

**CORRELATIONAL STUDY OF THE VARIABLES OF SELF-ESTEEM,
SELF-EFFICACY, AND ACADEMIC SUCCESS IN A POPULATION OF
NATIVE AMERICAN STUDENTS**

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PREVIEW

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Abstract

Self-esteem and self-efficacy appear to play a role in the reasons Native American students are not passing core subjects in middle school and high school and may explain why less than half of these students graduate. Studies have not provided conclusive evidence to support this contention. The majority of studies on the issues of self-esteem and self-efficacy, as they may correlate with academic success, have been conducted on college age students. Fewer studies have been conducted with student populations of elementary and secondary students regarding the issue between academic success, as measured by grade point average and either self-efficacy or self-esteem. No prior studies of secondary students regarding this issue have been conducted in the student population from the Pacific Northwestern tribe of coastal Native Americans ($N = 61$). Findings suggested that self-efficacy and self-esteem may be statistically unrelated to academic success in students from the tribe. Reasons for these findings are discussed in the context of culture, limitations are delineated, and recommendations for future research are provided.

Dedication

This dissertation is dedicated to my Lord and Savior, Jesus Christ
and to my father, Albert Leonard Hoppa.

PREVIEW

Acknowledgments

I would like to acknowledge and thank the following persons: my husband for his encouragement and unending support throughout this process; my family, children and grandchildren for their prayers and encouragement; Reverend Doctor Wesley Johnson for his prayers, support and wisdom; Diane and Steve Mossman and Theresa Schaudes for their instantaneous prayer support; Jeanne and Ben Greiner and Karen and Hallelujah Bill White for their support and prayers and the use of their computers; and my church family for their support and prayers. I would not have made it through without you. I would also like to acknowledge the Tribal Council for their approval of the study. Thank you.

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PREVIEW

CHAPTER 1. INTRODUCTION

Introduction to the Problem

Half of the Native American students of Washington State do not graduate from high school (Greene, 2002; High school dropouts in America, 2010; Hirschman, Pharris-Ciurej, & Willhoft, 2006), largely because of poor performance in core classes (Tribal Leader Congress, 2006), creating a crisis that has devastating effects on the educational, economic, health, and social well-being of Native peoples and their communities (American Indians, 2008). However, there is a paucity of studies empirically investigating a possible link between academic success and measured levels of general self-esteem and general self-efficacy in Native American primary and secondary students. Identifying correlates of academic success presents challenges for the educational psychology community; describing those correlates would constitute a first step towards helping the Native American students of Washington State, who are at risk for not graduating from high school.

Some evidence suggests that there is a relationship between academic success and general self-esteem and self-efficacy (Pajares, 1996). Further, there has been speculation that low self-efficacy and self-esteem may be the underpinnings of the lack of academic success seen among Washington's Native American school children (Tribal Leader Congress, 2006). However, recent evidence suggests that culture may play a decisive role, particularly the individualistic-collectivistic dimension (Pepi, Faria, & Alesi, 2006). Academic success may be related to self-efficacy and self-esteem in individualistic societies, but academic success may be independent of self-efficacy and self-esteem in collectivistic societies (Pepi et al., 2006).

School-age students in coastal Native American communities are living in a collectivistic society, nestled within the largely individualistic American society. It is possible that self-esteem and self-efficacy are predictive of academic success in these students because they live in an individualistic nation. But it is also possible that academic success in these students is independent of their self-esteem and self-efficacy because they live their lives within a tribal structure. Determining these relationships can assist the educational psychology community in improving the delivery of quality education to needy individuals at-risk for not graduating from high school, students like the elementary and secondary students of the Pacific Northwestern (pseudonym) Tribe of Native Americans.

Background of the Study

General self-esteem was first discussed as a construct by William James (1890/1950). James suggested that self-esteem is a sense of each person's perception of his/her individual self and an expression of how each person understands his/her self to be the same yesterday and today. That is, each of us perceives our self to be uniquely our self. This personal identity influences how we feel about ourselves.

Self-efficacy was first studied by early researchers in social learning theory, such as Rotter (1954, 1972), who understood that a child is not simply an instinct-driven creature compelled by unconscious impulses. We learn from the modeling of others. Modeling helps us to learn how to accomplish, how to cope, and how to perform in life. Rotter (1954, 1972) encouraged other researchers to appreciate the importance of social learning in a child's development of self concept.

Bandura (1963, 1973, 1977, 1989) advanced social learning theory by showing that our personal locus of control relates to whether we can control an outcome. Bandura built on Rotter's (1954, 1972) social learning theory and Sears's (1943) work on aggression to conduct studies that determined that general self-efficacy relates to our belief that we have the ability to conduct the tasks necessary to arrive at the target outcome (Pajares, 2004; Seeman, 1999). Bandura's (1973, 1977, 1989) research provided evidence of an attribute of general self-efficacy, or our belief that we can cope, accomplish, and perform in life, and showed how this belief influences how we interact with our environment, including how we act in academic settings. Bandura (2001) noted the creative flexibility of humans and our ability to change. It appears that general self-efficacy and general self-esteem change as a natural part of development (Baldwin & Hoffman, 2002; Wigfield, Eccles, & Pintrich, 1996; Willoughby, King, & Polatjko, 1996). This development is important, because if these qualities are malleable, it may provide a path for interventions.

This opportunity would be especially important as some evidence suggests a relationship between academic success and general self-esteem (Ahmed & Bruinsma, 2006; Pajares, 1996) and between academic success and general self-efficacy (Cleary & Chen, 2009; Obach, 2003; Walker & Greene, 2009; Webb-Williams, 2006).

There has been significant research in educational psychology with regard to self-efficacy and self-esteem as it relates to academic success. Pajares and Schunk (2001) stated:

Students' academic failures in basic subjects, as well as the misdirected motivation and lack of commitment often characteristic of the underachiever, the dropout, the student labeled "at risk," and the socially disabled, are in good measure the consequence of, or certainly exacerbated by, the beliefs that students develop about themselves and about their ability to exercise a measure of control over their environments . . . When low self-esteem is rooted in poor competence, skills that

will bring satisfaction must be cultivated. (p. 255)

The development of competency skills has been addressed by educational psychologists. It has been found that developing competency raises self-efficacy, and thereby increases academic success in students (Alfasi, 2003; Benbenutty, 2009; Schunk, 2001; Zimmerman & Schunk, 2001). Culture, however, impacts what tasks and competencies are developed, and the success in these tasks continues to impact self-efficacy and self-esteem (Bandura, 2002; Caprara, Regalia, Scabini, Barbaranelli, & Bandura, 2004). Bandura (2002) contended that culture does not negate social cognitive theory nor self-efficacy or self-esteem but may change how these impact academic success in individualistic versus collectivist cultures. Bandura (2002) and Caprara, et al. (2004) also emphasized that this is a topic that needs more research. However, no studies published to date have explored primary and secondary students of Coastal Native Americans' heritage regarding the possible link between academic success and the important psychological variables of general self-esteem and general self-efficacy.

While self-efficacy and self-esteem may be related to academic performance in some cultures, particularly individualistic cultures (Pepi et al., 2006), Native Americans are a collectivist people. In collectivist cultures, self-efficacy and self-esteem may be more reflective of the efficacy and esteem of the collective (Pepi et al., 2006), and are therefore unrelated to individual success. Because Native American elementary and secondary students are a part of a collectivist people within an individualistic American nation, and because of the assertion of the Tribal Leader Congress (2006) linking poor academic performance among Native Americans to self-esteem and self-efficacy, it was important to empirically determine whether self-esteem and self-efficacy are related to academic

achievement in students of Coastal Native American people of whom the Pacific Northwestern elementary and secondary students are representative.

If general self-efficacy and general self-esteem are predictive of academic outcome in Native American school students, educators could take advantage of the relationship and encourage the development of more curricula that are able to positively influence Native American students' general self-esteem and general self-efficacy, leading to academic success. An example of appropriate curricula increasing academic success is the expert-apprenticeship model used by Sharp (Lipka, Sharp, Brenner, Yanex, & Sharp, 2005). This model is useful in the Yup'ik culture, and it mirrors both traditional Native American knowledge and the proposition of Bandura's (1973, 1977, 1986) social cognitive theory, which hold that one of the ways we learn is in mimicking others. The model helped to stimulate excitement, willingness to learn, and increased grade point averages (GPA). Cultural relativity of materials is also supported by Buly's (2005) study of Native American students' reliance on background knowledge from community and home to answer questions in a school context.

While self-esteem has been found to have variable results in its correlation with academic success, there are adherents, such as Borba (2003) and Plummer and Harper (2007), who have developed self-esteem curriculum with the argument that self-esteem does correlate with academic success. Also, Johnson, Freedman, and Thomas (2008) and Stevens, Harris, Aguirre-Munoz, and Cobb (2009) have developed curricula to build students' self-efficacy.

If, however, general self-efficacy and general self-esteem are unrelated to academic outcomes in Native American students, the educational psychology community could

consider curricula that do not focus on general self-efficacy and general self-esteem in promoting academic success among, for example, Native Pacific Northwestern students.

Statement of the Problem

In the Native American community of Washington State, less than half of students are passing core subjects (Tribal Leader Congress, 2006), but whether academic success is related to general self-efficacy and general self-esteem in students of the Pacific Northwestern tribe of Native Americans is unclear. There is limited evidence in the literature on academic performance as it relates to general self-esteem and general self-efficacy in Native American primary and secondary students, as the majority of studies have been conducted with college students (Aragon, 2002; Gloria & Kurpius, 2001; Kurpius, Payakkakom, Rayle, Chee, & Arredondo, 2008). Further, whether self-efficacy and self-esteem are related to academic outcomes may depend on the individualistic-collectivist dimension of culture (Kim & Park, 2010; Oettingen & Zosuls, 2006). Evidence suggests the possibility that self-efficacy and self-esteem are predictive of academic outcomes in individualistic cultures; but in collectivistic cultures. this issue can only be ameliorated by directly examining self-efficacy, self-esteem, and academic performance in elementary and secondary Native American students, such as the students of Washington's Pacific Northwestern Tribe of Native Americans.

Purpose of the Study

The present study investigated the relationship between general self-efficacy, as measured by the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995), and general

self-esteem, as measured by the Rosenberg Self-Esteem Scale (Rosenberg, 1965, 1989), and an important indicator of academic success (grade point average) in Native American school children of the Pacific Northwestern tribe. It is possible that self-esteem and self-efficacy have a role in the poor academic performance of Native American students of the state of Washington (Tribal Leader Congress, 2006). If so, then the collected data should reveal that academic performance is correlated with self-efficacy and self-esteem.

However, it is also possible that academic performance is independent of self-esteem and self-efficacy in students of the collectivistic Pacific Northwestern tribe of Native Americans, given that some evidence suggests that these concepts occur differently in collectivistic societies (Pepi et al., 2006). Determining these relationships is important towards empirically testing the speculations of the Tribal Leader Congress (2006). More importantly, determining these relationships is important to inform theory. The purpose of the present study was fulfilled by collecting GPAs for students of the Pacific Northwestern tribe and correlating this data with self reported measures of general self-esteem (Rosenberg Self-Esteem Scale; Rosenberg, 1965) and general self-efficacy (General Self-Efficacy Scale; Schwarzer & Jerusalem, 1995).

Rationale

As there is limited investigation of the issues affecting Native American school children, this study provides the first empirical measures of the levels of general self-efficacy and general self-esteem in the Pacific Northwestern tribe, a vulnerable population at-risk for not graduating from high school, and one wherein it is assumed that self-esteem and self-efficacy are related to academic success (Ahmed & Bruinsma, 2006;

Cleary & Chen, 2009; Tribal Leader Congress, 2006). However, this assumption may not be valid, because the school-age children of the Pacific Northwestern tribe live in a collectivistic society, nestled within the largely individualistic American society.

If results had shown that academic success is correlated with self-efficacy and self-esteem in Pacific Northwestern tribe students, the implications for the educational psychology community would include the possibility of interventions specifically designed to target general self-esteem and general self-efficacy in this at-risk population. Equally importantly, –because results showed that academic success is not correlated with self-efficacy and self-esteem in Pacific Northwestern tribe students, the implications for the educational psychology community include appreciating the knowledge that in some isolated communities, like the Pacific Northwestern tribe of Native Americans, measures of self-esteem and self-efficacy operate independent of academic success.

Therefore, results of this study provided the first steps towards determining whether the Tribal Leaders Congress (2006) was correct in associating the poor academic performance of Native American students in the state of Washington with low self-esteem and low self-efficacy. More importantly, the present study adds to our understanding of theory by providing published evidence regarding whether the positive relationships between academic success and the psychological variables of self-esteem and self-efficacy found in individualistic cultures is also evident in collectivistic cultures (Pepi et al., 2006). This knowledge is crucial to determining potential interventions designed to improve academic performance. Perhaps most importantly, the present study provides empirical data on an important educational psychological issue affecting Native American school children, an understudied group at risk for not graduating from high school, in part because

of poor performance in core subjects.

Research Questions and Hypotheses

Research Questions

1. To what extent does general self-efficacy correlate positively with academic success in the population of coastal Native American students?
2. To what extent does general self-esteem correlate positively with academic success in the population of coastal Native American students?
3. To what extent do general self-efficacy and general-self esteem predict academic success?

Null Hypotheses

- H1o. There is no relationship between academic success (either as cumulative grade point average or as a binomial variable of cumulative grade point average of 2.0 or better) and general self-efficacy as measured by the General Self-Efficacy Scale (GSES) developed by Schwarzer and Jerusalem (1995, 2004).
- H2o. There is no relationship between academic success (either as cumulative grade point average or as a binomial variable of cumulative grade point average of 2.0 or better) and general self-esteem as measured by The Rosenberg Self-Esteem Scale (RSS) developed by Rosenberg (1989).

Significance of the Study

Information provided from this study can potentially inform the educational psychology and general educational communities as to whether self-efficacy and self-esteem are factors in academic success of Native American school children who are presently at risk for not graduating high school. While previous studies of other populations have found relationships between self-efficacy, self-esteem, and academic success (Ahmed & Bruinsma, 2006; Carter, 2003; Chowdhury & Shahabuddin, 2007; Pullman & Alik, 2008), no previous studies have focused on Washington's Coastal Native American school children with respect to the correlation between academic success and the

potentially important attributes of general self-efficacy and general self-esteem. Findings from this line of investigation can potentially inform theory, in addition to potentially assisting individual students of the Native American community of Washington State in achieving academic success.

Definition of Terms

For the purpose of this study, the following terms are defined as listed:

Academic success. Academic success is defined by scholars variously throughout the literature review, including standardized test scores, classroom test scores, and GPA. In the methods of the present study, academic success was defined as grade point average (GPA) for each participating student.

General self-esteem. A positive or negative orientation toward oneself, an overall evaluation of one's worth or value as measured by the Rosenberg Self-Esteem Scale. (Rosenberg, 1965, 1989).

General self-efficacy. The belief that one can perform a novel or difficult task or tasks; or cope with adversity in various domains of human functioning, as measured by the General Self-Efficacy Scale (Jerusalem & Schwarzer, 1992).

Assumptions and Limitations

Social cognitive theory (SCT) and self-determination theory (SDT) provided the theoretical framework of the present study, including the assumptions and limitations of these theories. Social cognitive theory supports the concept of self-efficacy and assumes a relationship between positive self-efficacy and task accomplishment (Bandura, 1977). The

self-determination theory assumes that “self-esteem is-a healthy development of self” (Ryan & Deci, 2004), which in turn builds autonomy, relatedness, and competence, such that belief in one’s ability supports success in a task, such as academic success. Indeed, some quantitative studies support the proposition that self-efficacy and self-esteem may be related to academic success (Ahmed & Bruinsma, 2006; Aragon, 2002; Baird, Scott, Dearing, & Hamill, 2009; Bong & Clark, 1999; Jaret & Reitzes, 2009; Pajares, 1996; Pajares and Schunk, 2001).

However, SCT and SDT are limited by these assumptions. For example, in the context of the present study, self-efficacy and self-esteem are not the only variables related to academic success. Personality, intelligence, industriousness, personal motivation, cognitive learning style, and test-taking skill are only some of potentially crucial variables affecting academic success that are not fully embraced in social cognitive theory or self-determination theory. Therefore, the present study was limited by the assumptions of these theories when correlating academic achievement with self-efficacy and self-esteem.

It was assumed that the measuring instruments were valid and reliable. The Rosenberg Self-Esteem Scale (Rosenberg, 1965) and the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995) have been previously assessed for validity and reliability (Bagley, Bolitho, & Bertrand, 1997; Martín-Albo, Núñez, Navarro, & Grijalvo, 2007; Scherbaum, Cohen-Charash, & Kern, 2006; Schwarzer & Jerusalem, 1995). Because the present study used correlation and regression methodologies, the normality of these variables was assessed with the Shapiro-Wilk Statistic (Shapiro & Wilk, 1965), followed by tests of skew, kurtosis, and identification of possible outliers. These steps were taken to foster the linearity assumption of correlation and regression statistics.

The present study was conducted on Native American students of the Pacific Northwestern Tribe. While Bandura (2001) argued that the constructs of general self-efficacy and general self esteem are cross-cultural constructs, validated by research, instruments used in the present study have not been normed on tribes of Native American persons. It was assumed that the items on the Rosenberg Self-Esteem Scale (Rosenberg, 1965) and the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995) were easily understandable by the participants and that the Likert-type response scale was easy to use.

Academic achievement was measured by GPA. GPA was considered to be appropriate because over half of Native American students in the state of Washington are not passing core subjects (Tribal Leader Congress, 2006), and GPA represents classroom performance. Further, GPA was chosen because it has been empirically demonstrated to be a valid and relatively stable measure of academic achievement over time (Bacon & Bean, 2006). Unlike standardized tests, which do not take into account individual differences in needs, language, or culture, letter grades and GPA are easily interpretable and familiar to the student, parent, and general population (Culbertson & Jalongo, 1999). Further, GPA is predictive of four-year college outcomes for all academic disciplines (Geisler & Santelices, 2007). For these reasons, GPA was assumed to be a reliable and valid measure of academic success. However, GPA is limited. For example, GPA can be criticized regarding the unknown relative rigor or ease across teachers, coursework, schools, and school years. For these reasons, the choice of GPA as the measure of academic outcome limited the present study.

The present study used a self-reported survey methodology to determine the general self-efficacy and general self-esteem of the participants. The self-reporting

methodology assumes that participants are honest. While these constructs were measured with previously validated and reliable measuring instruments, the self-reporting methodology limited the findings because there were no behavioral measures included or measures from others (parents, teachers, peers) to cross-validate the answers given by participants. Some participants may have been reluctant to share personal information, even though confidentiality was assured, but there is no reason to believe that reluctance would have systematically increased or decreased scores.

The participants in this study were not randomly selected. Instead, all eligible participants of this specialized population were invited to participate, and 61 of 66 eligible Pacific Northwestern tribe students (ages 12 to 18) agreed to participate and had his/her data included in the analysis. Because the statistical sample was non-random, generalization of the findings should be made with caution. First, we do not know what the scores of the non-participants would be. Second, the Pacific Northwestern tribe is similar but not identical to other Native American tribes. While coastal Washington Native American tribes share commonalities, and may be similar in regards to the substantive constructs in the present study, it may be unwise to generalize beyond this region to all 700 Native American tribes, which vary greatly in culture, expressions of individuality, and academic achievement.

Further, while including 61 of 66 potential participants represents a large portion of Pacific Northwestern students, data were collected for only one school year, so the stability of the present findings over time is unknown. However, while limited, these data were appropriate to meet the goals of the present study, which was designed to acquire and analyze empirical data to assess the relationship between academic success and the