

THE RELATIONSHIP OF CULTURAL AND
CLASS VARIABLES TO ATTRIBUTIONAL
STYLE AND ACADEMIC PERFORMANCE
AMONG COLLEGE STUDENTS

By

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NOMENCLATURE

AASQ	academic attributional style questionnaire
BDI	beck depression inventory
CoNeg	composite negative attributional style
GPA	grade point average
MIQ	minority identification questionnaire
PDS	perceived deprivation scale
SES	socioeconomic status

The Relationship of Cultural and Class Variables to
Attributional Style and Academic Performance Among College
Students

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Abstract

The present study examined the relative contribution of cultural (racial status versus cultural identification) and class (socioeconomic status versus perceived deprivation) variables to attributional style and academic achievement in minority and non-minority college students. In general, results indicated that minority and non-minority students utilize different types of motivating strategies in attaining academic success.

Perceived deprivation was associated with a pessimistic attributional style and cultural identification was associated with academic performance only among minority students. Contrary to prediction, the relationships between class and cultural variables and academic performance was not mediated by attributional style. Results also suggest that objective estimates of socioeconomic status and perceived deprivation measure distinctly different constructs, as do racial status and cultural identification. Perceived deprivation and cultural identification appear to be more meaningful variables for assessing cultural and class influences on attributional style and academic achievement in minority individuals.

The Relationship of Cultural and Class Variables to
Attributional Style and Academic Performance Among College
Students

Historically, racial minority groups in the United States have been over-represented in lower income brackets and have constituted a large percentage of families living below the poverty line. In addition, minority individuals demonstrate lower levels of academic achievement and are under-represented in higher education circles (Locke, 1992). Review of the 1994 U.S. census data reveals that the economic and educational status of minorities has changed minimally over the years. With regard to economic status, in 1980 the median income of households was \$18,350 for African-Americans, \$23,271 for Hispanics, and \$31,851 for Whites. Despite corrections for inflation income changed minimally in 1992. In 1992 the median income of households was \$18,660 for African-Americans, \$22,848 for Hispanics, and \$32,368 for Whites. In addition, the percentage of families below the poverty level in 1992 was 30.9% for African-Americans, 26.2% for Hispanics and 8.9% for Whites (U.S. Bureau of the Census, 1994). Economic census data for Native-Americans was not provided in the 1990 or 1994 census data.

Further, the 1994 census data for educational attainment indicates that in 1980 51.2% of

African-Americans, 44.0% of Hispanics, and 68.8% of Whites completed high school. In 1990 66.2% of African-American, 50.8% of Hispanics, and 79.1% of Whites completed high school. In addition, in 1990 11.3% of African-Americans, 9.2% of Hispanics, and 22.0% of Whites completed four years of college or more (U.S. Bureau of the Census, 1994).

Given today's competitive society, it is unlikely that an individual with a limited education will be able to compete for higher income jobs or that he or she will be qualified to compete even for low, entry-level positions. In other words, not obtaining an education may further limit opportunities for success, and the cycle of poverty and lack of education becomes self-perpetuating. Consequently, because the number of minority individuals attaining higher education is substantially lower than non-minorities, it is reasonable to expect that unless patterns of education change dramatically, the number of minorities living below the poverty level will remain unchanged.

Theorists from a variety of disciplines have tried to identify the factors that influence lower academic achievement and lower academic motivation in members of culturally diverse populations. However, several conceptual and methodological shortcomings exist in the extant literature. One main criticism of the literature is

that researchers have used traditional measures [i.e., the Scholastic Aptitude Test (SAT)] to predict academic success (e.g., Lay & Wakstein, 1985; Peterson & Barrett, 1987). However, because these standardized cognitive ability tests assess aptitude that is deemed important primarily according to Anglo standards, they tend to yield scores that may not accurately represent the abilities of racial and ethnic groups in our society. Some researchers even suggest that psychologists and psychometricians who specialize in the construction and validation of cognitive ability tests "seemingly have no clear understanding of what scores on such devices really mean about the intelligence or intellectual abilities of different racial and ethnic groups" (Helms, 1992, p. 1083).

Further, researchers have only recently begun to look at cultural (e.g., cultural identification) and class (e.g., socioeconomic impoverishment) variables separately in relation to academic achievement. Thus, many of the previous studies investigating cultural variables have failed to distinguish between membership in a particular minority race versus personal identification with a particular culture (e.g., Sue & Okazaki, 1990). Race is defined simply as "a group of persons related by common descent, blood, or heredity" (Stein, 1988, p. 1087). On the other hand, culture is defined as "all those things

that people have learned to do, believe, value, and enjoy in their history. It is the totality of ideals, beliefs, skills, tools, customs, and institutions into which each member of society is raised" (Sue & Sue, 1990, p. 35). The lack of distinction between these terms when used as research variables leads not only to stereotyped expectations, but also to an imprecise conceptual picture of minority individuals and the role that racial status plays in academic performance. As a result, most research does little to delineate useful variables that might distinguish academically successful minority students from those students who are less successful.

Similarly, the majority of studies examining the role of class variables appear to equate objective socioeconomic status with perceived environmental and socioeconomic deprivation. Thus, most studies (e.g., Rafferty & Shinn, 1991) have only speculated about the influences of lower socioeconomic level or about environmental conditions (e.g., over-crowding) related to socioeconomic impoverishment. Studies have failed to assess directly the cognitive manifestation of socioeconomic impoverishment and the negative future expectancies that may be associated with it. The lack of investigation of perceived deprivation leads to an imprecise conceptualization of the influence exerted by class variables on academic

achievement.

Another important shortcoming of the current literature examining the role of class and cultural variables on academic achievement is that relatively few studies utilize existing psychological theories to describe the cycle of low academic achievement and poverty in minority populations. Because the learned helplessness model of motivation (Abramson, Seligman, & Teasdale, 1978) appears to capture adequately this process (cf. Nolen-Hoeksema, Girgus, & Seligman, 1986), it was chosen for the present paper to serve as a conceptual blueprint for organizing both existing findings and current research questions. For this reason, the major tenets of the attributional reformulation of learned helplessness theory are reviewed in the first part of this paper. A review and integration of the literature on cultural and class influences on academic performance and achievement motivation are then provided.

The empirical study presented in this paper was designed to examine more precisely the contribution of cultural (racial status vs. cultural identification) and class (socioeconomic impoverishment vs. perceived deprivation) variables to attributional style in minority and non-minority college students. The study also examined the relationship of these cultural and class variables to

academic performance in minority and non-minority college students.

Several specific relationships were investigated in this study. The first relationship examined involved the association between attributional style and academic performance. Secondly, the relative associations of cultural (i.e., cultural identification and racial status) and class (i.e., socioeconomic impoverishment and perceived deprivation) variables to attributional style were examined. Thirdly, the relative associations of cultural and class variables to academic performance were also examined. The final area of focus addressed whether cultural and class variables were directly related to academic performance, or whether these relationships were mediated by attributional style.

Literature Review

Reformulated Learned Helplessness

The learned helplessness phenomenon was first observed in experiments with animals (Overmier & Seligman, 1967; Seligman & Maier, 1967). Researchers found that when animals were repeatedly exposed to uncontrollable situations they eventually learned that their responses were independent of outcomes. Animals erroneously generalized this learned noncontingency to subsequent controllable tasks and exhibited significant behavioral

(i.e., lack of voluntary responses) and motivational (i.e., difficulty learning new responses) deficits (Seligman, Maier, & Solomon, 1971). Thus, the animals reacted in a "helpless" manner toward future tasks even though they actually had the capability to exert control.

In spite of the supportive data for the learned helplessness phenomenon and its deficits, this theoretical construct was inadequate for explaining helplessness in humans. The original learned helplessness model failed to explain adequately three observed phenomenon: a) why a self-esteem loss was frequently observed in humans (Hiroto & Seligman, 1975; Klein, Fencil-Morse, & Seligman, 1976; Klein & Seligman, 1976; Miller & Seligman, 1975; Seligman, 1975), b) why helplessness deficits were sometimes chronic and sometimes transient, and c) why in some cases helpless responses were general and pervasive, and in other cases, were specific to the learning task.

In response to these shortcomings, Abramson, Seligman, and Teasdale (1978) reformulated the learned helplessness theory to include an attributional conceptualization. The reformulated learned helplessness theory incorporates three attributional dimensions. The first dimension (internality vs. externality) addresses whether a person attributes an event to something about himself/herself or to other people or circumstances. The internality dimension can be used to

explain the self-esteem loss after a negative event; self-esteem deficits are also hypothesized to occur when individuals believe others possess control over positive outcomes and they do not. The second dimension (stable vs. unstable) deals with whether the causal factor is persistent across time. Thus, stability determines the chronicity of helplessness. The third dimension (global vs. specific) addresses whether the perceived cause for an event is seen as affecting a variety of outcomes. This dimension is hypothesized to determine the generality or pervasiveness of helplessness deficits (Abramson et al., 1978).

According to the reformulated model, if an individual has a characteristic pessimistic attributional style (which consists of attributing negative events to internal, stable, and global factors) he or she is likely to react in a helpless manner (i.e., displaying emotional, behavioral, and cognitive deficits). Other symptoms observed in association with these helplessness deficits may include passivity, sadness, anxiety, hostility, and low self-esteem (Peterson & Seligman, 1984). In combination, the symptoms of helplessness may appear similar to the syndrome of major depression.

Not surprisingly, the reformulated learned helplessness model claims an association between

attributional style and depression. This is not to say that a pessimistic attributional style produces depression, but rather that it is a risk factor for depressive symptomatology (Peterson & Seligman, 1984). At present, the current literature supports the learned helplessness prediction that people who interpret negative events in pessimistic terms (internal, stable, and global) are more susceptible to helplessness and depression (Brown & Siegel, 1988; Metalsky, Abramson, Seligman, Semmel, & Peterson, 1982; Peterson & Seligman, 1984; Seligman, Abramson, Semmel, & von Baeyer, 1979).

More recently, learned helplessness research has investigated the relationship between attributional style and real life circumstances. From this research, studies have demonstrated an association between different types of failure and learned helplessness (Brown, 1984; Lin & Peterson, 1990; McFarland & Ross, 1982; Nolen-Hoeksema et al., 1986; Peterson & Stunkard, 1989; Seligman, Nolen-Hoeksema, Thornton, & Thornton, 1990). More specifically, researchers have found that learned helplessness is a useful construct in describing motivation across a wide range of negative experiences, including job and school failure (Dweck & Licht, 1980; Nolen-Hoeksema et al., 1986; Peterson & Barrett, 1987; Seligman & Schulman, 1986; Weiner, 1979, 1985).

Theorists have hypothesized that failure in school or work may be the result of the development of a pessimistic attributional style. From this cognitive mediational perspective (e.g., Baron & Kenny, 1986), it could be speculated that through repeated exposure to negative life events some individuals learn that their responses and eventual outcomes are unrelated. In response to these chronic aversive events, the individual may develop the emotional, behavioral, and cognitive deficits associated with learned helplessness. Further, because these deficits have detrimental effects on future performance, they are thought to increase the likelihood of additional failure experiences. As a result, individuals eventually may begin to believe that negative events are likely to happen and that somehow it is their fault; thus, they exhibit the emergence of a pessimistic attributional style (Nolen-Hoeksema et al., 1986; Peterson & Barrett, 1987; Seligman & Schulman, 1986; Weiner, 1979, 1985).

This pessimistic style of interpreting the world now becomes the habitual manner in which the individual explains the causes of life events. Consequently, the individual with a pessimistic attributional style may begin to behave in a fatalistic manner when faced with even minor setbacks and may no longer apply himself or herself in situations where outcomes are largely under their control

(e.g., school or work). Due to a lack of effort, the person again may fail or quit, and the vicious cycle begins all over.

Peterson and Barrett (1987) conducted a longitudinal study to investigate the relationship between attributional style and academic performance in college freshman. The results of the study supported the prediction that students "who explain bad academic events with internal, stable, and global causes were at risk for poor grades" (p. 606). In other words, a pessimistic attributional style was detrimental to future academic achievement (cf. Dweck & Licht, 1980; Eccles, 1983).

Similarly, Powell (1990) utilized the reformulated learned helplessness model to explain the underrepresentation of minorities in pursuing training in mathematics and science. According to Powell (1990), African-American students stereotypically are not expected to do well in mathematics and science and, subsequently, receive poor academic preparation in these areas. As a result, they are more likely to experience repeated failure in understanding mathematical and scientific concepts early in their education. This repeated failure may lead African-American students to believe that their academic failure is pervasive, inevitable, and the result of personal flaws (i.e., a pessimistic attributional style).

Ultimately, these students may give up trying because they believe they will never be able to succeed in mathematics and science in particular, or academics in general. In an attempt to avoid additional failure or anxiety, the individual eventually may avoid either certain subjects or academic pursuits altogether.

In summary, learned helplessness theory provides a concise conceptual framework for depicting poor academic performance, particularly among racial minority populations. In addition, the literature on learned helplessness has demonstrated a relationship between attributional style and academic performance. The following chapters will further provide a conceptual framework for understanding the relationships between cultural and class variables to academic performance using the learned helplessness model.

Minority Identification

At present, research using racial status (i.e., membership in a racial minority group) as the key classification variable indicates that there are racial differences in school performance. Generally, African-American students are found to "earn lower grades, drop out more often, and attain less education than Whites" (Steinberg, Dornbusch, & Brown, 1992, p.723). Furthermore, it has been widely reported that African-American students

score on average 200 points less than Whites on verbal and mathematical sections of the SAT (Lay & Wakstein, 1985). Research also indicates that nearly half of Hispanic students drop out before completing high school. This drop out rate is twice that of African-American students and three times the rate of White students (Sue & Sue, 1990; U.S. Bureau of the Census, 1994). Additional studies indicate that 59% of Native-American students in middle school have grade point averages below 2.0, whereas the percentage for Whites is 21% (Sue & Sue, 1990). Performance of Asian-Americans, however, has been found to exceed that of White, African-American, and Hispanic students (Steinberg et al., 1992).

Although the existing literature indicates that membership in some minority groups is predictive of poorer academic performance (e.g., Lay & Wakstein, 1985; Mordkowitz & Ginburg, 1987; Steinberg et al., 1992; Sue & Okazaki, 1990), most studies do not make the conceptual distinction between racial status and cultural identification. By treating racial status and cultural identification as synonymous, much of the current literature appears to assume that all people of a particular race identify to the same degree with the cultural beliefs and practices associated with that race (Locke, 1992).

According to Oetting and Beauvais (1991), accurate assessment of cultural identification is important because minority individuals who identify to a greater extent with their traditional culture will behave differently in a variety of settings than those who more closely associate with mainstream or majority cultural values. Further, these authors suggest that cultural identification exists on orthogonal dimensions, in that "identification with any culture is essentially independent of identification with any other culture" (p. 661). In other words, identification with a particular culture does not mutually exclude simultaneous identification with other cultures. For example, a person may strongly identify with the Hispanic culture and at the same time moderately identify with the African-American culture. Thus, identification with elements from one culture does not restrict an individual from identifying with elements from another culture.

Oetting and Beauvais (1991) examined the relationship between cultural identification and the importance of a variety of activities (judged to be associated with different cultures) among a group of Native-American youth. Results of this study indicated that ratings of Anglo and Native-American cultural identification varied widely. Moreover, higher ratings for the importance of college and

job success were linked to greater identification with the Anglo culture, whereas higher ratings for the importance of traditional family relations were associated with greater identification with the Native-American culture. These findings provide support for the notion that members of a particular racial group do not uniformly identify with the cultural values of that group. Further, this study demonstrates that identification with different cultural values may be associated with different types of achievement-related values; different cultures place differential emphasis on academic achievement (Steinberg et al., 1992).

In short, it appears that cultural identification may serve as a more conceptually concise variable than racial status in identifying variables associated with academic achievement in minority groups. By assessing cultural identification, researchers would be better able to tease apart the effects that racial status and culture may have in determining academic achievement and motivation. Also, cultural identification may prove to be a useful variable in accounting for the variability in academic performance observed both between and within racial groups.

Integrating the reformulated learned helplessness theory, into the effects of cultural identification with academic performance, it is suggested that minority

individuals who identify more closely with their traditional culture may be in jeopardy for experiencing uncontrollable stress. Individuals who identify closely with their traditional minority culture are more prone to experience acculturation stress when attempting to adapt to the majority culture (Schinke, Moncher, Palleja, Zayas, & Schilling, 1988). Acculturation stress is related to the perceived need to adapt to both minority and majority cultures and to reconcile the conflicts in beliefs, values, traditions, and language. Acculturation stress and other sociocultural factors (e.g., racism) have been found to lead to chronic emotional distress in minority individuals (Miranne, 1981). The stress experienced due to acculturation and sociocultural factors may be conceived of as chronic uncontrollable stressors about which minority individuals can do little to change. In essence, individuals who identify with their traditional culture may be more likely to develop a host of emotional deficits (e.g., low self-esteem), behavioral deficits (e.g., lack of motivation), and cognitive deficits (e.g., difficulty developing alternative coping strategies). These deficits in turn may impede academic achievement (see Lay & Wakstein, 1985; Locke, 1992; Sue & Sue, 1990).

Deprivation

Historically, research investigating the effects of poverty on academic achievement have employed class variables like socioeconomic status (e.g., as established by Hollingshead, 1957) or environmental factors associated with socioeconomic impoverishment (e.g., overcrowding) as independent variables. When using socioeconomic status (SES) as an independent variable the families of study participants are placed into one of three groups: lower-class, middle-class, and upper-class. Each class is considered to be characterized by a particular type of lifestyle. For example, the lower-class family (also referred to as the socioeconomically impoverished family) is considered to be "characterized by unemployment, low wages, underemployment, little property ownership, no savings and lack of food reserves" (Sue & Sue, 1990, p. 43). Because of this characterization, basic needs of hunger and shelter are considered to be in day-to-day jeopardy. Lower-class families are also considered prone to experience lack of motivation, overcrowding, and noise pollution (Sue & Sue 1990).

Studies using the class approach demonstrate that poverty has a negative effect on academic success. Calliste (1982) investigated the educational and occupational expectations of high school students. The

authors concluded that students from a higher SES were likely to have higher academic achievement, better self-concept, and different employment aspirations than students from a lower SES.

A study by Cairns and Cairns (1989) investigated the relationship of behavioral, cognitive, and demographic factors to early school dropout. Students from higher SES brackets were less likely to drop out of school than students from lower SES brackets. They also found that the following factors predicted early school drop out by the 7th grade: a) being aggressive, b) doing poorly in school subjects, and c) being older than their peers. Also, the authors found that a combination of these three factors had the strongest relation to early school dropout. Furthermore, the authors found that early school drop outs tended to associate with other students who were also at high risk for dropping out.

Researchers that have examined environmental conditions (e.g., homelessness, high residential density, etc.) surrounding children raised in poverty support the contention that impoverished children are at increased risk for academic failure (Glass & Singer, 1972; Rafferty & Shinn, 1991; Rodin, 1976). In a study by Rodin (1976), children from the same multi-apartment, low-income housing project (where the family unit consisted of 3 to 10 people)

were tested on cognitive tasks. The results demonstrated that children from high-residential-density areas had marked deficits on cognitive tasks in comparison to children in less crowded environments. Additional research focusing on the effects that the uncontrollable noise, to which children raised in poverty are chronically exposed, has on academic performance demonstrates that uncontrollable noise has detrimental effects on complex cognitive tasks, such as mathematics (Glass & Singer, 1972). More recently, Rafferty & Shinn (1991) investigated the effects of homelessness on academic performance and found that homeless children (i.e., those living in emergency shelter facilities with their families) had greater deficits on standardized reading and mathematical tests than children who were not homeless. They also found that these children were often required to repeat a grade.

These studies focusing on socioeconomic impoverishment or environmental factors surrounding lower SES basically conclude that poverty is linked to poor academic achievement. However, they fail to investigate the extent to which socioeconomic deprivation is perceived or acknowledged by individuals who experience deprived environments. Although it is logical to expect that perceived deprivation is related to socioeconomic impoverishment, it is erroneous to consider perceived

deprivation and socioeconomic impoverishment to be synonymous. Perceived deprivation is characterized as a person's own subjective perception that his or her basic needs have not been sufficiently satisfied due to a lack of material goods, opportunities, privileges, and other resources (Mal, Jain, & Yadav, 1990). Socioeconomic impoverishment, on the other hand, is characterized by the objective classification of individuals into SES groups, which are usually based solely on educational and occupational levels (e.g., Hollingshead, 1957).

By equating perceived deprivation with socioeconomic impoverishment, the assumption is made that all persons in lower-class families perceive themselves to be deprived and that all persons in middle- to upper-class families consider themselves to be less deprived. However, it is possible that persons from lower-class families may perceive themselves to be privileged in other areas (e.g., family support, peer support, etc.) despite their meager life style. Conversely, children from middle- to upper-class families may perceive themselves to be deprived despite their families socioeconomic state.

Studies have begun to consider perceived deprivation as an important variable in studying the effects of poverty on academic achievement. Deprivation research has demonstrated that perceived deprivation has a negative

effect on academic success. Mal et al. (1990) investigated the effects of prolonged deprivation on cognitive tasks among Eastern Indian students. Children that perceived themselves as deprived exhibited greater performance deficits compared to less perceptually deprived children. Also, highly deprived children were found to display greater helplessness. Speculating that perceptually deprived children encounter more adverse conditions in their day-to-day lives, the authors stated, "these circumstances produce a sense of incompetence or inefficacy and a feeling of utter powerlessness and helplessness, which may lead to the perception of loss of control over adverse outcomes and a sense of resignation" (p. 194).

In a similar study by Mukerjee, Chatterji, and Gupta (1991), the relationships among prolonged deprivation, intelligence, and academic achievement were examined. Perceived deprivation related to food, clothing, housing, cultural activities, recreation, and religion all resulted in lowered intellectual level and scholastic achievement.

These studies suggest that the extent to which one subscribes to a particular cognitive set (deprived or non-deprived) may play a role in influencing perceptions and expectations for achievement. Although the current literature supports the finding that deprivation has a negative effect on academic success, the distinction

between socioeconomic impoverishment vs. perceived deprivation is essential to the precise conceptualization of these effects. It is important to assess whether the existence of a meager life style or the perception of deprivation is the primary factor influencing poor academic achievement and motivation.

From a learned helplessness perspective, socioeconomic impoverishment can be viewed as an uncontrollable stressor (Nolen-Hoeksema, 1992). Because children raised in poverty are at increased risk for experiencing higher levels of environmental stressors (e.g., crime and violence), home life stressors (e.g., overcrowding), and a decreased sense of control (Rodin, 1976), they may feel as though their sense of control and hope are constantly being challenged because life circumstances make it difficult for them to escape impoverishment. Further, because indigent children have limited means available to them to escape impoverishment, they may come to perceive poverty as uncontrollable (Nolen-Hoeksema, 1992). Thus, these children may feel as though most negative life events exceed their available coping strategies, and this sense of lack of control may lead them to experience a host of cognitive, emotional, and motivational deficits (Jain & Mal, 1984; Rafferty & Shin, 1991; Sue & Sue, 1990).

Rutter (1981) has cogently argued that although a person's cognitive appraisal of a stressful life event is important, a more crucial element is one's "perception of the meaning of the event and the cognitive set reflecting the anticipation of what can be done about it" (p. 350). When individuals attribute failure to internal factors, such as ability, feelings of helplessness and a pessimistic expectation for future performance can result (Abramson, Seligman & Teasdale, 1978). Impoverished children, therefore, may tend to develop pessimistic expectations for themselves and the future. This pessimistic outlook is suspected to remain with them after their initial distress subsides (Nolen-Hoeksema, 1992). Given the demonstrated effects of impoverishment, it would be expected that children raised in poverty would show declines in their self-esteem (i.e., emotional deficit: Jain & Mal, 1984), social skills (i.e., behavioral deficit: Rutter, 1981), and academic performance (i.e., cognitive deficit: Rafferty & Shinn, 1991). Moreover, children who develop negative expectations for future events as a result of personalized perceived deprivation should be more susceptible to the effects of negative events.

Summary

Minority individuals have been found to perform poorly in comparison to non-minorities in academic settings.

Although theoretical explanations have been offered for the discrepancy between races with regard to academic performance, no clear distinction between racial status and cultural identification has been made. Consequently, the lack of distinction between racial status and cultural identification in the literature makes it difficult to assess the effects of cultural variables on academic performance.

Socioeconomic impoverishment and perceived deprivation have been found to have a negative impact on academic performance. However, the current literature has failed to view these variables as separate factors, therefore ignoring the individual effects of perceived deprivation. The lack of investigation concerning perceived deprivation makes it difficult to tease apart the effects of individual class variables on academic performance.

Nevertheless, cultural and class variables, can both be conceptualized as uncontrollable stressors from a learned helplessness perspective. In addition, by integrating the reformulated learned helplessness theory with cultural and class research, it is possible to theorize how these uncontrollable stressors can lead to emotional, behavioral, and cognitive deficits. Such deficits could lead to the development of a pessimistic attributional style, which could result in poor academic

performance and low achievement motivation.

Present Study

The purpose of the present study was to examine cultural and class variables associated with academic achievement in minority college students, compared to a matched sample of non-minority students. Consequently, the analyses were performed separately for both racial groups (i.e., minority and non-minority) and the hypotheses focus primarily on anticipated findings in the minority sample. Figure 1 illustrates the four areas of focus in this study. The first area of focus assessed the relationship between attributional style and academic performance (Relationship I in figure I). Given the literature on traditional models of achievement motivation (see Abramson et al., 1978) it was hypothesized that individuals who attribute negative academic events to internal, stable, and global factors (high composite negative attributional style) would also have lower GPA's than individuals with a low composite negative attributional style. In addition, because previous literature has shown that depression is related to a pessimistic attributional style (see Peterson & Seligman, 1984) the relationship between attributional style and academic performance was also assessed, taking into account the effects of depression (Relationship Ia). It was hypothesized that the predicted relationship between

attributional style and GPA would exist even after the effects of depression were partialled out.

Insert Figure 1 about here

The second area of focus involved the relationships of cultural identification, socioeconomic impoverishment, and perceived deprivation to attributional style (Relationships numbered II in Figure 1). It was hypothesized that the more minority subjects identified with a minority culture, the greater their composite negative attributional style score would be on the AASQ. It was also hypothesized that no relationship would be found between SES and attributional style, and that the more individuals perceived themselves to be deprived the greater their composite negative attributional style score would be on the AASQ.

The third area of focus was the relationship of cultural identification, socioeconomic impoverishment, and perceived deprivation with academic performance (Relationships numbered III in Figure 1). The following hypotheses were made: a) the more minority subjects identified with a minority culture, the lower their GPA, b) no relationship would be found between SES and academic performance, and c) higher ratings of perceived deprivation

would be associated with lower GPA's.

The final area of focus involved determining whether the independent variables were directly related to academic performance, or whether these associations were mediated by attributional style. A mediator is a variable that accounts for the relation between a predictor and a criterion variable. To establish that a mediator relationship exists between two variables (predictor and mediator) and an outcome variable, four conditions must be met: 1) the predictor variable must be related to the outcome variable (Relationship III), 2) the predictor variable must be related to the potential mediator (Relationship II), 3) the mediator must be related to the outcome variable (Relationship I) after controlling for the predictor variable (Relationships II and III), and 4) the effect of the predictor variable on the outcome variable (Relationship III) must not be significant once the mediator is controlled (Relationships I and II: Baron & Kenny, 1986). Thus, it was determined whether attributional style met the criteria for mediation in the relationship between the class and cultural variables and academic performance. Based on the traditional models of achievement motivation (see Abramson et al., 1978), it was hypothesized that the relationship between the cultural and class variables and academic performance would be mediated

by attributional style.

Method

Subjects

Seventy eight (39 minority and 39 non-minority) undergraduate students were recruited from Oklahoma State University Introductory Psychology courses. Each subject received one extra credit point in their psychology course for participating in the experiment. The minority sample consisted of Hispanic (6), African-American (12), and Native-American (21) students. Asian-American students were excluded from the study due to differences found between this group and other minority students with regard to educational cognitive sets (see Steinberg et al., 1992). The minority and non-minority subjects were matched for age, gender, and current year in college. Each group consisted of 19 males and 20 females. Both groups averaged 20 years of age and consisted of 18 freshman, 13 sophomores, 6 juniors, and 2 seniors. There were no significant demographic differences between minority and non-minority subjects. Seventy-four percent of minority subjects came from intact families; eighty-seven percent of non-minority subjects came from intact families. See Table 1 for a description of demographic data.

Insert Table 1 about here

Materials

Academic Performance. Cumulative grade point averages (GPA's) obtained from students' transcripts were used as the measure of subjects' academic performance. The GPA's were averaged on a four-point scale.

Background Questionnaire. The Background Questionnaire assesses demographic information, and socioeconomic status (SES). SES was assessed with the Two Factor Index of Social Position (Hollingshead, 1957). The range of scores for SES on a continuum are from 11 (high SES) to 77 (low SES). Therefore, lower income brackets were indicated by a higher score (refer to appendix A for Background Questionnaire).

Minority Identification Questionnaire (MIQ). The MIQ (Oetting & Beauvais, 1990) is a 21-item self-report instrument that assesses cultural identification. The level of identification with any of several cultures is rated on a four-point scale; the higher the score, the more identified the subject is with a given culture. For the purpose of this study, the shorter version of this instrument was used which consisted of only six of the original questions. According to the authors, the shorter

version of the MIQ has an estimated internal consistency reliability rating in the .80s.

Perceived Deprivation Scale (PDS). The PDS is a scale that was derived from the Prolonged Deprivation Scale developed in India by Misra and Tripathi (1977). The Prolonged Deprivation Scale is a self-report instrument that assesses deprivation across 15 aspects of the environment. The scale has a split-half reliability coefficient of .91 and an internal consistency of .92. The scale was adapted by using only the identified clusters of the scale. The scale was used to assess an individual's level of perceived deprivation, during their adolescent years, in the following areas: housing, food, clothing, money, health care, transportation, family/parental support, peer support, religious support, teacher support, extra curricular activity, quality of education, and quality of neighborhood (refer to appendix B for Perceived Deprivation Scale). For the PDS scale subjects rated their level of perceived deprivation on a six-point scale; higher scores indicate a higher level of perceived deprivation. The summed score was used to assess the overall level of perceived deprivation.

Academic Attributional Style Questionnaire (AASQ).

The format of the AASQ (Peterson & Barrett, 1987) is similar to the original Attributional Style Questionnaire

(Peterson, Semmel, von Baeyer, Abramson, Metalsky, & Seligman, 1982), except that subjects are presented with 12 negative academic events instead of 12 general variety events. The AASQ is a 48-item, self-report instrument that measures the subject's attribution of the causes of negative academic events to internal (versus external), stable (versus unstable), and global (versus specific) factors (Peterson & Barrett, 1984). Subjects are asked to rate each negative event on three 7-point scales corresponding to the internality, stability, and globility dimensions. Scores were averaged for each of these three dimensions. In addition, the composite negative score which consists of the sum of all three dimensions was used to assess subjects overall attributional style. The internal consistency of the AASQ is estimated at .84 (Peterson & Barrett, 1984).

Beck Depression Inventory (BDI). The BDI (Beck, 1967) is a 21-item self-report instrument that assesses the severity of depressive symptoms. The severity of each of the 21 symptoms is rated on a three-point scale. The more severe the symptoms, the higher the score. The odd-even internal reliability coefficient of the BDI is .86. A high positive correlation with clinical ratings of depression have also been found (Steer, Beck, & Garrison, 1986). In addition, the scale has been validated on samples of

depressed college students (Bumberry, Oliver, & McClure, 1978; Hammen, 1980).

Procedures

An oral solicitation sheet was read in each Introductory to Psychology course, both in the Fall of 1993 and in the Spring of 1994, by the individual course instructors. The solicitation sheet indicated that the purpose of the experiment was to examine the effects of cultural and class variables on attributional style and academic performance. The solicitation sheet also informed the students that the study involved the completion of several paper-and-pencil questionnaires (Refer to appendix C for solicitation sheet). A sign-up sheet requesting potential subjects' name, age, gender, current grade level, ethnicity, and telephone number was circulated. Potential subjects were contacted by phone to set up an appointment for group testing. Subjects were tested within two weeks from the time of the original phone call.

Subjects were given a consent form to sign prior to beginning the study (refer to appendix D for consent form). Subjects were then administered a series of questionnaires, in the following invariant order: the Background Questionnaire, the Minority Identification Questionnaire, the Perceived Deprivation Scale, the Academic Attributional Style Questionnaire, and the Beck Depression Inventory.

Once the subject completed the package of questionnaires he/she was given a debriefing statement to read. The debriefing statement basically stated that a listing of mental health centers in the community was being handed out to subjects because some of the questionnaires tended to touch upon sensitive issues which might elicit introspection (Refer to appendix E for debriefing statement). The debriefing statement also thanked them for their participation.

Results

Two preliminary sets of analyses were performed initially on the data. First, because the data were collected on two separate occasions (Fall 1993 & Spring 1994), independent sample t-tests were performed to test for differences between Fall and Spring subjects with regard to depression, attributional style, and GPA. No significant differences were found between the two groups of subjects for depression, attributional style, or GPA. Based on these comparisons, subjects were collapsed into one general subject pool.

Next, a 2 x 2 (race X gender) multivariate analysis of variance (MANOVA) was performed to assess for gender and race effects on minority identification, Anglo identification, SES, perceived deprivation, depression, attributional style, and academic performance. A MANOVA

was performed because it reduced the overall number of gender and race comparisons performed on the data. The results revealed no significant main effect for gender, and no significant interaction effect. However, a significant main effect was found for race, $F(7,66) = 10.1, p < .001$. Univariate F-tests revealed that: a) subjects in the minority sample endorsed significantly greater minority identification, $F(1,72) = 51.96, p < .001$; b) non-minority subjects endorsed greater identification with the Anglo culture, $F(1,72) = 61.56, p < .001$; and c) minority subjects came from lower SES backgrounds than did non-minority subjects, $F(1,72) = 5.47, p < .05$. Descriptive statistics for the minority and non-minority groups are presented in Table 2.

Insert Table 2 about here

Zero-order correlations were performed separately for minority and non-minority groups to assess the direct relationship between composite negative attributional style on the AASQ and GPA. See Table 3 for correlations among study variables for both minority and non-minority subjects.

Insert Table 3 about here

Results for the minority group indicated a significant positive correlation between composite negative attributional style and GPA, $r(39) = .33$, $p < .05$, indicating that greater composite negative attributional style was associated with better academic achievement. This finding was contrary to the hypothesis.

Also for minority subjects, the direct relationship between attributional style and GPA with the effects of depression partialled out were examined using a multiple regression analysis with simultaneous entry of composite negative attributional style and BDI scores. First-order partial correlations revealed that for the minority subjects both BDI scores, $r(39) = -.33$, $p < .05$, and composite negative attributional style scores, $r(39) = .36$, $p < .05$, were associated with GPA. Thus, each exerted independent main effects on GPA.

Results for non-minority subjects revealed a significant negative correlation between composite negative attributional style and GPA, $r(39) = -.31$, $p < .05$. However, partial correlations revealed that neither BDI scores nor composite negative attributional style scores were independently associated with GPA, after controlling

for the other variable. Thus, part of the association between attributional style and GPA was due to the influence of depression. Figure 2 graphically presents the association of composite negative attributional style and GPA by racial status.

Insert Figure 2 about here

The zero-order correlations between the cultural and class variables (i.e., identification with a minority culture, identification with the Anglo culture, SES, and perceived deprivation) and the composite negative attributional style score revealed that, for minority subjects, a greater sense of perceived deprivation was associated with a greater composite negative attributional style, $r(39) = .53, p < .001$. No other variables were significantly correlated with composite negative attributional style for minority subjects. For non-minority subjects no variables were significantly correlated with composite negative attributional style. Figure 3 illustrates the association of perceived deprivation and composite negative attributional style by racial status.

Insert Figure 3 about here

Additional zero-order correlations between the independent variables and GPA revealed that for minority subjects, greater identification with a minority culture was associated with lower GPA's, $r(39) = -.29, p < .05$. No other variables were significantly correlated with GPA for minority subjects. For non-minority subjects no variables were significantly correlated with GPA. Figure 4 graphically presents the association of minority identification with GPA by racial status.

Insert Figure 4 about here

A series of analyses examined whether the observed significant associations between cultural and class variables and GPA were mediated by composite negative attributional style. For both the minority and non-minority sample, no set of variable relationships met the criteria for mediation as set by Baron and Kenny (1986). Thus, the demonstrated relationships with GPA were independent of the influence of composite negative attributional style.

The data were further analyzed to assess the relationship between minority identification and Anglo identification, and between SES and perceived deprivation. For both minority and non-minority subjects, the zero-order correlations between minority identification and Anglo identification were significant, $r(39) = -.74$, $p < .001$, and $r(39) = -.29$, $p < .05$, respectively. For minority subjects, the zero-order correlation between SES and perceived deprivation was not significant. However, for non-minority subjects, lower SES was associated with greater perceived deprivation, $r(39) = .39$, $p < .01$.

Discussion

The purpose of the present study was to investigate the relative influence of cultural (race vs. cultural identification) and class (SES vs. perceived deprivation) variables on academic performance and attributional style among minority and non-minority college students. Results indicated that several of the predicted relationships were supported, particularly among minority subjects. In addition, some surprising results were found.

The relationship between attributional style and academic performance revealed different patterns of motivation for non-minority and minority subjects. In the non-minority sample the observed association between pessimistic attributional style and poor academic

performance supported the traditional learned helplessness view of motivation. That is, a more pessimistic attributional style was associated with lower academic performance. Furthermore, a portion of the relationship between attributional style and academic performance was accounted for by the influence of depression. This last finding indicates that, for non-minority individuals, depression strongly influences motivation.

For minority subjects, the traditional model of motivation does not appear to apply to the prediction of academic achievement. Indeed, a pessimistic attributional style was associated with better academic performance. One possible explanation for this finding can be found in the construct, defensive pessimism. According to Norem and Cantor (1986), defensive pessimism is a motivational strategy used by individuals to help them cope by transforming anxiety from a debilitating force to a motivating one. Defensive pessimism is a cognitive appraisal mechanism in which individuals set unrealistically low expectations (based on previous experience) prior to entering a risky situation (a situation that presents the possibility of failure and potential threat to self-esteem, such as class finals) to prepare themselves for potential failure and to motivate themselves to work harder in order to rise above adversity

and avoid failure (Norem & Cantor, 1986). In the present study, minority individuals who make pessimistic causal attributions for events also may have expectations for doing poorly in college. In turn, these expectations for poorer performance may have resulted in increased anxiety which motivated them to study harder and rise above perceived adversity to do well in their courses.

Similarly, it may be that minority individuals habituate to anxiety over time due to chronic exposure to stressors in their environment (e.g., acculturation and sociocultural stress) with which non-minority individuals do not have to contend. Along these lines, it is also reasonable to speculate that perceptions of deprivation contributed to the development of pessimistic attributional styles. Although minority individuals may not perceive higher levels of deprivation than do non-minority individuals, deprivation may be perceived differently, or at least, may operate very differently for minorities. It may be that precisely because of the perceived adversity, minority individuals realize that they must work even harder than non-minority individuals to obtain more out of life (i.e., become successful). Yet, realistically, life circumstances make it difficult for the minority individual to be successful in the Anglo world, which leads to frustration and anxiety. However, instead of giving up,

minority individuals may view the obstacles laid before them as just another challenge, rather than a threat, and are motivated to work harder to overcome these obstacles. Consequently, the hard work pays off and the individual achieves success (high academic performance). Over time, the positive outcomes achieved by this strategy serve to reinforce the pessimistic cognitive set.

In support of this alternative explanation, results revealed that perceived deprivation was associated with a pessimistic attributional style for minority subjects. As hypothesized, higher levels of perceived deprivation were related to a greater likelihood for developing a pessimistic attributional style. This finding also supports the contention that the extent to which one experiences his/her upbringing as being deprived influences perceptions and expectations for future achievement.

Results also demonstrated that, for minority subjects, SES and perceived deprivation were not related. These findings suggest that SES and perceived deprivation assess two distinct class factors for minority subjects and should not be treated as synonymous in future investigations.

Contrary to the findings in the minority group, a relationship was found between SES and perceived deprivation among the non-minority subjects. This indicates that SES and perceived deprivation assess similar

class factors among non-minorities. A possible explanation for this discrepant finding is that because minorities make up a large portion of impoverished individuals they may expect deprivation to be a part of the minority life-style. However, the same does not hold for non-minorities. Non-minorities are more likely to be aware of both the greater socioeconomic variability that exists among individuals and the differences between themselves and others in the majority culture. Consequently, they are likely to realize that impoverishment is not the common life-style of people from the majority culture. Therefore, monetary deprivation, as well as other forms of deprivation, in their surroundings are all similarly evaluated in a negative light.

Another important finding in the study was the relationship observed between identification with a minority culture and academic performance. Results reveal that for the minority sample, more identification with a minority culture was associated with lower academic performance. One implication of this finding is that differences exist with regard to cultural values placed on academic success. According to Steinberg et al. (1992) minorities are less likely than non-minorities to receive family and peer support for academic achievement. Yet the research also demonstrates that youngsters who are

supported by both friends and parents perform better than those who receive support only from one source or no source at all. In addition, previous researchers have found that an important factor associated with academic performance was the belief that school failure would have negative consequences for obtaining a good job (Steinberg et al., 1992). Conversely, it has been found that Hispanic and African-American students do not recognize the negative consequences of school failure and have unwarranted optimism regarding obtaining a good job (Steinberg et al., 1992).

An alternative implication of this finding is that factors other than cultural identification, such as acculturational stress or lack of cultural understanding in the school system, could be influencing the academic performance of minority students who strongly identify with their culture. Research has shown that one of the strongest agents of conformity in society is the school system (Ramirez, 1991). The school system represents a culture of its own and can unwittingly force conformity through their assimilationist philosophies and orientation. The message that minority children often hear is "if you want to succeed you must be like us" (Ramirez, 1991). The present findings suggest that this message may also involve the abandonment of more traditional beliefs in the service

of academic success.

Additional results of the present study demonstrate that unlike cultural identification, racial status and class variables were not good predictors of academic performance for minority or non-minority subjects. This finding suggests that racial status and cultural identification assess two separate aspects of cultural influences associated with academic performance. Thus, racial status may not be a good predictor of GPA. More importantly, this finding supports the contention that cultural identification may be a more valid cultural variable than racial status in predicting academic performance in minority groups. Although, cultural identification accounted for only 9% of the variance in GPA, it appears to be a more useful variable in accounting for the variability in academic performance observed both between and within racial groups. In addition, cultural identification appears to be a more robust predictor of academic performance than SES and perceived deprivation.

In view of the findings of this study several suggestions are made for future research. It is recommended that future research investigate defensive pessimism as a motivational explanation for academic achievement in racial minority groups. In addition, future research should compare traditional models of motivation

with defensive pessimism among students who have successful academic histories (are likely to get into college) and those who have poor academic histories (are not likely to get into college).

It is further recommended that future research should make a clearer distinction between SES and perceived deprivation when assessing the general effects of class variables. This distinction has not been made in previous research. Indeed, only in the past ten years have the effects of perceived deprivation been investigated. Because SES and perceived deprivation appear to assess two different aspects of class influence, this lack of distinction in previous research makes it difficult to tease apart the influence exerted by these two class variables. When assessing for class effects on academic performance, perceived deprivation should be examined along with SES.

A final recommendation is that future research should clearly distinguish between racial status and cultural identification when assessing for cultural influences on achievement, because they are not functionally equivalent. Previous research has used racial status as a predictor of academic performance and has largely ignored the effects of cultural identification. The present study suggests that future research should focus on the relationship of

cultural identification to academic performance and on racial status as a possible moderator in this relationship.

As with all studies there were several methodological limitations to the present study which need to be considered. First, a select sample of subjects was used. Because the subject pool consisted of only college students, no parallel comparisons could be performed on minority and non-minority individuals with poor academic histories (i.e., non-college populations). This limits the generalizability of the argument for defensive pessimism as a motivating force in minority individuals. Comparison studies of this nature need to be carried out to determine the validity of defensive pessimism in predicting success and failure in both minority and non-minority groups.

Second, because the data are cross-sectional, and retrospective in some cases (i.e., perceived deprivation), no definitive statements regarding the causal nature of these variables can be made. Longitudinal studies will be necessary to determine whether perceived deprivation precedes the development of a pessimistic attributional style or vice versa. Likewise, studies focusing on younger groups of subjects, utilizing longitudinal methods to examine the development of achievement motivation may reveal that, whereas, defensive pessimism explains motivation in groups of minority students who persevere in

the face of adversity, learned helplessness characterizes those students who succumb to it.

A final shortcoming was that the number of individuals representing specific ethnic minority groups (i.e., African-Americans, Hispanics, and Native-Americans) was too small to allow for comparisons on key variables between subgroups of minority students. Because academic achievement differences have been found both between and within minority groups (see Locke, 1992; Steinberg et al., 1992; Sue & Sue, 1990), future studies should assess differences across such groups. The role of cultural identification as a defining variable should also be assessed in these studies. In addition, Asian students should be included as a separate minority group to be compared with other minorities and non-minorities. As noted earlier the cognitive set of Asian-American students with regard to the effects of academic success/or failure on future job attainment is different from that of other minorities. Also Asian-Americans tend to surpass Whites and other non-minorities in academic performance. Therefore, as a comparison group Asian-American subjects could help reveal additional information with regard to cultural effects on academic performance.

Summary

The purpose of this study was to examine the relative contribution of cultural and class variables to attributional style and academic achievement in minority and non-minority college students. In addition, the study sought to assess whether the relationship of cultural and class variables to academic achievement was mediated by attributional style.

In general, the results indicated that minority and non-minority students utilize different types of motivating strategies in attaining academic success. The results further demonstrated that perceived deprivation was associated with a pessimistic attributional style only among minority subjects. Further, the relationships between cultural and class variables and academic performance was not mediated by attributional style.

Results of the present study further suggest that objective estimates of socioeconomic status and perceived deprivation measure distinctly different constructs, as do racial status and cultural identification. It is concluded that perceived deprivation and cultural identification are more meaningful variables for assessing cultural and class influences on attributional style and academic achievement in minority individuals.

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Table 1

Frequency Ratings of Demographic Data

Variables	Minority	Non-Minority
Born in the USA		
Yes	39	38
No	0	1
Raised in the USA		
Yes	38	39
No	1	0
Marital status of parents		
Single	1	2
Married	29	34
Divorced	6	2
Cohabiting	1	0
Widowed	0	0
Remarried with stepmother	0	0
Remarried with stepfather	2	1

Note. For all measures $n = 39$.

Table 2

Multivariate Analysis of Variance of Race on Main Variables

Variables	Minority		Non-Minority	
	Mean	STD.	Mean	STD.
Minority Identification **	64.13	10.93	48.03	7.91
Anglo Identification **	27.33	8.30	38.49	1.85
SES *	31.39	15.26	24.67	12.39
Deprivation	21.90	10.58	19.74	9.17
Depression	7.51	7.36	6.90	6.40
Composite Negative	13.03	2.01	12.56	1.66
GPA	2.82	.60	2.81	.59

Note. For all minority scores n=39. For all non-minority scores except identification with a minority culture and identification with the Anglo culture n=39. For identification with a minority culture and identification with the Anglo culture in the non-minority sample n=37.

* p< .05; ** p< .001

Table 3

Correlation Matrix of Main Variables

	Minority					
Scale	1	2	3	4	5	6
1. Min. Iden.						
2. Anglo Iden.	-.74+					
3. SES	.19	-.24				
4. Deprivation	.07	-.16	.16			
5. CoNeg	-.10	-.05	-.05	.53+		
6. GPA	-.29*	.16	.001	.18	.33*	

	Non-Minority					
Scale	1	2	3	4	5	6
1. Min. Iden.						
2. Anglo Iden.	-.29*					
3. SES	.02	.07				
4. Deprivation	.09	-.08	.39**			
5. CoNeg	-.09	-.04	.01	.12		
6. GPA	.08	.13	-.20	-.09	-.31*	

* p< .05; ** p< .01; + p< .001.

Figure Caption

Figure 1. Association of Independent and Dependent Variables.

Figure 2. Association of Composite Negative Attributional Style and GPA by Racial Status.

Figure 3. Association of Perceived Deprivation and Composite Negative Attributional Style by Racial Status.

Figure 4. Association of Minority Identification and GPA by Racial Status.

Figure 1. Association of Independent and Dependent Variables

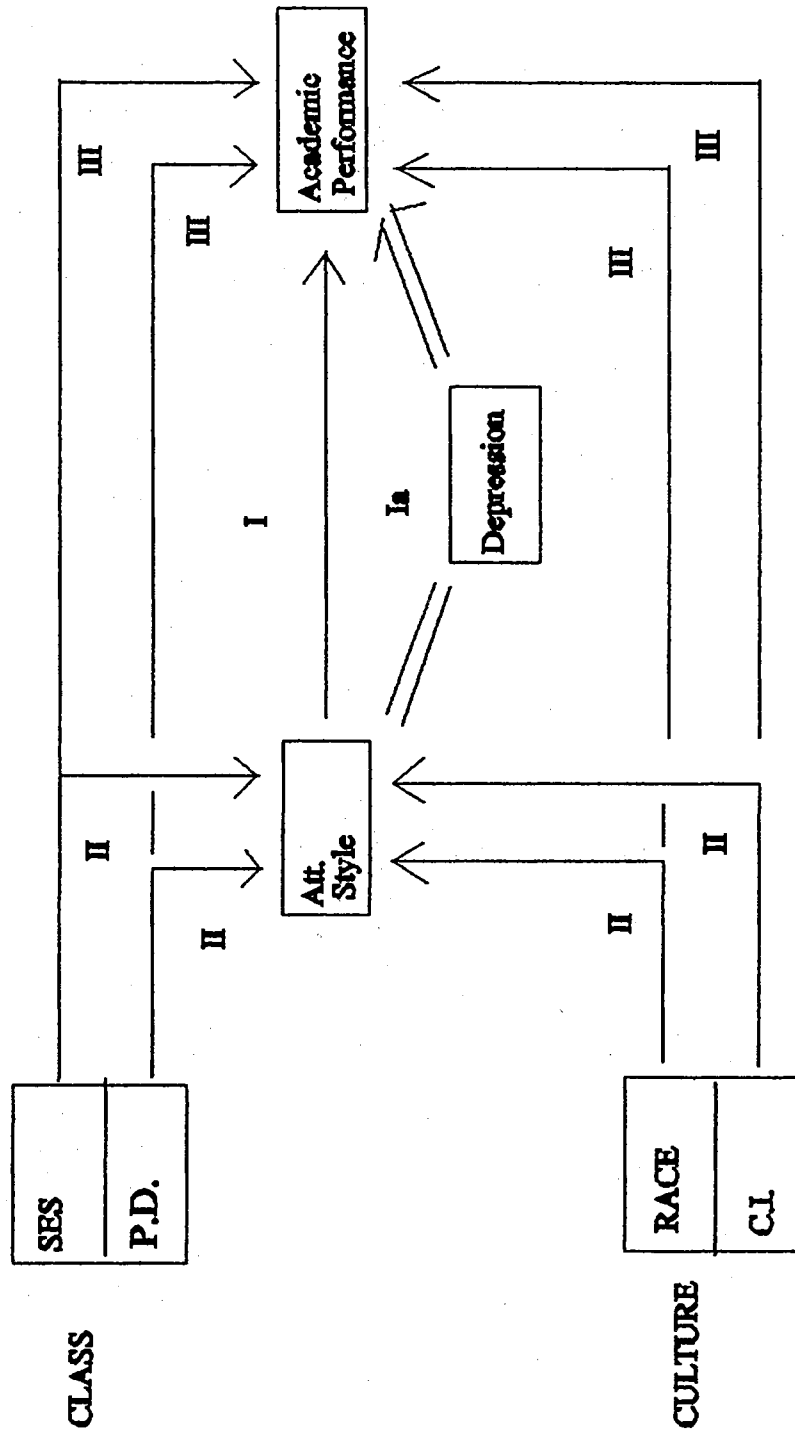


Figure 2. Association of Composite Negative Attributional Style and GPA by Racial Status

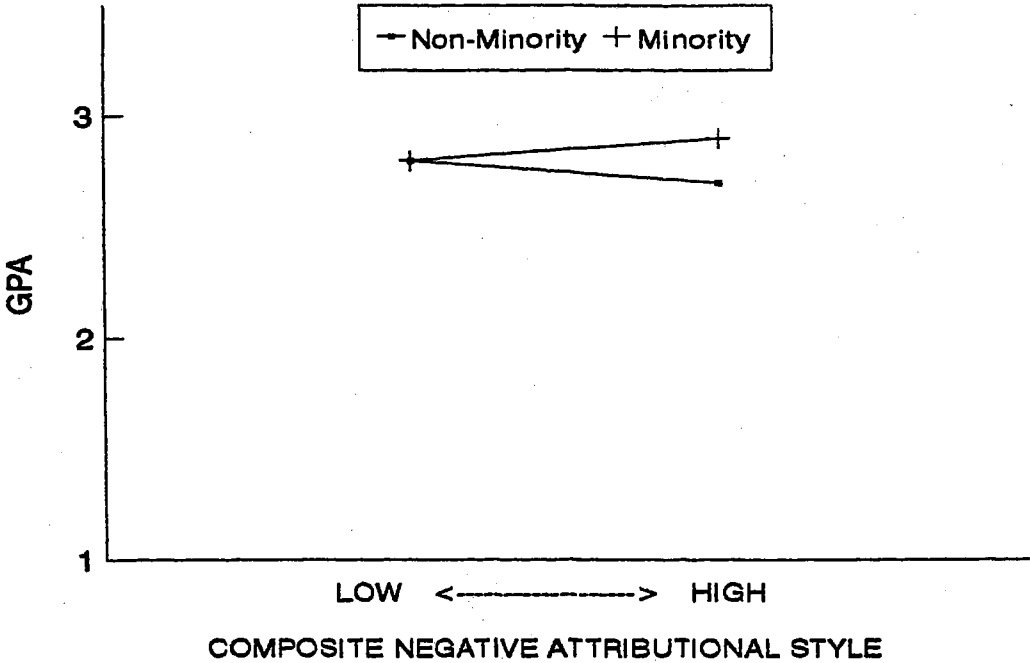


Figure 3. Association of Perceived Deprivation and Composite Negative Attributional Style by Racial Status

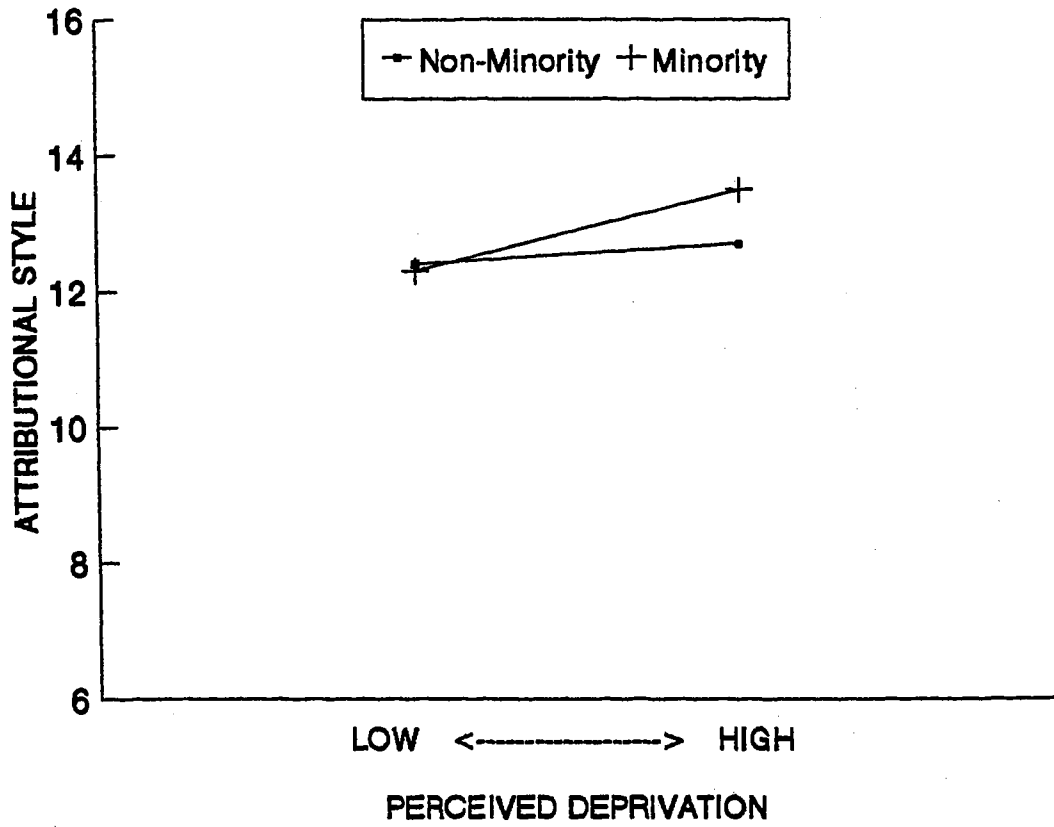
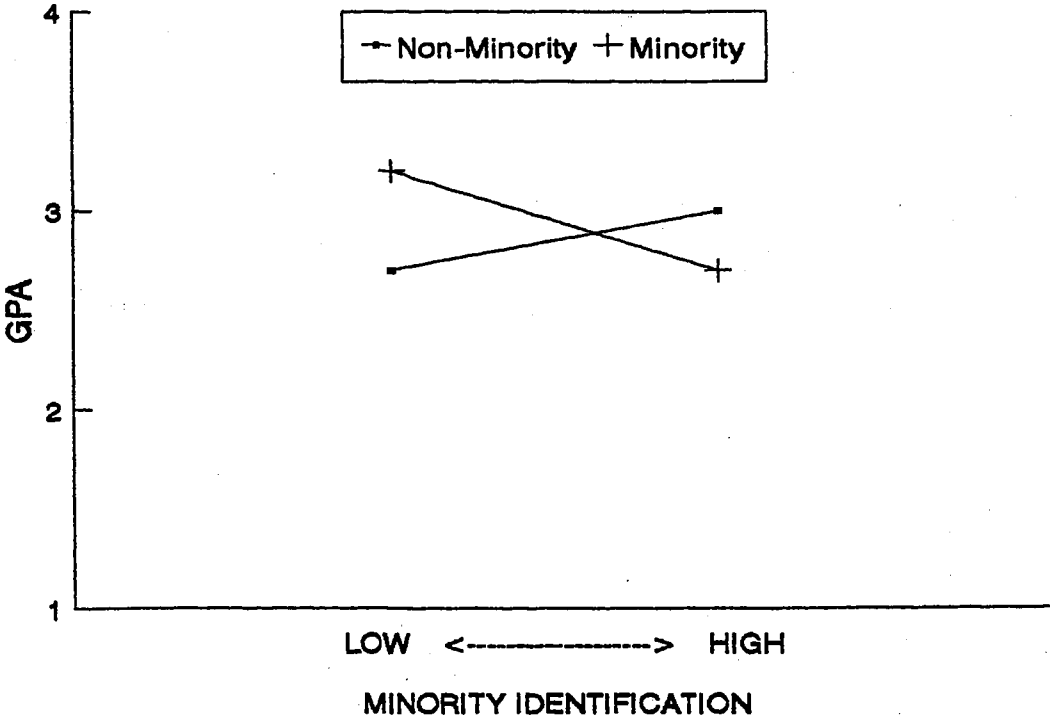


Figure 4. Association of Minority Identification and GPA by Racial Status



APPENDIXES

APPENDIX A
BACKGROUND QUESTIONNAIRE

BACKGROUND INFORMATION

- 1) Social Security# _____ 2) Name _____
 3) Age _____ 4) Telephone # _____
 4) Date of birth _____

PLEASE FILL IN THE BLANK OR CIRCLE THE APPROPRIATE ANSWERS.

- 5) Sex M F
 1 2
- 6) Race: Hispanic White Black Native American
 1 2 3 4
 Asian Other(please specify) _____
 5 6
- 7) Were you born in the USA? Yes No
 1 2
- 8) Were you raised primarily in the USA? Yes No
 1 2
- 9) Grade: Freshman Sophomore Junior Senior Graduate
 1 2 3 4 5
- 10) In your opinion how difficult are your college studies? (Please circle one)
- 1 Extremely difficult 2 Very difficult
 3 Average 4 Fairly easy
 5 Extremely easy

PLEASE ANSWER THE FOLLOWING QUESTION AS THEY PERTAIN TO YOUR CHILDHOOD YEARS.

- 11) What was the marital status of the parents you lived with for the majority of that time? _____
- 1)Single 2)Married
 3)Divorced 4)Cohabiting
 5)Widowed 6)Remarried with stepmother
 7)Remarried with a stepfather

- 12) Please give the approximate number of people who were living in your home during that time including yourself.

Children _____ Adults _____

Do Not write in this area

6

7

8

9,

10

11

12

13,14,15

13) What was the occupation of the parent(s) you lived with at that time? (Be specific)

Mother/Stepmother_____ Father/Stepfather_____

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14) What was the highest education of the parents you lived with at that time?

Mother/Stepmother_____

Father/Stepfather_____

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- 1) Graduate Professional Training
- 2) Standard College Graduation
- 3) Partial College/ vocational Training
- 4) High School Graduates
- 5) Partial High School
- 6) Junior High School
- 7) Less than 7 years of school.

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APPENDIX B

PERCEIVED DEPRIVATION SCALE

PDS

Some people believe that their upbringing was deprived in some way. We are interested in your perception of the type of environment that you grew up in. The scale below ranges from "NEEDS WERE MET COMPLETELY" to "NEEDS WERE NOT MET AT ALL". Please circle the number that indicates the extent to which your needs were met in the following areas.

	NEEDS WERE MET COMPLETELY					1	2	3	4	5	6	NEEDS WERE NOT MET AT ALL
Housing	1	2	3	4	5	6	1					
Food	1	2	3	4	5	6	2					
Clothing	1	2	3	4	5	6	3					
Money	1	2	3	4	5	6	4					
Health care	1	2	3	4	5	6	5					
Transportation	1	2	3	4	5	6	6					
Family/Parental emotional support	1	2	3	4	5	6	7					
Peer support	1	2	3	4	5	6	8					
Religious support	1	2	3	4	5	6	9					
Teacher support	1	2	3	4	5	6	10					
Extra curricular activity/ Leisure	1	2	3	4	5	6	11					
Quality of education	1	2	3	4	5	6	12					
Quality of neighborhood	1	2	3	4	5	6	13					

APPENDIX C
SOLICITATION SHEET

ORAL SOLICITATION

Margarita Hernandez, who is presently working on her dissertation under the supervision of Dr. John M. Chaney would like to recruit people who are interested in participating in a study for extra credit. The purpose of the study is to examine the effects of cultural and class variables on causal explanations that people make in response to life events, and academic performance.

As a participant you will be asked to fill out a series of questionnaires. It will take approximately 20 minutes to complete the package. Each participant will receive one extra credit point. If you are interested, please fill out the information on the sign up sheet. In a few days you will be contacted by phone to set up an appointment, for testing, that is convenient for you.

If you have any questions, Dr. Chaney or Ms. Hernandez would be glad to talk more about the project with you. You may leave a message in Dr. Chaney's mail box in 215 North Murray.

Thank you,

Margarita Hernandez, M.S.
Researcher

John M. Chaney, Ph.D.
Chair

APPENDIX D
CONSENT FORM

Consent Form

I, _____ (print your name), voluntarily consent to participate in the investigation of attributional styles. I thereby authorize Margarita Hernandez and Dr. John M. Chaney or assistants of their choosing, to perform the following treatments or procedures:

A. Purpose: We are interested in evaluating the effects of perceived deprivation, cultural identification and attributional style on academic performance.

B. Procedure: You will be asked to complete several paper-and-pencil questionnaires that address your perception of life events.

To further help us determine the factors that influence academic achievement it will be helpful to have access to your transcript. I understand that by signing this consent form, I am giving the researchers permission to obtain information from my transcript at Oklahoma State University.

C. Confidentiality: All data will be coded by numbers, not names. The data will be stored in a filing cabinet in a locked laboratory office. Only those individuals working on the project will have access to these files. Consent forms will be stored with the questionnaires and other data. Only the results from this data may be presented at professional meetings or in publications. You will remain anonymous.

D. Risks: There are no risks involved.

E. Benefits: You will receive one (1) research credit for your participation. The information derived from this project may have important implications for others. The information gained may contribute to a better understanding of the factors that influence academic performance. Eventually, this research may lead to programs designed to help students who may be experiencing difficulties in these settings.

I have been fully informed about the procedures listed here. I am aware of what I will be asked to do and of the benefits of this study. I also understand the following statements:

1. I am 18 years of age.
2. I understand that my participation is voluntary, that there is no penalty for refusal to participate. I understand that I am free to withdraw my consent and participation in this project at any time without penalty.

3. I may contact Dr. John Chaney, Psychology Department, 215 North Murray Hall, Oklahoma State University, at (405)744-5703 should I wish further information about the research. I may also contact Beth McTernen, University Research Services, 001 Life Sciences East, Oklahoma State University, Stillwater, OK 74078, (405) 744-9992. Should any problems arise during the course of the study, I may take them to Dr. David Thomas, Psychology Department Head, 215 North Murray Hall, Oklahoma State University, at (405) 744-6027.

Signature

Date

APPENDIX E
DEBRIEFING STATEMENT

DEBRIEFING STATEMENT

The present experiment is conducted to examine the relationship between race, cultural identification, socioeconomic status, and perceived deprivation on attributional style- the way people explain events, and academic performance. The questionnaires handed out to you touched upon some sensitive issues, such as depression, therefore, they elicit introspection. Consequently, we are handing out this list of mental health centers in the area to everyone in case they are interested. Do you have any questions concerning the experiment?

THANK YOU FOR YOUR PARTICIPATION

2

VITA

Margarita Hernandez

Candidate for the Degree of

Doctor of Philosophy

Dissertation: THE RELATIONSHIP OF CULTURAL AND CLASS
VARIABLES TO ATTRIBUTIONAL STYLE AND
ACADEMIC PERFORMANCE AMONG COLLEGE STUDENTS

Major Field: Clinical Psychology

Biographical:

Personal Data: Born in Brooklyn, New York, April 25,
1966, the daughter of Victor Manuel and Juanita
Hernandez.

Education: Graduated from John Jay High School in
Brooklyn, New York in May of 1984; received
Bachelor of Arts in Psychology from the State
University of New York College at Purchase,
Purchase, New York in May of 1988; received
Masters of Science degree in Psychology from
Oklahoma State University, Stillwater, Oklahoma
in July of 1990; completed requirements for the
Doctor of philosophy degree at Oklahoma State
University in December, 1995.

Special Abilities: Bicultural, bilingual- fluent in
Spanish and English.

Professional Experience: Clinical Psychology Intern,
Connecticut Valley Hospital, Middletown,
Connecticut (APA approved), September 1994 to
August 1995; Psychological Associate, Marriage
and Family Clinic, Oklahoma State University,
Stillwater, Oklahoma, August 1993 to May 1994;
Staff Psychotherapist, Edwin Faire CMHC,
Stillwater, Oklahoma, July 1992 to August 1993;
Psychological Associate, Psychological Services
Center, Oklahoma State University, Stillwater,
Oklahoma, August 1990 to August, 1992, and August
1993 to January 1994; Graduate Instructor in the

Department of Psychology, Oklahoma State University, Stillwater, Oklahoma, August 1991 to May 1992, and January 1994 to May 1994; Teachers Aid in the Department of Psychology, Oklahoma State University, Stillwater, Oklahoma, August 1989 to June 1990; Graduate Research Assistant in Department of Psychology, Oklahoma State University, Stillwater, Oklahoma, August 1989 to June 1990, and September 1990 to August 1991.

Student Memberships: American Psychological Association,

Awards and Scholarships: National Hispanic Scholarship Fund (5 consecutive years 1990-94); Outstanding Contribution to the Psychology Diversified Students Program for the 1993-1994 Academic Year; Outstanding Contributions on Behalf of Hispanic American Graduate Students in Psychology (1991 & 1992 academic year); Graduate Student Council Travel Award (1991 & 1992).

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
FOR HUMAN SUBJECTS RESEARCH

Date: 11-24-93

IRB#: AS-94-008

Proposal Title: THE EFFECTS OF PERCEIVED DEPRIVATION, CULTURAL IDENTIFICATION AND ATTRIBUTIONAL STYLE ON ACADEMIC PERFORMANCE AMONG COLLEGE STUDENTS

Principal Investigator(s): John M. Chaney, Margarita Hernandez

Reviewed and Processed as: Expedited

Approval Status Recommended by Reviewer(s): Approved

APPROVAL STATUS SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT NEXT MEETING.

APPROVAL STATUS PERIOD VALID FOR ONE CALENDAR YEAR AFTER WHICH A CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR BOARD APPROVAL. ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.

Comments, Modifications/Conditions for Approval or Reasons for Deferral or Disapproval are as follows:

Provisions received and approved

Signature:


Chair of Institutional Review Board

Date: November 24, 1993