's expectations of success. Resiliency in the presence of challenges includes the "abilities to plan, think critically, develop insight, and be flexible and resourceful" (Gonzalez, 2007, 295).

Resiliency is comprised of various components such as attachment to and support derived from at least one significant person. It is the belief that one can effectively cope with life's stresses when they have the social support of another person. Another

person's social support can promote positive social and psychological operations. There are two essential factors that determine the strength of social support one has in their life: the number of sources of social support and the functions that these sources play (Morrison, Robertson & Harding, 1998).

Bandura (1977) asserts that one's expectancy of a certain outcome to occur is different from one's self-efficacy beliefs. Outcome expectancies involve one's knowledge that conducting certain behaviors will yield certain and specific results (e.g. completing all courses required within a chosen college program will result in one being awarded a degree or certificate from their college). Self-efficacy, on the other hand, involves one's beliefs that they can successfully conduct the behavior required to produce the desired outcome. Knowing that engaging in a specific course of action which will yield a specific result is different than believing in one's capabilities to carry out the necessary course of action. Therefore, individuals plagued with feelings of self-doubt will likely not accomplish the same tasks and engage in the same behaviors as someone who has positive feelings about their capabilities. Moreover, individuals who choose to face their fears and self-doubt head-on tend to realize their potentials and meet and exceed their personal goals, which then simultaneously heightens their feelings of perceived self-efficacy. Likewise, individuals that doubt themselves to the point of submission and those who avoid uncertain obstacles tend to continue on this self-defeating path which disables them from living up to their true potential (Bandura, 1977). Therefore, self-efficacy and outcome expectations are essential in forming the basis for

one's motivation, goal creation, and dedication toward achievement of goals (Byars-Winston, Estrada, Howard, Davis & Zalapa, 2010).

Byars-Winston et al (2010) studied math and science majors to see how self-efficacy affected interests and goals. Statistical analysis revealed that participants who perceived themselves as capable of achieving success and positive rewards in mathematics and science courses were more likely to express interest in math and science. Furthermore, these participants who exhibited higher levels of self-efficacy in the areas of math and science also expressed interest in pursuing degrees in the science, technology, engineering, and mathematics (STEM) fields. Therefore, research has shown that students tend to express interest in areas of study and degree programs that they perceive to be within their own personal strengths and capabilities.

Self-efficacy beliefs have previously been shown to correlate with Latino college freshman and the decision of whether or not to drop out of college (Robinson Kurpius, Payakkakom, Dixon Rayle, Chee & Arredondo, 2008). In fact, self-efficacy, value of one's education, and levels of self-esteem were all found to be significant predictors of persistence in college for Latino college freshmen. This finding held true if all three constructs were examined together, or if two of the three were examined, but individually not one of these three factors was found to be statistically significant in the decision of whether or not to drop out of college (Robinson Kurpius et al, 2008).

Use of hierarchical regression analysis revealed that higher levels of self-efficacy and involvement with faculty members have been shown to correlate with higher GPA's among Latino college students at a Hispanic-serving institution. It was discovered that

self-efficacy only partially explained the relationship between faculty involvement and student GPA, as faculty involvement was a significant predicting variable of GPA, even as level of self-efficacy was still present in the model (DeFreitas and Bravo, 2012).

Zuckerman and Kuhlman's (2000) theory of sensation-seeking, the third theoretical framework from which the current study stemmed, explains why some individuals take risks and others choose not to. Some individuals may evaluate a specific behavior as being "risky" while others may not find it risky at all. The evaluation as to whether or not a behavior is considered risky is determined subjectively. In addition, individuals are more likely to admit to engaging in a specific behavior if it is called a "sensation-seeking" behavior rather than a "risk-taking" behavior due to the negative connotation of the latter.

Sensation seeking is defined as "the seeking of novel situations and the willingness to take risks for the sake of such stimulation" (Zuckerman and Kuhlman, 2000, p.1015). Humans are highly sensation-seeking by nature. Moreover, individuals that are considered to be high sensation-seekers tend to evaluate activities as lower in risk than individuals considered to be low sensation-seekers. This holds true even if the high sensation-seekers have never tried the activity for which they are evaluating the risk associated with it (Zuckerman and Kuhlman, 2000).

Zuckerman and Kuhlman (2000) created a study in which they examined college psychology students and their risk-taking behaviors involving smoking, drinking, drug use, driving, sex, and gambling. The study also examined participants' personality traits such as impulsivity sensation-seeking (ImpSS), aggression-hostility (Agg-Hos),

sociability (Soc), neuroticism-anxiety (N-Anx), and activity level. Those who scored high on risk-taking scales were found to score higher on impulsivity sensation-seeking, aggression-hostility and sociability scales than those who scored lower on risk-taking scales.

Novelty seeking has been found to be an inherited trait and is influenced by enzymes found within the brain, such as monoamine oxidase (Zuckerman and Kuhlman, 2000). Pidcock et al. (2001) found that high levels of novelty-seeking, a subpart of sensation-seeking, correlated with high incidence of Hispanic college students dropping out of school. Additionally, Hispanics scored higher on levels of novelty-seeking than their European American counterparts. Moreover, a statistical analysis revealed that 92% of the Hispanics that dropped out of college were female (Pidcock et al., 2001).

### **Gap in the Existing Literature**

Many factors can have an impact on one's academic achievement in college. Therefore, a hierarchical regression analysis was necessary. The present study utilized hierarchical regression to statistically analyze the relationship between college self-efficacy, resiliency, sensation-seeking, and academic achievement among Hispanic community college students. The present study sought to fill a gap in the current literature, as previous studies had not addressed whether or not sensation-seeking played a role in one's academic achievement after controlling for factors which were previously linked to academic achievement (i.e. self-efficacy and resiliency).

Although past studies have provided valuable insight into some factors influencing Latino students, these studies have not looked specifically at community



college students. The difference between students that attend community college versus a 4-year institution could not be ignored, as this was essential to a better understanding of this phenomenon. For example, four-year college students in general are less likely to drop out of college when compared to students attending community college.

Community college students tend to live at home with their parents and commute to school, which may be a factor that affects their attendance and grade point averages.

Lastly, community college students may not feel as socially connected or involved as those students who attend 4-year institutions of higher education due to factors such as being at school for a lesser duration of time and not having an option of living on campus.

The present study furthered the field of educational psychology by providing insight into the role that sensation-seeking played in Hispanic-American community college students' academic achievement. To examine the role of sensation-seeking in Hispanic-American college students' academic achievement, it was important to control for factors that had previously been shown to impact academic achievement such as resiliency and self-efficacy. In order to achieve control over these factors in the present study, hierarchical regression was the best possible methodological approach to use.

## Chapter 3: Research Method

### **Introduction to Methodology**

#### **Multivariate Analysis Using Hierarchical Regression**

Previous studies on Hispanic community college students have not examined whether involvement in sensation-seeking behaviors predicts academic achievement. Therefore, the present study examined whether involvement in sensation-seeking behaviors predicted academic achievement for Hispanic community college students after controlling for variables that were previously shown to correlate with students' academic performance, such as self-efficacy (Bong et al., 2012).

In this chapter I discuss the variables that were examined in the present study as well as the method chosen to analyze the variables. I discuss the research design used in this study in detail as well as explain how this design connected to the research questions. I provide a rationale as to why the present study used a hierarchical regression analysis. Additionally, in this chapter I present information on the target population such as the sampling method and criteria that were used to determine inclusivity in the present study. Moreover, in this chapter I describe the power analysis used to determine the correct sample size for the present study. I also discuss in this chapter the rationalization used to determine the effect size, alpha level, and power level chosen for the present study. This chapter also contains my explanation of the recruitment procedure for participants and the demographic information that was collected from participants. Furthermore, I outline in this chapter the procedure that I used to obtain informed consent, collect data, and debrief the participants. Additionally, I discuss the instruments that I used to collect the data from

the participants in terms of reliability, validity, and applicability to the current study. In this chapter I also discuss the software that was used to analyze the data collected and explore the research questions and hypotheses of the present study. Finally, I discuss in this chapter any potential threats to validity that existed and end with a discussion of ethical procedures that were employed to ensure participants' anonymity and confidentiality.

### **Research Design and Rationale**

I used a quantitative design in the present study and employed the survey method. The survey method was ideal for the present study due to its feasibility, cost-efficiency, and its use of a standardized stimulus, which allowed for all participants to respond to the same questions and answer choices. This helped to eliminate observer subjectivity while allowing greater rates of reliability. Furthermore, the survey method also allowed for many individuals to participate in the study at once (Colorado State University, 2011).

I self-administered the surveys in-person to gather data due to the low response rate that is associated with telephone surveys and surveys that are mailed out to participants. Time was also a factor that influenced the decision to self-administer the surveys.

I employed a hierarchical regression analysis in which I attempted to explain the relationship between college self-efficacy, resiliency, involvement in sensation-seeking behaviors, and academic achievement (as measured by GPA) among Hispanic community college students. The predictor variables in the present study were levels of college self-efficacy, resiliency, and sensation seeking. The dependent variable in the

present study was academic achievement (as measured by GPA). I sought to understand the relationship between these four predictor variables, and therefore a hierarchical regression analysis was necessary. A hierarchical regression analysis allowed for several variables to be examined simultaneously rather than singly. This approach allowed me to take into account pre-existing relationships between variables. This was important because if various relationships were not examined at the same time, it would be possible to believe there was an actual effect on the dependent variable when it could have been explained by a confounding factor instead (Krzanowski, 2000). Therefore, a hierarchical regression analysis was suitable for the present study as it was not too time-consuming, it was convenient and cost-efficient, and it allowed for many variables to be examined at the same time.

In the present study I used a design that was consistent with other research designs used in the past to advance knowledge in the realm of educational psychology. For example, GPA had been used frequently in research designs to determine academic achievement of college students (Aspelmeier, Love, McGill, Elliott, & Pierce, 2012; Reid, 2013). GPA is one of the measurements of achievement with which most students are familiar and that they track, and therefore a self-report measure of GPA was ideal for the present study.

### **Population**

The target population was Hispanic students who attended community college in Central New Jersey and had previously taken at least three college courses. Hispanics

make up approximately seventeen percent of all college students in the United States (Barresi, 2014).

**Sampling procedures.** The participants in this study were from a convenience sample of community college students due to the nature of the study, time constraints, lack of funding available, and convenience factors. The two community colleges that I utilized in the present study were chosen precisely because they have been recognized as Hispanic-serving institutions of higher education (Hispanic Association of Colleges and Universities, 2011). The two community colleges chosen for the present study were located in Central New Jersey.

National Statistical Service, an online mathematical tool, assisted with determining the confidence intervals for a sample of 154 students. The confidence level was set at 95%. The confidence interval was determined to be 0.08002. The upper range for the confidence interval was 0.58002 and the lower range for the confidence interval was 0.41998. Using the online tool, I determined that the standard error would be equal to 0.04082 (Australian Bureau of Statistics, n.d.). SPSS generated ANOVA and  $p$ -values that I examined to look for statistically significant results. The  $p$ -values in the significance column had to be below .05 for the results to be statistically significant (University of Colorado, n.d.).

I conducted a power analysis using a free online tool, G\*power 3.1.9.2 (Faul, Erdfelder, Buchner, & Lang, 2009). The tool was downloaded for its inclusion in my determination of the sample size, power, and value of critical  $F$  needed. I performed an ANOVA first, and therefore an  $F$  test was necessary. I ran an ANOVA on the data first

in order to generate a Model Summary. The Model Summary displayed the  $R$ ,  $R^2$ , and the adjusted  $R^2$ , which indicated how well the regression model fit the data (Lund Research Limited, 2013).

Using the online G\*power tool, I entered  $F$  test in the drop-down box labeled, “Test Family.” Then the type of statistical test to be performed was entered (linear multiple regression, fixed model,  $R^2$  deviation from zero) into the drop-down box labeled “Statistical test.” The appropriate sample size needed to be determined for the present study, and therefore the selection was made, “A priori-compute required sample size-given alpha, power, and effect size” from the drop-down box as the type of power analysis to be performed. I entered the number of predictor variables in the box labeled “Number of predictors” as 3, as there were 3 predictor variables in the present study (self-efficacy, resiliency, and sensation-seeking).

The G\*power online tool determined that a sample size of at least 119 students was necessary for the present study. The G\*power online tool also revealed that the noncentrality parameter was 17.85 and the critical  $F$  was 2.68. The effect size was .15, and the chance of error was .05. The actual power was .95. The numerator  $df$  was determined to be 3 and the denominator  $df$  was determined to be 115 (Faul et al, 2009).

**Procedures for recruitment.** Demographics such as age, country of origin, employment status, school enrollment status, and marital status were identified with a demographic survey I created. Academic achievement, for the purpose of this study, was measured by the cumulative GPA earned during a student’s first year of enrollment in college courses. The students’ GPAs were self-reported on the demographic survey.

Students were invited to inquire about and participate in the present study as they passed by a table that was prepared with surveys located in the student lounge area of each college. At the two community colleges that I chose for the present study, research questionnaires are often distributed to students and faculty as they enter or leave the lounge area. The administrators at the two colleges chosen for this study gave permission to conduct the present study once they reviewed the approved proposal from Walden University.

### **Types and Sources of Data**

I obtained data from 154 participants who filled out four short surveys: the 20-item College Self-Efficacy Inventory (1993), the SSS-V (1978), a simple demographic survey, and the 10-item CD-RISC (2003).

Participants were chosen for the study if they met all of the following criteria:

- Participants were currently attending a two-year community college.
- Participants were of Hispanic origin.
- Participants were over the age of 18.
- Participants were capable of reading and understanding the English language.
- Participants had taken at least three college courses prior to participation in the present study.

Potential participants were given an informed consent form that they filled out indicating their agreement to participate in the present study. After participants complete the informed consent form, they were given the four short surveys to fill out. After each participant completed all four surveys, I collected the surveys and placed them

into a folder. It was reasonably estimated that completion of the four surveys would take between fifteen and twenty minutes for each participant. Once participants completed all four surveys, they were given a debriefing form which briefly explained the aim of the study and follow-up contact information that participants could utilize to contact me regarding the study's outcome. Participants were then given a \$5.00 Dunkin' Donuts gift card to thank them for their participation in the present study.

### **Instrumentation and Operationalization of Variables**

**College Self-Efficacy Inventory.** Self-efficacy involves one's beliefs that they can successfully conduct the behavior required to produce the desired outcome (Bandura, 1977). College self-efficacy in the present study was measured using The College Self-Efficacy Inventory (1993). The original College Self-Efficacy Inventory was created by first reading through college self-help manuals that addressed issues that students faced and then finding underlying themes. From the themes discovered, 20 items were created for The College Self-Efficacy Inventory.

The College Self-Efficacy Inventory has been used with Hispanic college students in previous studies (Barry and Finney, n.d.). This scale measures the broader college experience, encompassing questions that reflect both a social and academic focus. The authors of the scale reported a Cronbach's alpha of .93. The College Self-Efficacy Inventory measures 3 or 4 different factors that impact self-efficacy in college, depending on version of the scale one chooses to use. For the purposes of the present study, the 3-factor model scale will be used. The 3-factor model is comprised of Course efficacy, Roommate efficacy, and Social efficacy factors (Barry and Finney, n.d.). The subscales



were found to have high internal consistency (each having a coefficient alpha of .88) and possessed a good level of discriminant and convergent validity (Solberg et al, 1993).

Measures of validity were determined using a sample of 164 Mexican-American and Latino-American college students. Since the principal researcher utilized community college students, the Roommate questions did not apply, and therefore these specific questions were omitted from the surveys, as community college students did not have on-campus housing options involving roommates.

The College Self-Efficacy Inventory (1993) is comprised of 20 items which begin with the statement, “How confident are you that you could successfully complete the following tasks...” followed by an 11-point Likert scale ranging from 0, which coincides with the response “not at all confident,” to 10 “extremely confident.” The College Self-Efficacy Inventory is scored by adding together the number values chosen from the Likert scale for the 20 items. This yields a total score which indicates level of self-efficacy. Higher total scores are indicative of high levels of self-efficacy, whereas lower total scores are indicative of lower levels of self-efficacy (Solberg et al, 1993). The College Self-Efficacy Scale is allowed to be used by students and researchers for educational purposes without written permission required.

**Connor-Davidson Resilience Scale.** Resiliency can be defined as “the ability to overcome challenges of all kinds and to bounce back stronger, wiser and personally more powerful” (Henderson, para.1, 2012). Resiliency was measured in the present study using the 10-item CD-RISC (2003). The 10-item CD-RISC (as opposed to the 25-item structure) was chosen for the present study because it demonstrated “a stable factor

structure across students in general and students seeking assistance from campus mental health offices” (Hartley, 2012, p.45). In addition, Hartley (2012) reported that the 10-item CD-RISC possessed a Cronbach’s alpha of .87 for students in classrooms and .90 for students needing help from campus mental health offices. Furthermore, the 10-item CD-RISC displayed a strong goodness of fit for both students in classrooms and students seeking assistance from campus mental health offices as well as convergent validity (Hartley, 2012). The 10-item CD-RISC has been recommended by researchers for use in college counseling settings to identify those individuals that may be in need of psychological services (Hartley, 2012).

The original 25-item CD-RISC was comprised of a five-factor model which was eventually reduced to a 10-item, one-factor model. The CD-RISC item count was reduced from 25 items to 10 items to improve its overall ability to measure resilience (Hartley, 2012). Participants had to provide feedback on items such as “I am able to adapt when changes occur”, and “I believe I can achieve my goals, even if there are obstacles”. Participants had to choose from the following responses for each test item: (0) Not true at all, (1) Rarely true, (2) Sometimes true, (3) Often true, and (4) True nearly all the time. Participants are to answer based on how they have felt regarding each test item over the last month. If a certain test item does not apply to the participant, they are to select the choice that resembles best what they think they would have felt. After all items are answered on the 10-item CD-RISC, the participant’s resilience score will be found by adding together the numbers that coincide with each response choice, which will yield a total that can range between 0 and 40. The higher the total resiliency score is,

the higher the resiliency level is for that participant. Therefore a score of 0 would indicate no resiliency at all and a score of 40 would be indicative of extremely high resiliency.

Written permission was granted to use the 10-item CD-RISC by contacting Dr. Davidson online and paying a user's fee of \$30 (See Appendix A). This was a necessary step in using the scale because the full scale with established reliability and validity is not available in the public domain.

**Sensation-Seeking Scale.** For the purpose of this study, sensation-seeking is defined as “the seeking of novel situations and the willingness to take risks for the sake of such stimulation” (Zuckerman and Kuhlman, 2000, p.1015). Sensation-seeking behaviors will be measured using the SSS-V (1978). The Sensation-Seeking Scale V (SSS-V) has been used previously with United States undergraduate college students (Roberti, Storch & Bravata, 2003). Researchers have found the Sensation-Seeking Scale V to be high in internal consistency and have also confirmed its convergent validity, reliability, and construct validity. Researchers have found the four subscales of the SSS-V to have the following Cronbach's alphas: Thrill and Adventure Seeking (.80), Disinhibition (.80), Boredom Susceptibility (.76) and Experience Seeking (.75), (Roberti et al, 2003, p.292). The Sensation-Seeking Scale V is available for use in teaching and research without expressed written permission. Examples of test items from the SSS-V included, “I often like to get high (drinking liquor or smoking marijuana)” and “I like to have new and exciting experiences and sensations even if they are a little unconventional or illegal”. Participants were expected to choose from the following response choices for

each test item: A or B. A was indicative of high sensation-seeking tendencies, and B was indicative of low sensation-seeking tendencies. Once all responses had been chosen for each of the 40 items, the sensation-seeking score could then be found. This was done by adding up all of the A responses and assigning 1 point for each. The B responses were worth 0 points. After adding all of the A responses, the total sum was the sensation-seeking score for that participant. A higher score was indicative of a high-sensation-seeking individual and a low score was indicative of a low-sensation-seeking individual.

### **Data Analysis Plan**

The present study sought to determine the ability of each predictor variable (i.e., college self-efficacy, involvement in sensation-seeking, resiliency, and demographic variables) to foretell the dependent variable (i.e., academic achievement as measured by GPA). Hierarchical regression was a useful tool for this study because many variables were being explored that were previously found to be interrelated in the field of education. Hierarchical regression allowed the variables researchers had previously shown to be related to academic achievement to be entered into the regression model first (i.e., resiliency, demographic variables and college self-efficacy), followed by the predictor variable introduced in the present study (i.e., involvement in sensation-seeking).

This was done to examine the unique contribution that involvement in sensation-seeking behaviors had on academic achievement of Hispanic community college students.

The control that was achieved through hierarchical regression was much greater than what could have been accomplished utilizing the step-wise approach, as hierarchical regression accounted for changes in the adjusted R-squared at each phase of the analysis.

This allowed the variance to be calculated as each variable was entered into the model (Lewis, 2007). Therefore, the adjusted R-square value indicated which variables had a statistically significant effect on academic achievement. Moreover, this model allowed for predictor variables to be examined one at a time without the influence of other predictor variables skewing the results.

Using hierarchical regression, the present study addressed the following research questions:

RQ1: Does level of college self-efficacy predict academic achievement for Hispanic community college students?

$H_{01}$ : The level of college self-efficacy does not predict academic achievement for Hispanic community college students.

$H_{a1}$ : Higher levels of college self-efficacy will predict higher GPAs for Hispanic community college students.

RQ2: Does involvement in sensation-seeking behaviors predict poor academic achievement?

$H_{02}$ : Involvement in sensation-seeking behaviors does not predict poor academic achievement.

$H_{a2}$ : High levels of sensation-seeking behaviors will predict lower GPAs for Hispanic community college students.

RQ3: Does resiliency level predict academic achievement for Hispanic community college students?

$H_{03}$ : Resiliency level does not predict academic achievement for Hispanic community college students.

$H_{a3}$ : High levels of resiliency will predict higher GPAs for Hispanic community college students.

Data cleaning and screening took place after all data was collected. An examination of the data was conducted to search for missing or absent data. Statistical assumptions were checked against the data to ensure that they were not violated. In addition, when outliers were identified, the original survey was closely examined to determine what error had been made. If data was missing or absent for any reason on any particular test item, it was properly recorded as a missing piece of data in SPSS. SPSS then employed the Missing Value Analysis when data was missing from a case. This option allowed the statistical program to predict the missing values based off of the other cases in the raw data set (Meyers, 2005). Moreover, frequency tables were generated in SPSS to ensure that data was normally distributed.

Once all data was appropriately screened, each variable was entered into the SPSS Grad Pack 16.0 computer program. For the present study, the variables that were entered into the independent variable box were (a) age, (b) country of origin, (c) enrollment status, (d) number of children, (e) marital status, (f) level of resiliency, and (g) level of college self-efficacy. This is the order in which the variables were entered, and since the order mattered, that is another reason why hierarchical regression was used. The demographic variables of age, country of origin, enrollment status, number of children, marital status, level of resiliency, and level of college self-efficacy were variables that

participants had no control over at the time of their participation in the study, and therefore these variables were entered during step one of the model. These variables were entered into the model first by SPSS so that they would be acknowledged for any shared variability that they had with the predictor variable (sensation-seeking). Therefore, any observed effect of level of sensation-seeking on students' GPA could be considered independent of the effects of the variables for which the principal researcher had controlled.

SPSS generated a model summary which was then examined in terms of *R*-square. The interpretation of *R*-square displayed the percentage of variability within the dependent variable (GPA) that could be accounted for by all the predictor variables combined. The difference between the *R*-square found in step one and step two of the model summary showed the amount of predictive power that was added to the model by adding sensation-seeking to the model in step two. SPSS generated an ANOVA and *p*-values were examined to look for statistically significant results. The *p*-values in the significance column had to be below .05 for the results to be statistically significant (University of Colorado, n.d.).

### **Threats to Validity**

External validity of the present study could have been threatened by several factors. One potential threat to external validity was volunteer bias. Volunteers may have had specific reasons for agreeing to participate in the present study which may have affected the ability for the study's results to be generalized to the entire Hispanic community college student population. If this study was to be repeated, it is

recommended that participants are not told ahead of time that they will receive a Dunkin' Donuts gift card. Participants should be made aware of the gift card following their participation in the study.

External validity could have also been threatened by participants not being fully representative of the population. For example, participants from different age groups, genders, or occupations may have answered the same questions on the surveys very differently. In order to be able to generalize the findings of the present study across populations, it was necessary to stratify the sample of participants so that there were an equal number of males and females participating in the study (Lund Research Limited, 2012). The sample was also stratified by age groups, enrollment status (part-time or full-time students), and employment status (part-time, full-time, over 40 hours, unemployed, and self-employed). The sample had to accurately represent the entire U.S. Hispanic community college student population in order for the results of the present study to be generalized across populations.

Internal validity of the present study could have been threatened by students not being representative of the target population. It is possible that the students that attended the summer session of 2016 may not have been representative of the entire Hispanic community college student body. Many students that attend in the summer session may not attend all terms throughout the year. In addition, the students that attend in the summer may have certain reasons for attending in the summer instead of the fall or spring, which could involve familial, occupational, or financial factors. Therefore, future



studies should incorporate students from all terms offered at the college to ensure an even higher representative sample.

Attempts to counter this threat included soliciting individuals to participate in the study at different times of the day, and on different days of the week. This mattered because there may have been different types of students that took classes on a Saturday morning in contrast to a Monday night. Some individuals may have taken classes on a Monday night because they worked during the day. Students that took classes on a Saturday may have done so because that was the only day that they could find a babysitter to watch their children. Therefore, in order to limit the threat to internal validity, surveys were administered to participants during mornings, afternoons and nights as well as on weekends to ensure a highly representable sample of the target population.

Another threat to internal validity was the possibility that some of the items on the Sensation-Seeking Scale V may have not been relatable and/or relevant to all members of that particular population. For example, the Sensation-Seeking Scale V asked questions about “mountaineering” which is an activity that may only be undertaken by those in a particular socioeconomic class, age cohort, or culture, which Roth & Hammelstein (2012) point out. Therefore, some participants may have been unable to accurately answer questions involving activities that they have never tried or heard about within their social groups. Therefore, to address this threat to internal validity a different activity was put in place of “mountaineering” allowing participants to more easily relate to the question and adequately answer it. The activity that replaced “mountaineering” was “riding roller

coasters at amusement parks”. The same procedure was followed for any other questions that were not suitable for the age cohort, socioeconomic class, and culture being researched.

There were no issues of construct validity as each of the chosen instruments has been found to be high in construct validity. Each instrument was chosen specifically with the intention of matching the operational definition set forth for each variable under examination in the present study.

### **Ethical Procedures**

Prior to conducting the present study, IRB approval was obtained. Two institutions in central NJ agreed to allow data collection on their Hispanic community college students for the purpose of fulfilling the present dissertation requirement. Two community colleges in central NJ were visited during the spring semester of 2016 to collect participant data. Individuals were solicited for participation during the course of 3 days, a Monday, a Wednesday, and a Saturday of the same week. Solicitation of participants occurred during the hours of 9:00 a.m. EST and 12 p.m. EST on each of the days as well as at night between the hours of 6:00 p.m. EST and 9:00 p.m. EST. This was done to ensure that a representative sample of college students was obtained. The days of Monday, Wednesday, and Saturday were chosen to ensure a representative sample of the target population. The times of 9 a.m. to 12 p.m. and 6 p.m. to 9 p.m. were chosen due to the large number of students that attended classes during those times. Classes tended to be fuller during the morning hours and the early evening hours than any other time.

A table was set up within the student lounge area of each community college. A banner was hanging on the wall behind the table which read, “Attention all Hispanic students: You are invited to participate in a research study. All participants will receive a Dunkin’ Donuts gift card”.

Participants were asked to complete the surveys while remaining seated at a designated table within the student lounge area of each community college. The researcher distributed the surveys to the participants and asked that they not speak to anyone during the administration of the survey. The surveys were collected once participants were finished completing them. All survey information was anonymous as names and other personal identifying data were not be asked of participants. Participants were handed a consent form, indicating their willingness to participate in the present study. If participants signed the consent form they were able to participate in the present study and complete the surveys. Participants were allowed to withdraw from the study at any time without reason, and this was stated on the consent form. No participants withdrew from the present study.

Following completion of the surveys, participants were given a debriefing form, which explained the true nature of the study and provided contact information in case any participant wanted to ask further questions about the study at a later date.

Data from this study was stored in a locked storage cabinet following conclusion of the study and will be held there for a period of no less than 7 years. The data was only available to the primary researcher. After 7 years, all data from this study will be shredded and appropriately discarded.

### **Summary**

The present study uncovered the factors that were the best predictors of academic achievement in Hispanic community college students. Previous research had indicated a relationship between academic achievement and self-efficacy, resiliency, and demographics. The present study sought to find out the effect that involvement in sensation-seeking behaviors had on one's academic achievement while controlling for the variables previously shown to be related to academic achievement. The survey method was employed for the present study and a convenience sample of 154 community college students in central NJ from 2 colleges were used due to time constraints and lack of funding available.

Data was obtained by participants filling out four short surveys: the 10-item version of the CD-RISC (2003), the 20-item College Self-Efficacy Inventory (1993), the Sensation-Seeking Scale (SSS-V) (1994), and a simple demographic survey created by the researcher. Completion of the 4 surveys took between fifteen and twenty minutes for each participant. Data was collected and analyzed using computer software program SPSS Grad Pack 16.0. An analysis of variance was computed as well as a linear regression model to determine if sensation-seeking had an effect on academic achievement of Hispanic community college students.

## Chapter 4: Results

### Introduction

In this chapter I discuss the purpose of the present study, the research questions that the study addressed, the hypotheses that were tested, and whether or not the alternative hypotheses were accepted or rejected.

Previous studies on Hispanic community college students had not examined whether involvement in sensation-seeking behaviors predicted academic achievement. Therefore, in the present study I intended to examine whether involvement in sensation-seeking behaviors predicted academic achievement for Hispanic community college students after controlling for variables that have shown to correlate with students' academic performance, such as self-efficacy (Bong et al., 2012).

Using hierarchical regression, I addressed the following research questions the present study:

RQ1: Does level of college self-efficacy predict academic achievement for Hispanic community college students?

$H_01$ : The level of college self-efficacy does not predict academic achievement for Hispanic community college students.

$H_{a1}$ : Higher levels of college self-efficacy will predict higher grade GPAs for Hispanic community college students.

RQ2: Does involvement in sensation-seeking behaviors predict poor academic achievement?

$H_02$ : Involvement in sensation-seeking behaviors does not predict poor academic achievement.

$H_{a2}$ : High levels of sensation-seeking behaviors will predict lower GPAs for Hispanic community college students.

RQ3: Does resiliency level predict academic achievement for Hispanic community college students?

$H_03$ : Resiliency level does not predict academic achievement for Hispanic community college students.

$H_{a3}$ : High levels of resiliency will predict higher GPAs for Hispanic community college students.

### **Data Collection**

The target population was Hispanic students who attended community college in Central New Jersey and had previously taken at least three college courses. The target population size for this study was 150 participants.

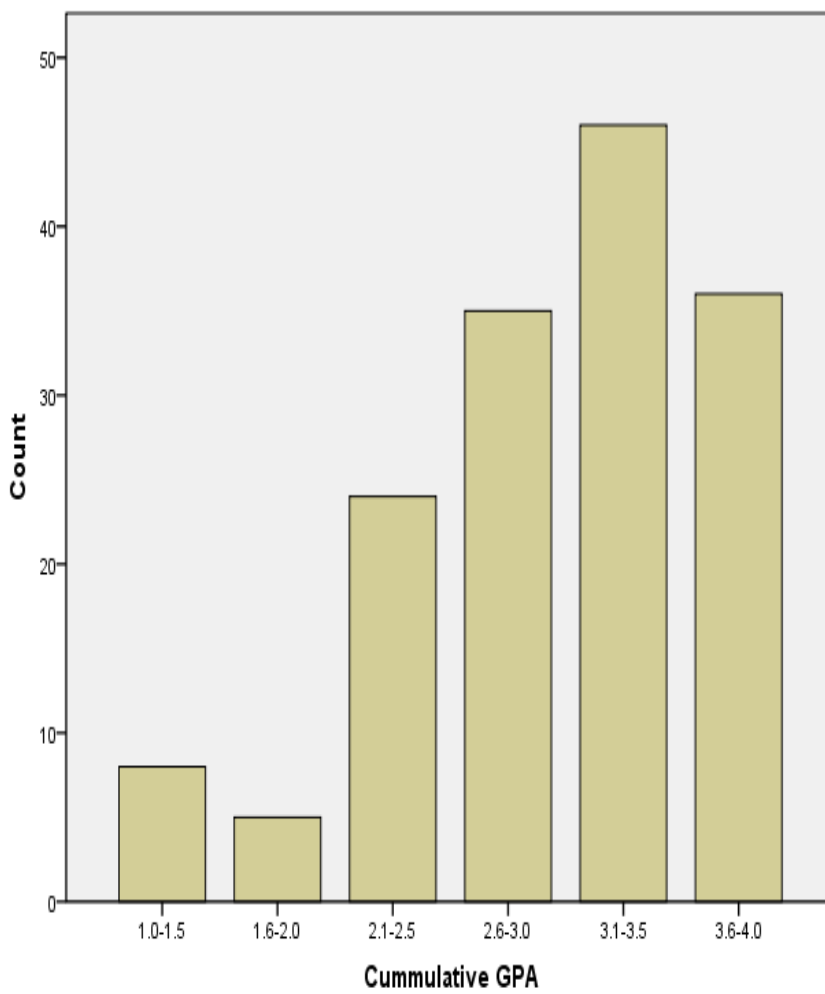
Data was collected during the summer semester of 2016 from participants who were enrolled in two community colleges designated as Hispanic-serving institutions. The students who participated in the study were solicited during three different times of day: morning, afternoon, and evening. I collected data on a Monday, Wednesday, and Saturday to ensure that students who either attended weekdays or weekends would be included. Data was collected over a series of weeks at both colleges. Data collected was largely representative of the Hispanic community college population as surveys were collected from students from two different community colleges in New Jersey. One of the

colleges was located in a rural area of New Jersey, while the other college was located in a suburban area of the state.

## **Results**

### **Descriptive Statistics**

A total of 154 Hispanic community college students (Colombian = 28%, Costa Rican = 15%, Mexican = 36%, Puerto Rican = 15%, Peruvian = 4%, and More than One Hispanic Country of Origin = 2% and Hispanic Country Not Listed = 0%) participated in the present study. Most participants had GPA's that fell between a 3.1-3.5, as depicted in Figure 1 below. Most participants were between the ages of 18-25. Among the study's participants, 23% of participants reported a GPA of 3.6-4.0, and 30% of participants reported a GPA of 3.1-3.5, as depicted in Table 1, and 23% of participants had a GPA of 2.6-3.0. Approximately 16% of participants had a GPA of 2.1-2.5, while 3% of participants had a GPA of 1.6-2.0, and 5% of participants had a GPA of 1.0-1.5.



*Figure 1.* Frequency of cases with regard to GPA.



Table 1

*Frequency of GPA*

		<b>GPA</b>			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0-1.5	8	5.2	5.2	5.2
	1.6-2.0	5	3.2	3.2	8.4
	2.1-2.5	24	15.6	15.6	24.0
	2.6-3.0	35	22.7	22.7	46.8
	3.1-3.5	46	29.9	29.9	76.6
	3.6-4.0	36	23.4	23.4	100.0
	Total	154	100.0	100.0	

**Inferential Statistics**

The data screening procedure was completed and indicated that there were 154 samples across all variables, and therefore all samples were used to begin data analysis. Regression analysis was performed to see if resiliency, self-efficacy, and sensation seeking predicted GPA for Hispanic community college students.

**Research Question 1 and Hypothesis**

RQ1: Does level of college self-efficacy predict academic achievement for Hispanic community college students?

$H_0$ 1: The level of college self-efficacy does not predict academic achievement for Hispanic community college students.

$H_a$ 1: Higher levels of college self-efficacy will predict higher grade GPAs for Hispanic community college students.

Higher levels of college self-efficacy predicted higher grade point averages for Hispanic community college students. Therefore,  $H_0$ 1 was rejected.

### Research Question 2 and Hypothesis

RQ2: Does involvement in sensation-seeking behaviors predict poor academic achievement?

$H_02$ : Involvement in sensation-seeking behaviors does not predict poor academic achievement.

$H_{a2}$ : High levels of sensation-seeking behaviors will predict lower GPAs for Hispanic community college students.

Six variables related to sensation-seeking predicted GPA: Roller coaster riding, feelings regarding familiar faces, marijuana use, sex before marriage, sailing, and skiing. Engaging in the sensation-seeking activity of roller coaster riding was shown to predict GPA,  $\beta = -.295$ ,  $t(153) = -2.641$ ,  $p = .01$ . Feelings regarding familiar faces was also shown to predict GPA,  $\beta = -.306$ ,  $t(153) = -2.659$ ,  $p = .00$ . Marijuana use was shown to predict GPA,  $\beta = .301$ ,  $t(153) = 2.206$ ,  $p = .03$ . Sex before marriage was shown to predict GPA,  $\beta = -.235$ ,  $t(153) = -2.193$ ,  $p = .03$ . Sailing was shown to predict GPA,  $\beta = -.239$ ,  $t(153) = -2.400$ ,  $p = .01$ . Skiing was shown to predict GPA,  $\beta = .249$ ,  $t(153) = 2.296$ ,  $p = .02$ . Therefore,  $H_{a2}$  was accepted.

### Research Question 3 and Hypothesis

RQ3: Does resiliency level predict academic achievement for Hispanic community college students?

$H_03$ : Resiliency level does not predict academic achievement for Hispanic community college students.

$H_{a3}$ : High levels of resiliency will predict higher GPAs for Hispanic community college students.

High levels of resiliency predicted higher grade point averages for Hispanic community college students. Figures 2 and 3 below depict this relationship.

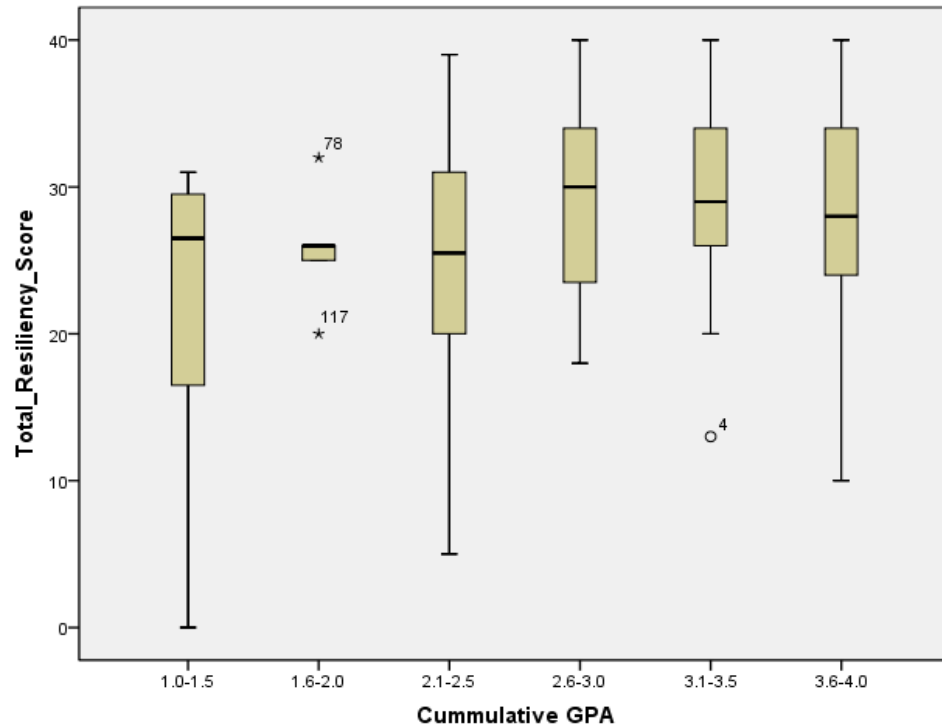


Figure 2. Total resiliency scores in relation to cumulative GPA for RQ3.

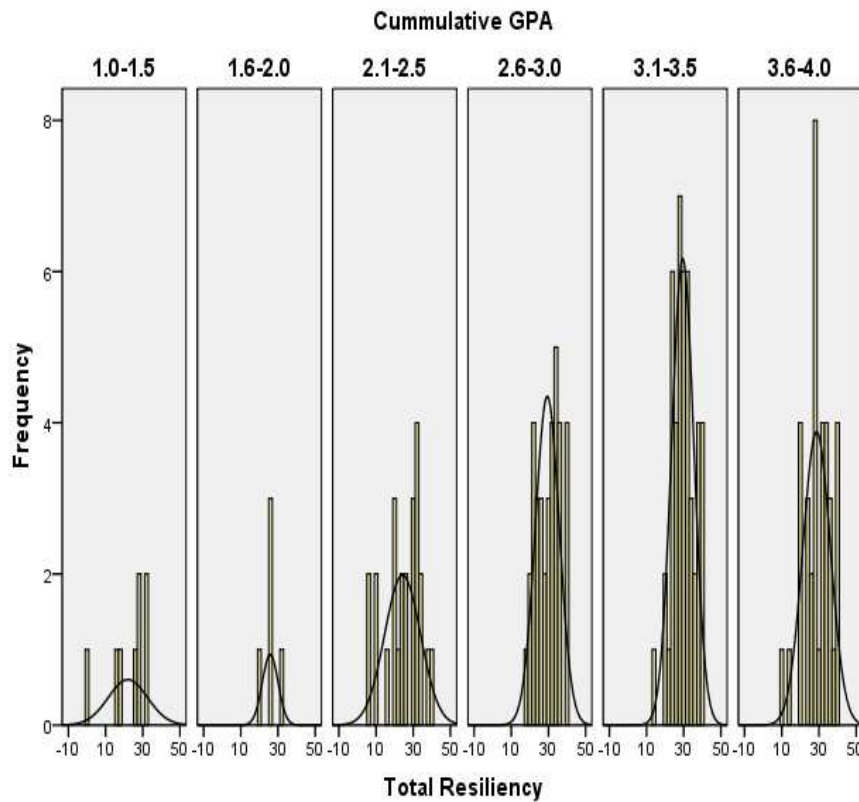


Figure 3. Frequency of cases shown for cumulative GPA in relation to total resiliency.

One resiliency factor was found to be statistically significant in predicting GPA: coping with stress makes me stronger. The resiliency factor of coping with stress makes me stronger significantly predicted GPA,  $\beta = -.234$ ,  $t(153) = -1.996$ ,  $p = .04$ . Even after controlling for all other variables in the model, the resiliency factor of coping with stress makes me stronger still was found to be statistically significant,  $\beta = -.292$ ,  $t(153) = -2.121$ ,  $p = .03$ . Therefore,  $H_{a3}$  was accepted.

### **Summary and Conclusion**

College self-efficacy did not affect the GPA of Hispanic community college students. Six variables related to sensation seeking predicted GPA: Roller coaster riding, feelings regarding familiar faces, marijuana use, sex before marriage, sailing, and skiing. Finally, the resiliency factor of “coping with stress makes me stronger” significantly predicted GPA. In the following chapter I discuss the reasons why the findings turned out the way in which they did. I also discuss recommendations for future research on the topic of academic achievement of Hispanic community college students.

## Chapter 5: Discussion, Conclusions, and Recommendations

### **Discussion**

Previous studies of Hispanic community college students had not examined whether involvement in sensation-seeking behaviors predicted academic achievement. Therefore, in the present study I intended to examine whether involvement in sensation-seeking behaviors predicted academic achievement for Hispanic community college students after controlling for variables that have shown to correlate with students' academic performance, such as self-efficacy (Bong et al., 2012).

### **Interpretation**

A total of 154 Hispanic community college students were asked to complete self-report surveys regarding levels of college self-efficacy, resiliency, and sensation-seeking. High levels of sensation-seeking were shown to correlate with lower grade point averages. In particular, roller coaster riding, sex before marriage, skiing, sailing, feelings regarding familiar faces, and marijuana use correlated with lower GPAs. Therefore, academic performance was lower for Hispanic community college students who reported high levels of engagement in sensation-seeking behaviors. Secondly, college self-efficacy levels did not correlate with poor academic performance for Hispanic community college students. Finally, resiliency was found to correlate with poor academic performance for Hispanic community college students, but only for the factor of “coping with stress making one stronger.”

**RQ1.** This question studied the relationship between level of college self-efficacy and academic achievement for Hispanic community college students. I found through this

study that college self-efficacy did not have a relationship to Hispanic community college students' GPA. It is possible that college self-efficacy alone does not correlate with academic achievement, but college self-efficacy may impact GPA when paired with other variables that are interrelated. For example, the study by Defreitas and Bravo (2012) revealed that higher levels of self-efficacy and involvement with faculty members were shown to correlate with higher GPAs among Latino college students at a Hispanic-serving institution. Defreitas and Bravo (2012) discovered that self-efficacy only partially explained the relationship between faculty involvement and student GPA, as faculty involvement was a significant predicting variable of GPA even as level of self-efficacy was still present in the model.

**RQ2.** This question examined the relationship between involvement in sensation-seeking behaviors and academic achievement of Hispanic community college students. High levels of sensation seeking were shown to correlate with lower grade point averages. In particular, roller coaster riding, sex before marriage, skiing, sailing, feelings regarding familiar faces, and marijuana use correlated with lower GPAs. Therefore, academic performance was lower for Hispanic community college students who reported high levels of engagement in sensation-seeking behaviors. Perhaps as sensation-seeking behaviors are engaged in more often, this leads to negative outcomes for an individual, which in turn negatively affects the individual's academic performance. For example, as a student uses marijuana, they may begin to lose sight of reality, expectations, obligations, and responsibilities, which can then lead to less studying, loss of focus, and altered perception and judgment. These consequences can then lead to lower grades on

tests and quizzes, incomplete or late assignments, lower grades on term papers, and a general lack of focus on academia. Therefore, certain sensation-seeking activities such as marijuana use are counterproductive in terms of achieving academic goals.

As discussed earlier, sensation seeking has also been shown to correlate with adolescent drug use (Zuckerman et al., 1990), health problems (Zuckerman et al., 1976), likelihood to smoke (Zuckerman et al., 1990), choosing dangerous careers (Zaleski, 1984), pro-drug discussions amongst adolescents (Yanovitzky, 2005), online gaming addiction (Mehroof & Griffiths, 2010), drinking alcohol and driving (Arnett, 1990), participation in risky sexual behavior (Sheer and Cline, 1994), and alcohol use (Donohew et al., 1999). As sensation seeking has been linked with many negative outcomes for an individual, it is not surprising that sensation seeking is also linked to lower academic achievement. It is possible, perhaps even likely, that many of these sensation-seeking behaviors are interrelated and therefore engaging in more than one high-sensation-seeking activity at the same time during a semester can exacerbate the impact that these behaviors can have on academic achievement, as the implications are magnified.

**RQ3.** This question studied the relationship between level of resiliency and academic achievement for Hispanic community college students. A multiple regression analysis was carried out and the result indicated that the resiliency factor of “coping with stress makes me stronger” significantly predicted GPA. Even after controlling for all other variables within the model, the resiliency factor of “coping with stress makes me stronger” was still found to be a significant predictor of GPA for Hispanic community college students. Therefore, a students’ beliefs that coping with stress can make them



stronger helps to increase their levels of academic achievement. This finding was consistent with findings from other researchers who found that confidence, motivation, and encouragement were factors that influenced academic achievement (Cavazos et al., 2010; Romero, 2009). Therefore, as students' stress levels get higher, the belief that it makes them stronger can possibly be motivating and encouraging and can help to build their confidence in themselves, thus increasing their academic achievement.

The present study's finding on resiliency also aligns well with the study by Gonzalez (2007), which found that Latino doctoral students were faced with challenges relating to professors' negative stereotypical beliefs, which in turn called for them to be resilient and persistent in their focus on academia. Therefore, the stress of facing stereotypes pushed Latino students harder to overcome the adversity and prove their professors wrong, thus increasing their strength and resiliency. Therefore, coping with stress (negative stereotypes) made these students stronger (resilient).

### **Limitations**

One limitation of this study was that only two community colleges from Central New Jersey were examined, which is a relatively small population in comparison to the number of Hispanic students found in other parts of the United States. These two institutions that participated in the study were Hispanic-serving institutions, but there are many other Hispanic-serving institutions throughout New Jersey and the United States. Likewise, there are other community colleges across the United States that may be more representative of the entire Hispanic community college population than the colleges that

I chose. The colleges that I chose were selected due to their close proximity to my home, time and monetary constraints, and the colleges' statuses as Hispanic-serving institutions.

The other limitation was the idea that some students may have been dishonest in reporting their GPA, enrollment status, feelings regarding self-efficacy, resiliency, and sensation seeking in an effort to appear more socially desirable to the researcher or to avoid embarrassment.

### **Implications for Social Change**

Knowing what contributes to a student's success in college can help to ensure that more students achieve academic excellence, and move on to higher education endeavors and professional roles and careers. Closing the gap of equality in education is a national priority that needs to be addressed as Hispanics will quickly become the majority. The academic achievement of Hispanics will ultimately have an effect on the United States in the future, as the Hispanic population will continue to grow and more and more Hispanics will be seen in leadership, management, and educational roles. Therefore, Hispanic Americans are the future of America and need to achieve academic excellence that is equal to or even greater than that of their European American and African American counterparts in order to properly and adequately fulfill their roles as future leaders, managers, and educators in this country.

This study illustrated that factors of resiliency (specifically coping with stress makes one stronger) and sensation-seeking have an impact on the academic achievement of Hispanic community college students. However, college self-efficacy did not have an impact on the academic achievement of Hispanic community college students. Therefore,

educators, administrators, parents, and faculty should focus more on Hispanic community college students who are at risk for low levels of resiliency and high levels of sensation seeking to intervene earlier in these students' educational journeys to ensure the highest rates of academic achievement are realized.

### **Future Research**

Future research should focus on other factors that may affect the academic performance of Hispanic community college students such as: (a) whether or not the student came from a single-parent household or a dual parent household, (b) whether or not students are affected by parents' divorce, and (c) what mitigating factors serve as buffers to students when faced with obstacles that would otherwise affect their academic achievement. Research should also examine other demographic factors that can possibly affect academic performance such as relationship status and relationship issues, number of hours worked during the semester, and residential situation (apartment renter, homeowner, boarder, shared living space, etc.).

Future research should also examine why certain sensation-seeking behaviors are more likely to correlate with lower GPA's than other sensation-seeking behaviors. It would also be interesting to investigate the factors that influence college students' decisions to attend summer sessions. In addition, it would be interesting to learn the attendance rates of college students of different ethnicities who attend class during the fall, spring and summer sessions as this is a gap in the literature.

The present study illustrates how many variables come together to play a role in an individuals' processes of becoming motivated, sticking to their plan, and achieving their goals. The present study's findings show there are various factors that can play a role in predicting academic achievement. Some factors are more obvious than others. Some factors affect academic achievement only when present among other variables that have previously been shown to affect academic achievement. In other words, some variables only have an impact if they become paired with other variables simultaneously. Therefore, those who seek to improve the academic achievement of others must take into account the various possible factors that may affect the learning and retention of material being taught. As seen in the present study, outside factors such as sensation seeking can play a significant role in whether or not individuals perform at their very best. This also suggests that there may be many other variables affecting academic achievement of students that have yet to be realized.

### **Conclusion**

In conclusion, the present study was able to effectively illustrate that there are two specific factors that affect the academic achievement of Hispanic community college students: sensation seeking and resiliency. The results of the present study align well with similar findings gained from Pidcock et al. (2001), who found that high levels of novelty-seeking, a subpart of sensation seeking, correlated with high incidence of Hispanic college students dropping out of school. Additionally, Hispanics scored higher on levels of novelty seeking than their European-American counterparts (Pidock et al, 2001). Therefore, engagement in sensation-seeking behaviors and activities may be a factor that

prevents Hispanic community college students from attaining academic achievement rates similar to that of their non-Hispanic classmates.

This newfound knowledge will be of particular interest to educators, administrators, tutors, mentors, academic coaches, and learning consultants. These findings may impact how educators engage Hispanic community college students as well as how at-risk students are identified. Since it has been revealed through this study that sensation-seeking is correlated with poor academic performance, this would help to identify future Hispanic students who may be at-risk for failure, underachievement, or dropping out of community college. Likewise, Hispanic individuals found to exhibit signs of low resiliency would be identified earlier in their educational journeys and therefore may be able to get specialized academic assistance in time for it to reduce the possibility of drop-out and increase grade point averages, thus positively impacting their educational careers.

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Appendix A: Institutional Review Board Approval Number

The Walden University IRB approval number for this study was 03-24-16-0177014.

## Appendix B: Permission Letter for Connor-Davidson Resilience Scale

Dear Lisa:

Thank you for your interest in the Connor-Davidson Resilience Scale (CD-RISC). We are pleased to grant permission for use of the CD-RISC in the project you have described under the following terms of agreement:

1. You agree not to use the CD-RISC for any commercial purpose, or in research or other work performed for a third party, or provide the scale to a third party. If other off-site collaborators are involved with your project, their use of the scale is restricted to the project, and the signatory of this agreement is responsible for ensuring that all collaborators adhere to the terms of this agreement.
2. You may use the CD-RISC in written form, by telephone, or in secure electronic format whereby the scale is protected from unauthorized distribution or the possibility of modification.
3. Further information on the CD-RISC can be found at the [www.cd-risc.com](http://www.cd-risc.com) website. The scale's content may not be modified, although in some circumstances the formatting may be adapted with permission of either Dr. Connor or Dr. Davidson. If you wish to create a non-English language translation or culturally modified version of the CD-RISC, please let us know and we will provide details of the standard procedures.
4. Three forms of the scale exist: the original 25 item version and two shorter versions of 10 and 2 items respectively. When using the CD-RISC 25, CD-RISC 10 or CD-RISC 2, whether in English or other language, please include the full copyright statement and use restrictions as it appears on the scale.
5. A fee of \$ 30 US is payable to Jonathan Davidson at 3068 Baywood Drive, Seabrook Island, SC 29455, USA, either by PayPal (at: [mail@cd-risc.com](mailto:mail@cd-risc.com)), cheque, bank wire transfer (in US \$\$), international money order or Western Union.
6. Complete and return this form via email to [mail@cd-risc.com](mailto:mail@cd-risc.com).
7. In any publication or report resulting from use of the CD-RISC, you do not publish or partially reproduce the CD-RISC without first securing permission from the authors.

If you agree to the terms of this agreement, please email a signed copy to the above email address. Upon receipt of the signed agreement and of payment, we will email a copy of the scale.

For questions regarding use of the CD-RISC, please contact Jonathan Davidson at [mail@cd-risc.com](mailto:mail@cd-risc.com). We wish you well in pursuing your goals.

Sincerely yours,  
Jonathan R. T. Davidson, M.D.  
Kathryn M. Connor, M.D.

Agreed to by:  
Lisa Marcelino

\_\_\_\_\_  
Signature (printed)                      Date                      11/12/14  
\_\_\_\_\_  
Student Researcher  
Title  
Walden University  
\_\_\_\_\_  
Organization

## Appendix C: Demographics Form

**Demographics Form**

Please select the category that describes yourself by circling the correct choice or choices below.

**Age group** (Choose ONE)    18-25    26-33    34-41    42-49    50-57    58-65  
66+

**Race** (Choose One)    Puerto Rican    Colombian    Costa Rican    Mexican  
Peruvian  
More than one Hispanic Country of Origin    Hispanic Country Not  
Listed

**Occupation** (Choose One)

Full time worker

Part time worker

Volunteer worker

Internship/assistantship

Retired

Prefer not to work while attending school

Disabled and cannot work

**Cumulative GPA in College Thus Far:** (choose ONE)

1.0-1.5

1.6-2.0

2.1-2.5

2.6-3.0

3.1-3.5

3.6-4.0

**Relationship Status:** (Choose One)

Single    Engaged    Married    Separated    Divorced    Widowed    Remarried

**How many children do you have?** (Choose One)    0    1    2    3    4    5  
6    7+

## Appendix D: Permission to Use Sensation Seeking Scale

Sensation Seeking Scale, Form V

Version Attached: Full Test

PsycTESTS Citation:

Zuckerman, M., Eysenck, S., & Eysenck, H. J. (1978). Sensation Seeking Scale, Form V [Database record].

Retrieved from PsycTESTS. doi: <http://dx.doi.org/10.1037/t04065-000>

Instrument Type:

Rating Scale

Test Format:

The 40-item Sensation Seeking Scale, Form V uses a forced-choice response format.

Source:

Zuckerman, Marvin, Eysenck, Sybil B., & Eysenck, H. J. (1978). Sensation seeking in England and America:

Cross-cultural, age, and sex comparisons. *Journal of Consulting and Clinical Psychology*, Vol 46(1), 139-149. doi:

10.1037/0022-006X.46.1.139

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## Appendix E: Permission to Use College Self-Efficacy Inventory

College Self-Efficacy Inventory  
Version Attached: Full Test

### PsycTESTS Citation:

Solberg, V. S., O'Brien, K., Villareal, P., Kennel, R., & Davis, B. (1993). College Self-Efficacy Inventory [Database record]. Retrieved from PsycTESTS. doi: <http://dx.doi.org/10.1037/t09476-000>

### Instrument Type:

Inventory/Questionnaire

### Test Format:

Responses were recorded on a 10-point scale ranging from 0 (not at all confident) to 10 (extremely confident).

### Source:

Solberg, V. Scott, O'Brien, Karen, Villareal, Pete, Kennel, Richard, & Davis, Betsy. (1993). Self-efficacy and Hispanic college students: Validation of the College Self-Efficacy Instrument. *Hispanic Journal of Behavioral Sciences*, Vol 15(1), 80-95. doi: 10.1177/07399863930151004, © 1993 by SAGE Publications. Reproduced by Permission of SAGE Publications.

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doi: 10.1037/t09476-000

College Self-Efficacy InventoryCSEI

PsycTESTS™ is a database of the American Psychological Association

Appendix F: Research Question 1 Table: Model Summary

Model Summary					
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension	1	.116 <sup>a</sup>	.013	-.020	1.373
	2	.421 <sup>b</sup>	.177	.088	1.298
	3	.602 <sup>c</sup>	.362	.180	1.231
	4	.779 <sup>d</sup>	.607	.238	1.186



Appendix G: Research Question 2 Table: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.794	5	.759	.403	.846 <sup>a</sup>
	Residual	278.829	148	1.884		
	Total	282.623	153			
2	Regression	50.034	15	3.336	1.979	.021 <sup>b</sup>
	Residual	232.589	138	1.685		
	Total	282.623	153			
3	Regression	102.391	34	3.012	1.988	.004 <sup>c</sup>
	Residual	180.232	119	1.515		
	Total	282.623	153			
4	Regression	171.424	74	2.317	1.646	.015 <sup>d</sup>
	Residual	111.199	79	1.408		
	Total	282.623	153			

Appendix H: Research Question 3 Table: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.654	.423		11.005	.000
	Participant Age	-.053	.192	-.025	-.273	.785
	CountryofOrigin	.007	.085	.007	.080	.937
	Occupation	.011	.067	.014	.169	.866
	Relationship Status	-.212	.232	-.111	-.912	.364
	Number of children	.019	.184	.013	.105	.917
2	(Constant)	3.203	.566		5.658	.000
	Participant Age	-.166	.189	-.080	-.877	.382
	CountryofOrigin	.020	.082	.020	.247	.805
	Occupation	-.006	.066	-.007	-.091	.928
	Relationship Status	-.124	.223	-.065	-.555	.580
	Number of children	-.013	.177	-.008	-.072	.943
	ability to adapt when changes occur	.087	.159	.062	.548	.585
	ability to deal with whatever comes	.356	.192	.231	1.855	.066
	ability to see humor when faced with problems	-.090	.128	-.070	-.702	.484
	coping with stress makes me stronger	-.279	.151	-.208	-1.851	.066
	able to bounce back after illness injury or hardship	.215	.154	.156	1.397	.165
	believe achieve goals in face of obstacles	.244	.159	.185	1.533	.128
	stay focused think clearly under pressure	-.016	.137	-.012	-.116	.908
	not easily discouraged by failure	-.128	.128	-.102	-.997	.321
	see self as strong when dealing with life's challenges and difficulties	.135	.145	.107	.930	.354
	handle unpleasant feelings like sadness, fear and anger	-.047	.106	-.045	-.443	.659
3	(Constant)	2.119	.676		3.132	.002
	Participant Age	-.159	.204	-.077	-.782	.436
	CountryofOrigin	-.007	.080	-.007	-.093	.926
	Occupation	-.039	.070	-.048	-.565	.573
	Relationship Status	-.353	.233	-.186	-1.512	.133
	Number of children	.176	.181	.115	.974	.332
	ability to adapt when changes occur	-.205	.172	-.147	-1.196	.234
	ability to deal with whatever comes	.263	.224	.171	1.174	.243
	ability to see humor when faced with problems	-.048	.130	-.037	-.371	.711
	coping with stress makes me stronger	-.313	.157	-.234	-1.996	.048
	able to bounce back after illness injury or hardship	.127	.158	.092	.806	.422
	believe achieve goals in face of obstacles	.177	.165	.134	1.074	.285
	stay focused think clearly under pressure	-.054	.142	-.042	-.380	.705
	not easily discouraged by failure	-.104	.130	-.083	-.799	.426
see self as strong when dealing with life's	.081	.156	.064	.520	.604	

challenges and difficulties					
handle unpleasant feelings like sadness, fear and anger	-.002	.109	-.002	-.020	.984
Research a term paper	.079	.082	.140	.965	.336
Write course papers.	.069	.086	.114	.801	.425
Do well on your exams.	.118	.072	.186	1.640	.104
Take good class notes.	.057	.079	.081	.718	.474
Keep up to date with your schoolwork.	.052	.074	.081	.710	.479
Manage time effectively	-.066	.065	-.109	-1.024	.308
Understand your textbooks.	-.012	.066	-.019	-.175	.861
Get along with roommates	.019	.076	.034	.253	.801
Socialize with your roommates.	.023	.073	.041	.311	.756
Divide space in your apartment or room.	-.029	.065	-.055	-.440	.661
Divide chores with roommates.	.011	.067	.022	.170	.865
Participate in class discussions.	-.060	.071	-.111	-.853	.395
Ask a question in class.	.125	.074	.251	1.695	.093
Get a date when you want one.	-.018	.050	-.039	-.360	.720
Talk to your professors.	.054	.091	.089	.593	.554
Talk to university staff.	.005	.097	.009	.048	.962
Ask a professor a question.	-.049	.129	-.089	-.381	.704
Make new friends at college.	.060	.108	.110	.555	.580
Join a student organization.	-.029	.087	-.055	-.337	.736
4 (Constant)	5.607	2.886		1.943	.056
Participant Age	-.299	.251	-.144	-1.191	.237
CountryofOrigin	-.024	.088	-.023	-.272	.786
Occupation	.002	.089	.002	.018	.986
Relationship Status	-.222	.274	-.117	-.811	.420
Number of children	.155	.220	.101	.704	.484
ability to adapt when changes occur	-.012	.213	-.009	-.059	.953
ability to deal with whatever comes	.299	.276	.194	1.081	.283
ability to see humor when faced with problems	-.009	.165	-.007	-.056	.955
coping with stress makes me stronger	-.391	.184	-.292	-2.121	.037
able to bounce back after illness injury or hardship	.245	.186	.178	1.318	.191
believe achieve goals in face of obstacles	.161	.190	.122	.849	.398
stay focused think clearly under pressure	-.236	.178	-.182	-1.327	.188
not easily discouraged by failure	.099	.161	.079	.620	.537
see self as strong when dealing with life's challenges and difficulties	.144	.191	.114	.756	.452
handle unpleasant feelings like sadness, fear and anger	-.032	.121	-.031	-.264	.792
Research a term paper	.005	.098	.009	.049	.961
Write course papers.	.192	.102	.317	1.881	.064
Do well on your exams.	.016	.094	.026	.174	.862
Take good class notes.	.155	.093	.223	1.675	.098
Keep up to date with your schoolwork.	-.033	.086	-.051	-.381	.704

Manage time effectively	.000	.082	-.001	-.004	.996
Understand your textbooks.	-.032	.079	-.053	-.407	.685
Get along with roommates	-.050	.086	-.088	-.589	.557
Socialize with your roommates.	.129	.088	.232	1.475	.144
Divide space in your apartment or room.	.074	.078	.143	.955	.342
Divide chores with roommates.	-.073	.079	-.141	-.922	.359
Participate in class discussions.	-.104	.083	-.191	-1.250	.215
Ask a question in class.	.163	.085	.326	1.925	.058
Get a date when you want one.	.016	.057	.033	.270	.788
Talk to your professors.	-.013	.103	-.022	-.131	.896
Talk to university staff.	.110	.125	.211	.877	.383
Ask a professor a question.	-.157	.155	-.285	-1.013	.314
Make new friends at college.	.031	.124	.056	.246	.806
Join a student organization.	-.050	.103	-.094	-.487	.627
Kind of parties wild or quiet	-.093	.190	-.057	-.490	.625
seeing same movies again	.133	.501	.028	.265	.792
mountainclimbing feelings	-.831	.315	-.295	-2.641	.010
Body odor feelings	.242	.280	.087	.864	.390
familiar faces	-1.260	.474	-.306	-2.659	.009
getting lost	.084	.294	.030	.286	.776
what others say	-.004	.265	-.001	-.016	.987
Movie and play predictability	-.220	.312	-.077	-.706	.482
Marijuana use	.822	.373	.301	2.206	.030
Drug use feelings	.298	.396	.088	.751	.455
Dangerous activities	-.584	.326	-.207	-1.793	.077
Swingers	-.241	.322	-.083	-.747	.458
stimulants	-.056	.333	-.019	-.168	.867
New foods	.097	.309	.031	.314	.754
Home movies	.349	.334	.111	1.046	.299
waterski	.456	.380	.158	1.200	.234
surfboarding	-.193	.377	-.068	-.513	.610
unplanned trip vs. planned	-.257	.278	-.093	-.924	.358
Friends preference	-.114	.365	-.035	-.313	.755
fly airplane	-.142	.289	-.051	-.492	.624
scuba	-.208	.314	-.075	-.663	.509
would like to meet homosexuals	.607	.421	.163	1.443	.153
parachute jumping	.050	.338	.018	.149	.882
friends predictable	.160	.138	.107	1.159	.250
Experiences for their own sake	-.205	.334	-.072	-.613	.541
preference in artwork	-.030	.277	-.011	-.107	.915
surroundings	-.055	.317	-.020	-.173	.863
Diving off high board	-.276	.321	-.100	-.859	.393
Dating opposite sex exciting or shared values?	-.052	.307	-.018	-.169	.866
Heavy drinking	-.158	.281	-.058	-.563	.575

social sin	-.217	.362	-.065	-.599	.551
sex before marriage	-.646	.294	-.235	-2.193	.031
jet set preference	.093	.281	.034	.332	.741
insulting others	-.127	.333	-.047	-.381	.704
sex in movies	-.117	.317	-.043	-.370	.712
feelings about drinking	.578	.308	.206	1.876	.064
dress	-.067	.290	-.024	-.233	.817
sailing	-.681	.284	-.239	-2.400	.019
patience with boring people	-.096	.360	-.030	-.267	.791
skiing	.685	.298	.249	2.296	.024

a. Dependent Variable: Cumulative GPA