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ABSTRACT

Goal theory of achievement motivation provided the framework for an investigation of the relationship among young adolescents' motivational orientation, perceptions of the educational environment, and psychological well-being. One hundred sixty-eight sixth graders' reports of personal achievement goals and perceptions of the school as stressing task goals and ability goals were related to measures of general and academic well-being. Students' reports of holding task goals and perceiving the school as stressing task goals were related to positive psychological well-being, while reports of holding ability goals and perceiving the school as stressing ability goals were related to negative psychological well-being. These patterns were found among African American students as well as Euro-American students. However, path analyses pointed to possible different processes operating for the African American and the Euro-American students in the sample. Cluster analysis, based on the assumption that students hold and perceive the environment as stressing multiple goals, suggested that the most adaptive profiles were holding high task and low ability personal goals, and perceiving high task goals and low ability goals in the school. Tables at the end of the document provide adolescent survey results. (Contains 34 references.) (Author)

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Patterns of Achievement Goals and Psychological Well-Being in Young Adolescents

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Abstract:

Goal theory of achievement motivation provided the framework for an investigation of the relationship among young adolescents' motivational orientation, perceptions of the educational environment, and psychological well-being. One hundred sixty eight sixth graders' reports of personal achievement goals and perceptions of the school as stressing task goals and ability goals were related to measures of general and academic well-being. Students' reports of holding task goals and perceiving the school as stressing task goals, were related to positive psychological well-being, while reports of holding ability goals and perceiving the school as stressing ability goals were related to negative psychological well-being. These patterns were found among African American students as well as Euro-American students. However, path analyses pointed to possible different processes operating for the African American and the Euro-American students in the sample. Cluster analysis, based on the assumption that students hold and perceive the environment as stressing multiple goals, suggested that the most adaptive profiles were holding high task and low ability personal goals, and perceiving high task goals and low ability goals in the school.

An important premise underlying motivation research is that human behavior is goal directed. Over the past decade, studies investigating achievement motivation have shown increasing interest in achievement goals as a central concept in processes determining behavior and achievement (Ames, 1992). Achievement goals have been related to an array of outcomes including effort and performance (Meece & Holt, 1993), cognitive learning strategies and self-regulation (Pintrich & Garcia, 1991), and information-seeking behavior (Butler, 1993). A goal theory approach to achievement motivation was described by Weiner (1990) as "a major new direction, one pulling together different aspects of achievement research." (p. 620).

The present study is aimed at examining the relationship between students' achievement goals and psychological well-being. While several studies have started examining the relationship between achievement goals and school-related affect (Urduan & Roeser, 1993; Roeser, Urduan & Midgley, 1994), a more global approach that looks at indicators of general well-being has not yet been taken. This approach follows Weiner's (1990) assertion that "motivation influences a vast array of other variables [in addition to learning], including affective experience, self-esteem, and so forth", and his call for broadening the "nets to capture the richness of motivational impact." (p. 621).

A second purpose of the study is to examine goal theory processes among a sample of African-American students. A recent review of research on motivation among African Americans has pointed to the scarcity of such research, and to the need for studies that are based on a general psychological theory (Graham, 1994). This is one of the first studies to examine achievement goals among African American students.

Achievement Goals

"An achievement goal concerns the purposes of achievement behavior. It defines an integrated pattern of beliefs, attributions, and affect that produces the intentions of behavior and that is represented by different ways of approaching, engaging in, and responding to achievement-type activities." (Ames, 1992, p. 261). While there are many goals that guide individuals' behavior in achievement situations, research concerning academic behavior has concentrated mainly on two types of achievement goals: "ability goals" and "task goals" (Anderman & Maehr, 1994)¹. These two sets of goals differ mainly in their conception of success in achievement situations. They represent different reasons for engaging in achievement

¹ Other theorists have used different names for these goals. "Task focused goals" are sometimes referred to as "mastery goals" or "learning goals" and "ability focused goals" are sometimes referred to as "ego goals" or "performance goals" (Ames, 1992; Dweck, 1989; Meece & Holt, 1993).

activity, and different ways of thinking about the task, its outcomes, and the self as related to the task (Ames, 1992).

Task goals relate to the growth of individual potential, to personal improvement, progress, and mastery. Individuals with task goals strive to increase their competence, to understand or master something new. Success in task goals is defined in relation to the task. In a learning situation this takes the form of learning for the sake of learning and mastering new knowledge and skills (Dweck, 1989; Maehr, De Groot, Midgley, & Pintrich, 1992).

Ability goals relate to social comparison, and to demonstrating one's ability to out-do or out-perform others. Having ability goals, individuals strive either to document or gain favorable judgments of their competence, or to avoid negative judgments of their competence. Success in ability goals is defined in relation to others. In a learning situation this takes the form of demonstrating that one is "smarter", or not less smart, than others. Since success is defined in terms of comparison and competition, the risk for self-evaluation is high. Many individuals do not manage to "win" or to be recognized, and their sense of self-competence is impaired. Even "winners" may engage in strategies such as choosing easy tasks and avoiding taking risks that may threaten their position, which are counterproductive to long term growth and wellness (Covington, 1992). Thus, the goals one holds are related to the development of critical views of self, which shape and affect coping strategies, resilience, and related factors that are associated with mental health and wellness (Maehr et al., 1992; Marshall & Weinstein, 1984; Renouf & Harter, 1990).

Many studies have established the beneficial effects of pursuing task goals in an achievement situation. People holding task goals were found to engage in learning activities longer (Butler, 1987), to display more adaptive help and information seeking behavior (Butler, 1993), to use deeper cognitive learning strategies (Anderman, 1992), to persist in the face of difficulty (Elliott & Dweck, 1988), to be better self-regulated learners (Pintrich & Garcia, 1991), and to have more positive attitudes towards learning (Meece, Blumenfeld, & Hoyle, 1988). In contrast, people holding ability goals were found to avoid challenging tasks (Elliott & Dweck, 1988), to experience negative affect following failure (Jagacinski & Nicholls, 1987), and to be more likely to use surface, rather than deep, cognitive strategies (Meece et al., 1988). These findings were especially strong for low achieving students (Anderman, 1992).

School Environment as Stressing Achievement Goals

Research indicates that the experienced environment is related to the goal orientation of students (Ames, 1992). Moreover, goal adoption was shown to be related to specific instructional and management practices employed by teachers, such as grouping, evaluation, and recognition methods (Meece, 1991). Students were more likely to adopt task-focused goals in classrooms where effort, improvement, and mastery were stressed (Anderman & Maehr, 1994; Anderman & Young, 1993). However, it is assumed that these practices influence students' goals through self-processes. For example, it was documented that students differ in their perception of the goal orientation that is stressed in the same classroom environment (Ames & Archer, 1988).

Anderman and Maehr (1994) suggest a causal relationship between the goals students perceive as stressed in the environment and the personal goals students pursue (see figure 1). Their model further assumes a causal relationship between personal goals and student outcomes such as learning strategies, attitudes, and affect. It is suggested that the perception of learning environments as stressing relative ability and social comparison will contribute to adoption of ability-focused goals, while perception of the learning environment as stressing learning for its own sake and self improvement will facilitate adoption of task-focused goals.

Although the causal assumptions between perceived goal stress and personal goals have not been supported yet, perceptions of the goals stressed in the environment were found to be correlated with students' personal goals (Midgley, Anderman, & Hicks, 1995) as well as with other outcomes. Ames and Archer (1988) found that students who perceived the classroom as stressing task goals were likely to prefer challenging tasks, to use learning strategies, and to have a positive attitude toward the class. Students who perceived the classroom as stressing ability goals were likely to have a negative attitude toward the class and lower perceptions of their ability.

Perceptions of the goals stressed in the school as a whole can also influence the goals that students adopt. School wide practices can interfere with classroom level practices and influence the emphasis on what is the primary focus of learning (Maehr & Buck, 1993; Maehr, Midgley & Urdan, 1992). Therefore students' perceptions of the goals stressed in the school environment are hypothesized to affect adoption of personal goals.

Profiles of Achievement Goals

While most research concerning achievement goals examined task and ability goals separately, some research has emphasized the role of multiple goals students pursue and perceive in learning environments (Meece & Holt, 1993; Pintrich & Garcia, 1991; Urdan & Midgley, 1994, Wentzel, 1993). Achievement goals have been found to be independent of each other. Students pursue and perceive task and ability goals simultaneously and to varying degrees. Several studies have identified profiles of personal and perceived achievement goals, and different relationships were found between various goal profiles and school-related beliefs, attitudes, and behaviors (Ames & Archer, 1988; Meece & Holt, 1993; Urdan & Midgley, 1994).

Ames and Archer (1988) investigated the patterns of perceptions of goals that are stressed in the classroom and their relationship to academic outcomes. Using median split on scales of mastery (task) and performance (ability) goals they created four profiles: students who perceived the classroom as high in task and ability goals, students who perceived the classroom as high in task and low in ability goals, students who perceived the classroom as low in task and high in ability goals, and students who perceived the classroom as low in task and low in ability goals.

Ames and Archer found a significant and consistent pattern of differences among the profiles on measures of learning strategies, challenging task choice, and attitudes toward the class. Students who rated their classroom as high in the stress on task goals (e.g. high task-low ability and high task-high ability profiles) showed a more adaptive pattern on all of these measures. These students were more likely to choose challenging tasks, to use deep learning strategies, and to have positive attitudes toward their classroom than students who perceived their classroom as low in the stress on task goals (low task-low ability and low task-high ability profiles). No difference was apparent within the high and low task profiles (Ames & Archer, 1988).

Meece and Holt (1993) used cluster analysis and identified three profiles of personal achievement goals: "high mastery", "combined mastery-ego", and "low mastery-ego". Students with a "high mastery" profile had high scores on a task-mastery goals scale and low scores on an ego-social goals scale (which is similar to ability goals) and on a work-avoidance goals scale. Students with a "combined mastery-ego" profile had an equal emphasis on task-mastery and ego-social goals. Students with a "low mastery-ego" profile had lower scores on both task-mastery and ego-social goals scales and higher scores on work-avoidance scale than the other profiles.

Meece and Holt have found that students who had a high-mastery goal profile received higher teacher ratings of effort and achievement expectations than did

students who had either of the other goal profiles. The high mastery profile students also had higher science grades and achievement test scores than the other students (Meece & Holt, 1993). Meece and Holt also found that profile membership was associated with gender. Girls were over-represented in the high mastery profile and boys were over represented in the low mastery-ego profile.

Urdu and Midgley (1994) identified nine goal profiles. They included adult approval goals and extrinsic goals in addition to the task and relative ability achievement goals in their analysis. Using cluster analysis they found five profiles that were shared by students from elementary level and middle level schools. Urdu and Midgley found that "Students in the clusters that were high in their pursuit of task goals had the most favorable pattern of results in the self-report data" of academic self efficacy, deep processing and effort avoiding strategy use, feelings of belonging in the classroom, perceptions of the social climate in the school, and beliefs about the modifiability of intelligence (p. 20). "Conversely, students in the clusters marked by low pursuit of task goals tended to have the least adaptive pattern of results across the various self-reported outcomes." (p. 20). Again, no differences were found between clusters that differed on the level of ability goals but not on the level of task goals.

With other outcomes such as achievement and teacher ratings, the relationships were more complex and less consistent. For example, "there were no differences among clusters in the middle school sample on either the achievement measures or the teacher-report measures" (p.20). "In the elementary sample, there were differences on both the teacher-report and achievement measures, but the pattern of results was different than it was for the self-report data." (Urdu & Midgley, 1994, p. 20).

Achievement Goals and Psychological Well-Being

Previous studies in goal theory have focused mainly on the relationship between achievement goals and academic outcomes. Only recently attention has been given to the relationship between achievement goals and measures of psychological well-being. Urdu and Roeser (1993) found that a perceived stress on task goals was associated with self-reports of more positive and less negative affect at school as well as with positive academic self-schemas. Recent work that examined the relationship between achievement goals and school-related well-being found that perceptions of the school's task orientation and social climate was related to students' feelings of school belonging and self-worth. Specifically, it was found that school task orientation, as well as the social climate of the school, affect students' adoption of personal task goals, which were in turn the best predictors of academic self-efficacy (Roeser, Urdu, & Midgley, 1994).

This work still focuses on school-related factors. The present study will be one of the first to look at the relationship between the goals students hold and perceive as stressed in the environment and indices of wellness that are not tied to the academic domain. The present study will also seek to identify patterns of personal goals as well as patterns of perceptions of goals that are stressed in the educational environment, and the relationships between these patterns and psychological well-being measures.

In this study we will focus on the self-image aspect of psychological well-being. Self-image is a phenomenological organization of individuals' experiences and ideas about themselves. It is manifested through functioning in various social domains such as the school, family, and peer group, as well as through psychological functioning such as impulse control, mental health adjustment, and ease in new situations (Petersen, Schulenberg, Abramowitz, Offer, & Jarcho, 1984). As an indicator of functioning and adjustment, self-image scores should reflect psychological distress and psychological well-being

Achievement Goals and Psychological Well-Being Among African-American Students

One of the most important contributions of this study will be to consider the relationships among goals that are stressed in the environment, personal goals, and psychological well-being in a sample of African-American students. In a recent review, Graham (1994) emphasized the scarcity of research examining motivational issues among the African American community. Graham notes that "the current themes that dominate the study of motivation - such as conceptions of ability (Dweck & Leggett, 1988), self-efficacy (Bandura, 1989), self-worth (Covington, 1992), and the goals for which individuals strive (Nicholls, 1989) - have been too scarcely examined among African Americans to make a review of findings possible." (Graham, 1994, p. 56).

In her review, Graham discards old beliefs regarding motivation and underachievement among African Americans. African American students have not been shown to have a lower need for achievement than Euro-American students, or to differ on internal/external attributions. "Blacks and Whites are about equally likely to display what is thought to be an adaptive (internal) attribution pattern - that is, attributing success to one's ability and effort and one's failure to lack of effort." (Graham, 1994, p. 93). The only consistent finding Graham reports, which could be considered a pattern among African American subjects is that, compared to their Euro-American counterparts, "Black research subjects remain remarkably optimistic about the future even in the wake of achievement failure." (p.95). In addition, "comparative racial studies consistently report Blacks to be equal to or higher than Whites on a vast

array of self-concept measures." Graham adds that this "general pattern of high academic self-concept among African Americans was relatively uninfluenced by social class distinctions." (Graham, 1994, p. 98).

Graham (1994) and other researchers (e.g. Betancourt & Lopes', 1993) call for an approach that uses general motivational theories in the investigation of culture. Such an approach should try to explain phenomena with general psychological processes. The present study attempts to generalize goal theory processes to a sample of African American young adolescents, while taking into account differences within this group such as socioeconomic status.

Method

Subjects

Subjects include 168 students of which 91 are girls (54.2%) and 76 are boys (45.2%) (one student failed to fill in the gender category). All participants were in the sixth grade and in their first year after a transition to middle school. Of the total, 91 of the students (54.2%) were Euro-Americans, 66 (39.3%) were African Americans, and 11 (6.5%) were of other ethnic backgrounds.

All the sixth grade students in the school received permission slips to be filled out by their parents/guardians. Nine students were denied permission by their guardians and did not participate in the study. Twenty two students who were assigned to special education classes did not participate as well. Of the rest, thirty seven students were either missing the day of the survey, refused to fill out the survey, or filled out only parts of the survey. The final number of participants on whose responses the analysis was conducted is 72% of the total number of sixth grade students in this school.

Procedure

The subjects responded to a 90 item survey which was administered by research assistants in the students' classes. The teacher was present in the room but was not involved with administering the survey. Students were assured that their answers would be kept confidential. The items were read aloud and time was given for the students to respond. The students were encouraged to ask for clarification regarding unclear items. The time it took to fill the survey was approximately 45 minutes.

Measures

The instrument chosen for the purpose of measuring self-image in this study is the Self-Image Questionnaire for Young Adolescents (SIQYA), developed by Petersen et al. (1984). The SIQYA was found to be highly correlated with the Rosenberg Self-Esteem

Inventory (SEI) which is a well validated measure of self-esteem. It was also found to distinguish between groups who reported four kinds of mental health problems from subjects who did not report these problems, and was found to distinguish between adolescents with a poor family relationship and adolescents whose parents were married and did not report discord (Petersen et al., 1984).

Three scales on the SIQYA were used for measuring the self-image factor in this research. One scale ('Peer Relationship'²) focuses on the social context while the other two ('Emotional Tone' and 'Impulse Control') focus on individual aspects of the self-image. The SIQYA response scales were converted from a six point to a five point Likert response scale with anchors of "very true of me" and "not at all true of me". All items in the survey were responded to on this scale.

An 'Affect toward School' scale was used from the Patterns of Adaptive Learning Survey (PALS) developed by Midgley, Maehr, and Urdan (1993) during a three year project that dealt with school and personal achievement goals and their effect on students' academic attitudes and affect. Two scales ('Positive Affect at School' and 'Negative Affect at School') were combined to form this scale. A scale measuring academic 'Self-Efficacy' as well as the scales measuring personal and perceived achievement goals were also used from PALS.

A scale measuring self-report of disruptive behavior was constructed for this study. Information on achievement, socioeconomic status (SES), and ethnicity were collected from school records. Achievement was measured by the students' GPA and was obtained from students' report cards. It was scored on a continuous scale (0.0-4.0) as it appeared in the report cards. SES was coded based on students' eligibility for free or reduced fee lunches..

Results

All the measures employed were reliable at $\alpha = .75$ or above. Table 1 reports descriptives and Cronbach's alpha for all the scales used in the study. The self-image, self-efficacy, and affect at school scales were coded so that a high score means a positive outcome on the measure. The disruptive behavior scale was coded so that a high score means perceptions of high disruptive behavior. The achievement goals variables were coded so that a high score means having high goals as implied by the construct name.

The only scale that was not validated before this study is the 'disruptive behavior' scale. This scale was found to be highly reliable ($\alpha = .83$) and was positively ($r = .44, p < .01$) correlated with the number of discipline slips students had in

² Item examples for all the scales are described in table 1.

their records. Since students do not get discipline referrals on each disruptive behavior, many students did not have referrals, and the measure of discipline referrals was highly skewed (Skewness=3.89). We decided to use the self-report measure rather than discipline slips as a continuous measure of disruptive behavior in the class.

Table 2 reports zero order correlations among the variables. The self-image and the 'affect towards school' variables were positively correlated among themselves. The disruptive behavior variable was negatively correlated with the self-image and affect variables. The two exceptions to this pattern were 'peer relationship' and 'impulse control', and 'peer relationship' and 'disruptive behavior' which were not significantly correlated. Self-efficacy was positively correlated with all the self-image and affect variables, and negatively correlated with the disruptive behavior variable. GPA was positively correlated with impulse control, affect at school, and self-efficacy, and negatively correlated with disruptive behavior.

Personal task and ability goals were not correlated. This supports the theoretical assumption that these are orthogonal constructs (Meece & Holt, 1993). Perception of the school as stressing task goals was positively and highly correlated with holding task goals. Perception of the school as stressing ability goals was positively correlated with holding ability goals. The perceptions were negatively correlated with each other.

Socio-Economic Status

SES was found to be an independent factor explaining variance in GPA. A one way analysis of variance (ANOVA) revealed a significant difference ($F=3.19$, $p=.04$, $R^2=.04$) among the three groups (free lunch, reduced lunch, no privileges) on GPA. Table 3 presents the GPA means for the three groups. The Scheffe test showed that the free lunch group had a significantly lower GPA than the group with no lunch privileges. The Bartlett-Box test supported the existence of homogeneity of variance ($F=.29$, $P=.75$). ANOVA testing for differences among the SES groups on other measures, including achievement goals, perceptions of self-efficacy, affect at school, and perceptions of the goals stressed in the school, was not significant. SES was not found to interact with ethnicity in affecting GPA. A chi-square test testing for SES differences among the ethnic groups was not significant. For the following analyses, a dummy variable was created for SES. Since the significant difference was apparent between the 'free lunch' group and the 'no-privileges group', the dummy variable included only these two groups with 'free lunch' as 0, and 'no-privileges' as 1.

Personal Achievement Goals

A series of multiple regressions were run using the measures of well-being and GPA as dependent variables. Dummy variables representing SES (free lunch=0, no-privileges=1), ethnicity (African Americans=0, Euro-Americans=1), and gender (Girls=0, Boys=1), were first entered. In a second step, personal task goals and personal ability goals were entered as a block into the equation.

Table 4 presents Beta values of personal goals as predictors of the well-being measures and of GPA after controlling for SES, ethnicity, and gender. Beta values of the demographic variables are reported only when they were significant. Holding personal task goals was found to be a significant positive predictor for all measures of well-being and GPA and a significant negative predictor for disruptive behavior. Holding personal ability goals was found to be a significant negative predictor for some measures of well-being. In almost every case, the explained variance by both personal goals constructs was equal to the sum of variance explained by each construct separately. These findings provide additional support for the theoretical assumption that task goals and ability goals are orthogonal constructs.

In a separate regression analysis, the interaction terms of personal goals and GPA, and personal goals and self-efficacy were tested as predictors for the well-being measures. None of the terms was significant.

Goals Perceived in the Environment

A second series of multiple regressions was run following the pattern described above. The personal goal constructs were replaced with constructs measuring perceptions of the goals stressed by the school. Table 5 presents Beta values of perception of goals stressed by the school as predictors of the well-being measures and of GPA after controlling for SES, ethnicity, and gender. Perception of the school as stressing task goals was a significant positive predictor for the academic related variables, and a significant negative predictor for disruptive behavior. Perception of the school as stressing ability goals was a significant negative predictor for emotional tone, impulse control, and affect toward school, and a significant positive predictor for disruptive behavior.

Patterns of Achievement Goals

Cluster analysis was used to determine students' profiles of task and ability goals. Profiles of personal achievement goals were analyzed first and profiles of perceptions of the goals stressed by the school second. After identifying the profiles, the relationships between these profiles and the measures of well-being were investigated. Many of the

previous studies examining motivational profiles have used the median split method for creating groups with different profiles (see Meece & Holt, 1993, for a review). Meece and Holt (1993) as well as Urdan and Midgley (1994) have pointed to cluster analysis as a better method of identifying goal profiles among students than median split. In cluster analysis, the structure of the profiles emerges from the data and is not imposed as in the median split method (Meece & Holt, 1993). A note should be made on the 'subjective' nature of interpretation of cluster analysis results.

A cluster analysis using agglomerative hierarchical clustering procedure (Norusis, 1990) was run using Ward's method. The cases were clustered using students' scores on the measures of personal task goals and ability goals. Six clusters were identified as best describing the data for the theoretical purposes of this study. One cluster includes 46 students who were high in both task and ability goals (HT-HA). A second cluster includes 26 students who were high on task goals and medium on ability goals (HT-MA). A third cluster includes 36 students who were high on task goals and low on ability goals (HT-LA). A fourth cluster includes 23 students who were medium on both task and ability goals (MT-MA). A fifth cluster includes 23 students who were medium on task goals and high on ability goals (MT-HA). The sixth cluster includes 14 students who were low on both task and ability goals (LT-LA). Table 6 presents descriptives of the six clusters. A multiple analysis of variance (MANOVA) was run to check for significant differences among the clusters. Table 7 presents the means, standard deviations, and the results of the MANOVA. As expected, there were significant differences among the clusters.

Analyses of variance (ANOVA) were run on the clusters for each of the well-being variables while including SES, gender, and ethnicity as covariates. Figure 2 presents the pattern of the constructs' means for these variables. Table 8 presents results of the ANOVA for the variables. No significant difference was found among the clusters in peer relationship and GPA. A clear pattern appeared in which profiles with high task goals had significantly higher scores on the well-being measures and significantly lower scores on disruptive behavior than profiles with low and medium task goals. These results are similar to results of other studies (Urdan & Midgley, 1994). An interesting result which is different from what was previously found is the significant difference between the high-task/low-ability (HT-LA) profile and the high-task/high-ability (HT-HA) profile on emotional tone, impulse control, and affect at school. In all of these measures the HT-LA profile had significantly higher scores than the HT-HA profile.

Personal Goal Profiles, Ethnicity, and Gender

Chi-square tests were run to check for different patterns of ethnicity and gender among the profiles. Both tests were found to be significant. African American students in this sample were more likely to be represented in the high task profiles and less likely to be represented in the high ability profiles than were Euro-American students ($\chi^2=15.85$, $df=5$, $p=.0073$). Female students in this sample were more likely to be represented in the high task profiles and less likely to be represented in the high ability profiles than were male students ($\chi^2=16.87$, $df=5$, $p=.0048$). A chi-square test that checked for SES differences among the profiles was not significant.

Profiles of Perceptions of the Goals Stressed by the School

The same method of cluster analysis was used for determining profiles based on perceptions of the goals stressed by the school. The cases were clustered using scores on the two scales measuring perceptions of the goals stressed by the school. Six clusters were identified as best describing the data for the theoretical purposes of this study. One cluster includes 15 students who perceived the school as stressing high task and high ability goals (HT-HA). A second cluster includes 34 students who perceived the school as stressing high task goals and medium ability goals (HT-MA). A third cluster includes 25 students who perceived the school as stressing high task goals and low ability goals (HT-LA). A fourth cluster includes 42 students who perceived the school as stressing medium task and low ability goals (MT-LA). The fifth cluster includes 36 students who perceived the school as emphasizing medium task goals and medium ability goals (MT-MA). The sixth cluster includes 13 students who perceived the school as emphasizing medium task and high ability goals (MT-HA). Three cases were rejected from the clusters due to missing data. Table 9 presents descriptives for the six clusters.

A multiple analysis of variance (MANOVA) was run to check for significant differences among the clusters. Table 10 presents the means, standard deviations, and the results of the MANOVA. As expected there were significant differences among the clusters on both of the goal measures. The profiles of perception of the goals stressed by the school were labeled in the same way as the personal goal profiles.

Analyses of variance (ANOVA) were run for each of the well-being variables while including SES, gender, and ethnicity as covariates. Figure 3 presents the pattern of the constructs' means for these variables. Table 11 presents results of the ANOVA for the variables. No significant differences in GPA and peer relationships emerged among the profiles. A less distinctive pattern appeared among the profiles of the perceived goals as compared to the profiles of the personal goals. Nevertheless, profiles with perceptions of the school as stressing high task goals had significantly higher

scores on affect at school and self efficacy, and significantly lower scores on disruptive behavior, than profiles with perceptions of the school as stressing medium task goals. In addition, profiles with perception of the school as stressing low ability goals had significantly higher scores on affect toward school and significantly lower scores on disruptive behavior than profiles with perceptions of the school as stressing high ability goals. Chi-square tests that were run to check for different patterns of ethnicity, gender, and SES among the clusters were not significant.

Relationship Among Profiles of Personal Goals and Profiles of Goals Stressed by School

Table 12 presents the distribution of subjects with certain personal goal profiles among the perception profiles. A chi-square test was run to determine whether students who share a profile of perceptions of the goals stressed by the school tend to be equally distributed among the personal goals profile. This test was significant ($\chi^2=58.19$, $df=20$, $p<.0001$).

Several patterns can be noted as one examines this table. Students who perceived the school as stressing medium-task/high-ability tended to have less adaptive personal goals profiles. Students who perceived the school as stressing medium-task/medium-ability tended to be distributed among all personal goals profiles. Students who perceived the school as stressing high-task/low-ability were much more likely (88.6%) to have a personal goals profile with high task goals. Students who perceived the school as stressing high-task/medium-ability were more likely (57.7%) to have a personal goals profile of high-task/high-ability or a profile of high-task/low-ability. Students who perceived the school as stressing high-task/high-ability tended to be distributed among all the personal goals profiles.

Table 13 presents results of correlations that were run to determine the relationship between personal goals and perceptions of the goals stressed in the school within each profile of personal goals. As expected and similar to results from other studies (Meece & Holt, 1993) personal task and ability goals were significantly correlated for the high-task/high-ability (HT-HA) profile. Personal goals were not correlated in the other profiles. Holding ability goals and perception of the school as stressing ability goals were significantly correlated only for the high-task/high-ability (HT-HA) profile.

Within the high-task/low-ability (HT-LA) profile, there were significant negative correlations between perceptions of the school as stressing task goals and perceptions of the school as stressing ability goals, and between holding task goals and perceptions of the school as stressing ability goals. Significant positive correlations were found between holding task goals and perceptions of the school as stressing task goals.

Within the medium-task/medium-ability (MT-MA) profile a significant and

negative correlation was found between perceptions of the school as stressing task goals and perceptions of the school as stressing ability goals. Within the medium-task/high-ability (MT-HA) profile a significant positive relationship was found between holding task goals and perceptions of the school as stressing task goals. And within the low-task/low-ability (LT-LA) profile a significant negative correlation was found between holding task goals and perceptions of the school as stressing ability goals.

Achievement Goals Among African American Students

A series of multiple regressions predicting well-being measures from personal and perceived achievement goals were run separately for the ethnic groups in the sample. Demographic variables of gender and SES were controlled by introducing dummy variables in a first step. In a second step, the goal variables were entered as a block. Results of the regressions for the African American sample are presented in Table 14 for the personal goals and in Table 15 for the perceived goals. Results of the regressions for the Euro-American students are presented in Table 16 for the personal goals and in Table 17 for the perceived goals. Betas for SES and gender are reported when they were significant.

Holding personal task goals was a positive predictor of all the well-being measures except for 'emotional tone' for the African American students, and 'peer relationship' for the Euro-American students. Holding task goals was also a strong negative predictor for disruptive behavior for both groups. Holding ability goals was a negative predictor for some of the well-being measures for the African American students, specifically, for impulse control and affect toward school, and a positive predictor for disruptive behavior. Personal goals were also significant predictors for GPA for the African American students and followed the same direction of prediction as above.

A similar but weaker pattern was observed for the perception of goals stressed in the environment. The perception that the school stressed task goals was a positive predictor only for self-efficacy and a negative predictor for disruptive behavior. Perception of the school as stressing ability goals was a negative predictor for the three self-image constructs for the African American students in the sample.

Structural Causal Analysis

Path analyses were run using LISREL 7 (Jöreskog & Sörbom, 1986). At a first step, a model adopted from Anderman and Maehr (1994) was examined (see figure 1). Perceptions of goals stressed in the school had direct effects on the dependent variables in addition to the indirect effects through personal goals. The model was adapted to

account for these relationships. Figure 4 presents the adapted model. Surprisingly, the model was found to fit the data for the Euro-American students in the sample, but not for the African American students. Figure 5 presents the model with path coefficients and measures of fit for the two groups.

The finding concerning self-efficacy among African American subjects, which was reported by Graham (1994) and mentioned earlier, prompted an attempt to test a different model in which self-efficacy predicts personal achievement goals rather than is predicted by them. This model was found to fit the data for the African American students in the sample, but was a worse fit for the Euro-American students. Figure 6 presents the model with path coefficients and measures of fit for the two groups.

Perception of the school as stressing task goals which appeared as a significant predictor of self-efficacy for the Euro-American students but not for the African American students in the first model, were a highly significant predictor for both groups in the second model. Perception of the school as stressing ability goals was not a significant predictor of self-efficacy for either group in either model. An interesting difference between the two ethnic groups is the relationship between self-efficacy and personal ability goals, which was not significant for the Euro-American students and positively significant for the African American students in both models.

Discussion

This study focused on three major issues. First, the study attempted to investigate the generalizability of goal theory of achievement motivation to the domain of general psychological well-being. The hypothesis, following Weiner (1990), was that students' experiences in school, in particular those that relate to their personal motivation and their perceptions of the school environment, will be related to their self-concept and psychological well-being. Second, we attempted to examine goal theory under the assumption that students pursue, and perceive the school as stressing multiple goals simultaneously. Previous research supported this assumption, and we saw a need for adding to the knowledge concerning the implications of pursuing and perceiving different profiles of goals. Third, the study attempted to add to the scarce knowledge concerning achievement motivation among African American students.

Achievement Goals and Well-Being

The findings point to a strong and consistent relationship between the achievement goals students pursue and perceive as stressed by the school, and their psychological well-being. Pursuing task goals was found to have a significant positive

relationship with all indices of well-being, including self-efficacy and GPA. Pursuing ability goals was found to have a significant negative relationship with two of the general indices of well-being, and with affect to school. These findings suggest that students' motivational orientation is related to emotions and cognitions that go beyond the academic context.

Achievement goals relate to the meaning of success in school, to students' perceptions of opportunities for success, and to the implication of failure for perceptions of self. When success is constructed in terms of winning a competition, only a few, at best, can win. Thus, when pursuing ability goals, students are more likely to encounter situations in which they are unsuccessful. Failure, in such situations is more likely to be attributed to fixed ability (i.e., to unchangeable properties of self -see Elliott & Dweck, 1988), and therefore, is likely to have an enduring effect on perceptions of self. In contrast, when success is based on self-criteria, students' chances for success depend on their own effort. Thus, when pursuing task goals, students are likely to feel more efficacious, and are likely to perceive more opportunities for success. Failure is more likely to be attributed to low effort, and therefore, to changeable properties that do not necessarily reflect on the self. While previous research found that goals have an effect on perceived stress, level of anxiety (Covington, 1992), and affect towards the school (Roeser et al, 1994), the current findings suggest that goals might also have a continuing and more general effect on perceptions of self.

Perceiving the school as stressing achievement goals was found to have a similar but weaker effect. Specifically, perceptions of the school as stressing task goals were related to school-related well-being, but not to more general indices. Perceiving the school as stressing ability goals was found to have significant negative relationships with two of the general indices of well-being and with affect to school.

A reason for the weaker effect of perceptions of the goals stressed by the school on well-being in comparison with personal goals might be that perceptions of the environment do not reflect directly on self-processes but correlate with the personal goals that do. However, our path analyses suggest an existence of a direct effect from these perceptions to well-being that does not go through personal goals. A different hypothesis might be that other processes which accompany the perceptions and do reflect on self-perceptions are involved. For example, it might be that many students who perceive the school as stressing ability goals also perceive the environment as less supportive. Another possibility is that gender and ethnicity differences, although not found to be significantly correlated with these perceptions, do account for much of the explained variance in the well-being measures.

Future research should investigate relationships between perceptions of the goals stressed by the school and students' perceptions of support, disparity, and belonging to the school. Such processes might provide a more elaborate explanation for the findings including those concerning personal and perceived goals and disruptive behavior.

Profiles of Achievement Goals

The analysis suggested six profiles of personal goals and perceptions of goals stressed by the school in this sample. Consistent with previous findings (Urduan & Midgley, 1994), the profiles with high task goals were found to be more adaptive than profiles with low task goals. Different from previous studies, however, was the finding that the profile of high task goals and high ability goals was not as adaptive as the profile of high task goals and low ability goals. Similar results were found among the profiles of perceptions of goals stressed by the school. Pursuit and perception of high task and low ability goals were found to be the most adaptive profiles. The profile of pursuing low task and ability goals was the least adaptive, followed by the profile of pursuing medium task and high ability goals.

Although the relationships between school practices and students' personal and perceived goals are yet to be established (for initial work in this direction see Meece, 1991 and Anderman & Young, 1993), the findings could be said to stand in contrast to a common held belief that being in a competitive environment as a young person prepares one to cope with an inevitably competitive future life. The findings support arguments made against this belief which assert that competitive (ability focused) environments are detrimental to young people's self-worth (Covington, 1992).

These arguments are further strengthened by patterns observed in the distribution of students among the profiles of perceived and personal goals. Students who perceive the school as stressing medium-task and high-ability goals were likely to exhibit less adaptive personal goals profiles. In contrast, students who perceive the school as stressing high-task and low-ability goals were likely to exhibit more adaptive personal goals profiles. In general, it seemed that profiles in which students perceived the school as stressing task goals more than ability goals were associated with adaptive profiles of personal goals. More research is needed to establish these patterns, and the relationship between school and classroom practices and students' perceptions of goals stressed by the school.

Correlations among perceptions of the school as stressing certain goals and students' personal goals differed among the personal goals profiles. Of special interest are the positive correlation between perception of the school as stressing ability goals

and pursuit of ability goals among the high-task high-ability profile, and the negative correlation between perception of the school as stressing ability goals and task goals among the high-task low-ability, medium-task high-ability, and low-task low-ability profiles. While causality can not be implied by these correlations, the case of the least adaptive profile, low-task low-ability, raises an interesting speculation that the perception of the school as stressing ability goals may be especially detrimental to those students who are already motivationally at risk.

Achievement Goals Among African American Students

The examination of personal and perceived achievement goals among the African American students in the sample supported goal theory predictions. Personal task goals were a positive predictor for almost all the well-being measures and personal ability goals and perception of the school as stressing ability goals were negative predictors for some of the well-being measures.

These findings provide an initial glance at goal theory processes in this population. Previous studies asserted that African American students' self-concept is not likely to be affected by events in the academic domain (Covington, 1992; Graham, 1994). Although the present findings agree with these assertions to a certain extent, they present a more elaborate picture. While personal goals were not a significant predictor for 'emotional tone' in African American students, they did predict all the other well-being measures including self-efficacy. Moreover, perceptions of the school as stressing ability goals were negative predictors for the three general well-being indices including 'emotional tone', and perceptions of the school as stressing task goals were positive predictors of self-efficacy.

These findings point to the complexity of the effects of personal and perceived goals on general well-being. While African American's emotional tone, a concept that is close to the traditional 'self-esteem' construct, seems not to be influenced by achievement goals, other indices of well-being are influenced. More research is needed to clarify underlying processes and to distinguish among the relationships between academic-related events and different indices of well-being. An initial direction for such examination is suggested by the results of the path analyses described in the next section.

Goal Processes

The model suggested by Anderman and Maehr (1994) (see Figure 1) was generally supported by a path analysis. This model suggests a causal relationship between the goals students perceive in the classroom and their personal goals, and, further, casual

relationships between the personal goals and self-efficacy. However, some modifications had to be made for the model to fit the data, the major one included addition of direct paths from the perceptions of the goals stressed by the school to self-efficacy, and further to other outcomes.

Interestingly, while the results of the multiple regression support similar predictions for the African American and the Euro-American students, the path analyses results suggest possible differences in the process by which goals and perceptions of goals operate in the two ethnic groups in this sample. Among the Euro-American students, the analysis supported causal paths leading from students' personal goals to self-efficacy. In contrast, among the African American students the analysis supported a reversed path, leading from self-efficacy to personal goals. A finding concerning a different role of self-efficacy in motivational processes in the two ethnic groups stand in accordance with findings of previous research (Graham, 1994). Graham concluded that the one consistent finding from ethnic comparison studies is that, Euro-American students' report of self-efficacy decreases after failure on a task, while African American students' self-efficacy maintains its level. The present findings might suggest an explanation.

When personal goals influence self-efficacy, change in self-efficacy will be predicted by differences in interpretations of success and failure. Thus, after experiencing failure, students who have high task goals might not change their self-efficacy while those who have low task goals will be likely to decrease these perceptions. In contrast, since self-efficacy is the predictor of personal goals among the African American students, it is less likely to be influenced by the different interpretations of success and failure. Rather, it will be a determinant of these interpretations. This speculation stands in accordance with Covington's (1992) suggestion that African American's concept of ability is determined by a "broader, more practical, everyday context" (p. 92) rather than by the narrow academic domain. It is also supported by the finding that self-efficacy in African American students is positively related to both personal task and ability goals and, therefore, is less likely to depend on success and failure interpretations.

Although providing a lead for the examination of motivational processes among African American students, these initial results need to be replicated and tested further. In addition, the data presented here are correlational, and was collected in one wave. The speculations concerning goal processes, causality, and self-efficacy and its role need to be supported by longitudinal studies and by an elaborated and theoretical rationale.

Conclusion

The results of the study suggest a strong relationship between students' motivational goals, their perception of the school environment as stressing different goals, and their psychological well-being. More specifically, profiles of pursuing and perceiving the school as stressing high task goals and low ability goals were the most adaptive. The results point to the generalizability of achievement goal theory predictions for a sample of African American young adolescents. Initial analysis points, however, to possible differences in the processes by which goals operate among African American and Euro-American students.

References:

- Ames, C. (1992). Classrooms: Goals, structures, and student motivation. Journal of Educational Psychology, 84, 261-271
- Ames, C., & Archer, J. (1988). Achievement goals in the classroom: Student learning strategies and motivation processes, Journal of Educational Psychology, 80, 260-267
- Anderman, E.M. (1992, March). The effect of personal and school-wide goals on deep processing strategies of at risk, not at risk, and special education students. Paper presented at the biennial meeting of the Society for Research on Adolescence, Washington D.C.
- Anderman, E. M., & Maehr, M. L. (1994). Motivation and schooling in the middle grades, Review of Educational Research, 64, 287-309
- Anderman, E. M. & Young, A.J. (1993, April). A multilevel model of adolescents' motivation and strategy use in academic domains. Paper presented at the Annual Meeting of the American Educational Research Association, Atlanta.
- Bandura, A. (1989). Human agency in social cognitive theory. American Psychologist, 44, 1175-1184
- Betancourt, H., & Lopes', S.R. (1993). The study of culture, ethnicity, and race in American psychology. American Psychologist, 48, 629-637
- Butler, R. (1987). Task involving and ego involving properties of evaluation: Effects of different feedback conditions on motivational perceptions, interest, and performance. Journal of Educational Psychology, 79, 474-482
- Butler, R. (1993). Effects of task- and ego-achievement goals on information seeking during task engagement. Journal of Personality and Social Psychology, 65, 18-31
- Covington, M.V. (1992). Making the grade: A self-worth perspective on motivation and school reform. New York, NY: Cambridge University Press.

- Graham, S. (1994). Motivation in African Americans. Review of Educational Research, 64, 55-117.
- Dweck C.S. (1989). Motivation. In A. Lesgold & R. Glaser (Eds.) Foundations for a psychology of education, (pp. 87-136). Hillsdale, NJ: Lawrence Erlbaum
- Elliott, E.S., & Dweck, C.S. (1988). Goals: An approach to motivation and achievement. Journal of Personality and Social Psychology, 54, 5-12
- Jagacinski, C.M., & Nicholls, J.G. (1987). Competence and affect in task involvement and ego involvement: The impact of social comparison information. Journal of Educational Psychology, 79, 107-114
- Jöreskog, K., & Sörbom, D. (1986). LISREL 7: Analysis of linear structural relationships by maximum-likelihood, instrumental variables, and least squares.
- Maehr, M.L., & Buck, R.M., (1993). Transforming school culture. In M. Sashkin & H.J. Walberg (Eds.), Educational leadership and school culture, Berkeley, CA: McCutchan.
- Maehr M.L., De Groot E., Midgley C. & Pintrich P.R. (1992). Personal and contextual influences on adolescent wellness, Grant Application to the National Institute of Mental Health, University of Michigan.
- Maehr, M.L., Midgley, C., & Urdan, T. (1992). School leader as motivator. Educational Administration Quarterly, 18, 412-431
- Marshall H.H., & Weinstein R.S. (1984). Classroom factors affecting students' self-evaluations: An interactional model, Review of Educational Research, 54, 301-325
- Meece, J.L. (1991). The classroom context and students' motivational goals. In M. Maehr, & P. Pintrich, (Eds.), Advances in Motivation and Achievement (Vol. 7, pp. 261-285), Greenwich, CT: JAI.

- Meece, J.L., Blumenfeld, P.C., & Hoyle, R.H. (1988). Students' goal orientations and cognitive engagement in classroom activities. Journal of Educational Psychology, 80, 514-523
- Meece, J.L., & Holt, K. (1993). A pattern analysis of students' achievement goals. Journal of Educational Psychology, 85, 582-590
- Midgley, C., Anderman, E.M., & Hicks, L.H. (1995). Differences between elementary and middle school teachers and students: A goal theory approach. Journal of Early Adolescence, 15, 90-113
- Midgley C., Maehr M.L., & Urdan T. (1993). Manual for the Patterns of Adaptive Learning Survey (PALS). University of Michigan.
- Nicholls, J. (1989). The competitive ethos and democratic society. Cambridge, MA: Harvard University Press.
- Norusis, M.J. (1990). SPSS Base System User's Guide, Chicago, IL: SPSS Inc.
- Petersen A.C., Schulenberg J.E., Abramowitz R.H., Offer D., & Jarcho H.D. (1984). A self-image questionnaire for young adolescents (SIQYA): Reliability and validity studies. Journal of Youth and Adolescence, 12, 93-111
- Pintrich, P.R., & Garcia, T. (1991). Student goal orientation and self-regulation in the college classroom. In M.L. Maehr & P.R. Pintrich (Eds.), Advances in motivation and achievement: Goals and self-regulatory processes, (Vol. 7, pp. 371-402). Greenwich, CT: JAI.
- Renouf A.G., & Harter S. (1990). Low self-worth and anger as components of the depressive experience in young adolescents, Development and Psychopathology, 2, 293-310
- Roeser, R.W., Urdan, T.C., & Midgley, C. (1994, April). Meaning, motivation, and mental health: A study of middle school culture. Paper presented at the Annual Meeting of the American Educational Research Association. New Orleans.

Urdu, T., & Midgley, C. (1994). Achievement goal patterns in elementary and middle school students. Manuscript submitted for publication.

Urdu, T.C., & Roeser, R.W. (1993, April). The relations among adolescents' social cognitions, affect, and academic self-schemas. Paper presented at the Annual Meeting of the American Educational Research Association, Atlanta.

Weiner, B. (1990). History of motivational research in education. Journal of Educational Psychology, 82, 616-622

Wentzel, R.K. (1993). Motivation and achievement in early adolescence: The role of multiple classroom goals. Journal of Early Adolescence, 13, 4-20

Table 1: Scale Description and Reliability

Variable	Item Example	alpha	#Items	N	Mean	SD	Skew
Task Goals	"I feel most successful in school when I learn something I didn't know before"	.80	6	168	3.41	.92	-.45
Ability Goals	"I would feel successful in school if I did better than the other students in my class"	.84	4	168	3.20	1.24	-.18
Perception, Task Goals	"In this school, teachers think how much you learn is more important than test scores or grades"	.83	8	166	3.92	.80	-1.00
Perception, Ability Goals	"In this school we are encouraged to compete against each other for grades"	.75	6	167	2.64	.92	.43
Self-Efficacy	"I can do even the hardest school work if I try"	.84	6	167	3.79	.88	-.88
Emotional Tone	"I feel that I am not as good as most people I know" (reversed)	.78	11	163	3.73	.71	-.44
Peer Relationships	"I find it extremely hard to make friends" (reversed)	.79	9	163	3.89	.75	-.89
Impulse Control	"Sometimes I do things that I know I shouldn't but I can't stop myself" (reversed)	.79	7	167	3.33	.85	-.34
Affect at School	"School often makes me feel bad" (reversed)	.82	7	168	2.96	.92	-.13
Disruptive Behavior	"I get into trouble at school more than most kids."	.83	5	167	1.99	.99	1.39

Table 2: Zero-Order Correlations Among the Variables

	2	3	4	5	6	7	8	9	10	11	12	13
1.Task Goals	.0577	.5919**	-.3601**	.2565**	.6930**	.2566**	.2254**	.4416**	.5654**	-.5231**	-.2604**	.2460**
2.Ability Goals	1.00	-.0120**	.2195**	-.1812*	.1470	-.2893**	-.0526	-.2312**	-.1733*	.0757	-.0775	-.1979*
3. Perception of Task	1.00	-.3638**	.0946	.5233**	.1201	.2439**	.2139**	.3556**	-.3977**	-.2684**	.1406	
4. Perception of Ability	1.00	-.0979	-.2306**	-.2594**	-.1213	-.2817**	-.3471**	.4150**	.1123	-.1856*		
5.GPA	1.00	.3284**	.1248	.0799	.3279**	.2780**	-.3535**	.2051*	.3604**			
6.Self-Efficacy	1.00	.2811**	.2619**	.3996**	.4687**	-.3967**	-.1807*	.0298				
7.Emotional Tone	1.00	.5096**	.4357**	-.1615*	-.0234	.0710						
8.Peer Relationship	1.00	.0628	.2057**	-.1826*	.0624							
9.Impulse Control	1.00	1.00	.4364**	-.6019**	.0471	.2419**						
10.Affect at School	1.00	-.3780**	1.00	-.1082	.3074**							
11.Disruptive Behavior	1.00	.0442	1.00	-.3419**								
12.Ethnicity-AfAm 0 EuAm 1	1.00	-.0069	1.00									
13.Gender - M 0, F 1	1.00		1.00									

* - Significance Level of .05 ** - Significance Level of .01

Table 3: GPA Means of SES Groups

	N	GPA Mean
Whole Sample	162*	2.64
Free lunch	47	2.37
Reduced lunch	18	2.70
No-Privileges	97	2.76

* 6 cases had missing data

Table 4: Personal Goals as Predictors of Well-Being

	Task Goals	Ability Goals	Demographics	R2
Emotional Tone	.26***	-.30***		.15
Peer Relationship	.17*	-.13		.08
Impulse Control	.42***	-.22**		.27
Affect to School	.53***	-.18**	Gender -.15*	.39
Self-Efficacy	.69***	.09		.49
Disruptive Behavior	-.49***	.02	Gender .22**	.34
GPA	.28**	-.12	Gender -.21** Ethnicity .22**	.20

* <.05 **<.01 ***<.001

Table 5: Goals Perceived as Stressed by School as Predictors of Well-Being

	Task Goals	Ability Goals	Demographics	R2
Emotional Tone	-.01	-.28**		.07
Peer Relationship	.14	-.01	Ethnicity -.19*	.07
Impulse Control	.05	-.23**	Gender -.20**	.13
Affect to School	.18*	-.23**	Gender -.23**	.22
Self-Efficacy	.46***	.01		.24
Disruptive Behavior	-.23**	.31***	Gender .25***	.33
GPA	.17*	.02	Gender -.29*** Ethnicity .19*	.15

* <.05 **<.01 ***<.001

Table 6: Description of Profiles of Motivation Goals

Cluster	Description	N	Males	Females	Euro-Americans	African Americans
HT-HA	High task goals	46 (27.4%)	24 (52.2%)	22 (47.8%)	16 (34.8%)	25 (54.3%)
	High ability goals					
HT-MA	High task goals	26 (15.5%)	9 (34.6%)	17 (65.4%)	13 (50%)	12 (46.2%)
	Medium ability goals					
HT-LA	High task goals	36 (21.4%)	9 (25%)	27 (75%)	19 (52.8%)	16 (44.4%)
	Low ability goals					
MT-MA	Medium task goals	23 (13.7%)	9 (39.1%)	14 (60.9%)	15 (65.2%)	7 (30.4%)
	Medium ability goals					
MT-HA	Medium task goals	23 (13.7%)	16 (69.6%)	7 (30.4%)	18 (78.3%)	4 (17.4%)
	High ability goals					
LT-LA	Low task goals	14 (8.3%)	9* (64.3%)	4 (28.6%)	10 (71.4%)	2 (14.3%)
	Low ability goals					

* One subject failed to fill gender.

Table 7: Means, Standard Deviations, and MANOVA Results For Motivation Goals Profiles

	HT-HA	HT-MA	HT-LA	MT-MA	MT-HA	LT-LA	F	df	p<
Task	3.9*	4.11	3.85	2.88	2.41	1.83	68.42	162	.001
Goals	.58	.38	.63	.35	.53	.53			
Ability	4.4	3.1	1.61	2.98	4.49	1.77	244.94	162	.001
Goals	.45	.33	.49	.30	.49	.43			

*Top-Mean, Bottom-Standard Deviation

**Table 8: Results of ANOVA for Differences in Well-Being
Among Personal Goals Profiles**

	df	F values	Scheffe
Emotional Tone	5/151	4.03**	HT-LA > All OTHER PROFILES
Impulse Control	5/155	6.05***	HT-LA > HT-HA, MT-MA, MT-HA, LT-LA HT-MA > HT-HA, MT-MA, MT-HA, LT-LA
Affect at School	5/156	6.41***	HT-LA > HT-HA, MT-MA, MT-HA, LT-LA HT-MA > MT-HA, LT-LA HT-HA > MT-HA, LT-LA MT-MA > MT-HA
Self-Efficacy†	5/155	12.02***	HT-MA > LT-LA, MT-MA, MT-HA HT-HA > LT-LA, MT-MA, MT-HA HT-LA > LT-LA, MT-MA, MT-HA MT-MA > LT-LA MT-HA > LT-LA
Disruptive Behavior†	5/155	9.54***	HT-MA < LT-LA, MT-MA, MT-HA HT-LA < LT-LA, MT-MA, MT-HA HT-HA < LT-LA, MT-HA MT-MA < LT-LA

* <.05 **<.01 ***<.001

† Bartlett-Box test of homogeneity of variance was significant

Table 9: Description of Profiles of Perception of Goals Stressed by the School

Cluster	Description of Perception of:	N	Males	Females	Euro-Americans	African Americans
HT-HA	High task goals	15 (8.9%)	7 (46.7%)	8 (53.3%)	9 (60.0%)	4 (26.7%)
HT-MA	High ability goals	34 (20.2%)	19 (55.9%)	15 (44.1%)	14 (41.2%)	16 (47.1%)
HT-LA	Medium task goals	25 (14.9%)	6 (24.0%)	19 (76.0%)	7 (28.0%)	17 (63.0%)
MT-LA	Low ability goals	42 (25.0%)	15 (35.7%)	27 (64.3%)	25 (59.5%)	14 (33.3%)
MT-MA	Medium task goals	36 (21.4%)	18 (50.0%)	18 (50.0%)	25 (69.4%)	11 (30.6%)
MT-HA	Medium ability goals	13 (7.7%)	9* (69.2%)	3 (23.1%)	10 (76.9%)	2 (15.4%)

* One subject failed to fill gender.

Table 10: Means, Standard Deviations, and MANOVA Results For Profiles of Perception of Goals Stressed by School

	HT-HA	HT-MA	HT-LA	MT-LA	MT-MA	MT-HA	F	df	p<
Perception of Task Goals	4.19* .54	4.62 .22	4.64 .27	3.66 .45	3.58 .49	2.26 .66	78.91	160	.001
Perception of Ability Goals	3.93 .35	2.61 .35	1.45 .27	1.99 .35	3.03 .24	4.32 .48	221.75	160	.001

*Top-Mean
Bottom-Standard Deviation

Table 11: Results of ANOVA for Differences in Well-Being Among Perceived Goals Stressed by School Profiles

	df	F values	Scheffe
Emotional Tone	4/151	2.43*	HT-LA > HT-HA
			HT-MA > HT-HA
			MT-LA > HT-HA
Impulse Control	4/153	3.43**	HT-LA > HT-MA, MT-MA, MT-HA, HT-HA
			MT-LA > MT-MA, MT-HA, HT-HA
Affect at School	4/153	4.93***	HT-LA > All other profiles
			HT-MA > MT-HA, HT-HA
Self-Efficacy	4/152	4.16***	HT-LA > MT-HA, MT-MA
			HT-MA > MT-HA, MT-MA
			MT-LA > MT-HA
			MT-MA > MT-HA
Disruptive Behavior†	4/152	8.53***	HT-HA > MT-HA
			HT-LA < MT-HA, HT-HA, MT-MA
			MT-LA < MT-HA, HT-HA, MT-MA
			HT-MA < MT-HA, HT-HA
			MT-MA < MT-HA

* <.05 **<.01 ***<.001

† Bartlett-Box test of homogeneity of variance was significant

Table 12 :Distribution of Profiles of Personal Goals by Profiles of Perception of Goals Stressed by the School

Profiles of Perception of Goals Stressed by the School

	HT-HA	HT-MA	HT-LA	MT-LA	MT-MA	MT-HA
HT-HA	4	22	4	8	7	-
HT-MA	3	1	7	9	6	-
HT-LA	1	.8	12	10	3	3
MT-MA	4	1	2	5	8	3
MT-HA	2	1	-	5	9	5
LT-LA	1	1	-	5	3	3

Profiles of Personal Goals

**Table 13 : Correlations Among Scores on Goal Measures
Within Profiles of Personal Goals**

	HT-HA	HT-MA	HT-LA	MT-MA	MT-HA	LT-LA
Task Goals & Ability Goals	.49**	-.21	-.26	.41	.25	.47
Perception of Task Goals & Perception of Ability Goals	.00	-.22	-.59**	-.49*	-.40	-.37
Task Goals & Perception of Task Goals	.24	.22	.62**	.35	.45*	.43
Ability Goals & Perception of Ability Goals	.41**	.05	.12	.37	.13	-.22
Task Goals & Perception of Ability Goals	-.09	.25	-.41*	-.11	-.43*	-.66*
Ability Goals & Perception of Task Goals	.27	-.34	-.15	-.18	-.12	.07

* - $p < .05$, ** - $p < .01$

Table 14: Personal Goals as Predictors of Well-Being Among African American Students

	Task Goals	Ability Goals	Demographics	R2
Emotional Tone	.14	-.23		.06
Peer Relationship	.27*	.06		.08
Impulse Control	.47***	-.41***		.33
Affect to School	.57***	-.21*	Gender -.27**	.41
Self-Efficacy	.60***	.12	Gender .21*	.48
Disruptive Behavior	-.48***	.36**		.30
GPA	.25*	-.24*		.10

* <.05 **<.01 ***<.001

Table 15: Perceived Goals Stressed in School as Predictors of Well-Being for African American Students

	Task Goals	Ability Goals	Demographics	R2
Emotional Tone	-.18	-.35*		.09
Peer Relationship	-.13	-.31*		.07
Impulse Control	.11	-.35*		.17
Affect to School	.19	-.16	Gender -.26*	.20
Self-Efficacy	.49***	.20		.18
Disruptive Behavior	-.41***	.22		.32
GPA	.16	-.07		.04

* <.05 **<.01 ***<.001

Table 16: Personal Goals as Predictors of Well-Being Among Euro-American Students

	Task Goals	Ability Goals	Demographics	R ²
Emotional Tone	.31**	-.33***		.22
Peer Relationship	.09	-.31**		.11
Impulse Control	.41***	-.04	Gender -.26** SES -.22**	.38
Affect to School	.53***	-.15		.37
Self-Efficacy	.74***	.02		.51
Disruptive Behavior	-.47***	-.19*	Gender .38***	.52
GPA	.22*	-.05	Gender -.41**	.30

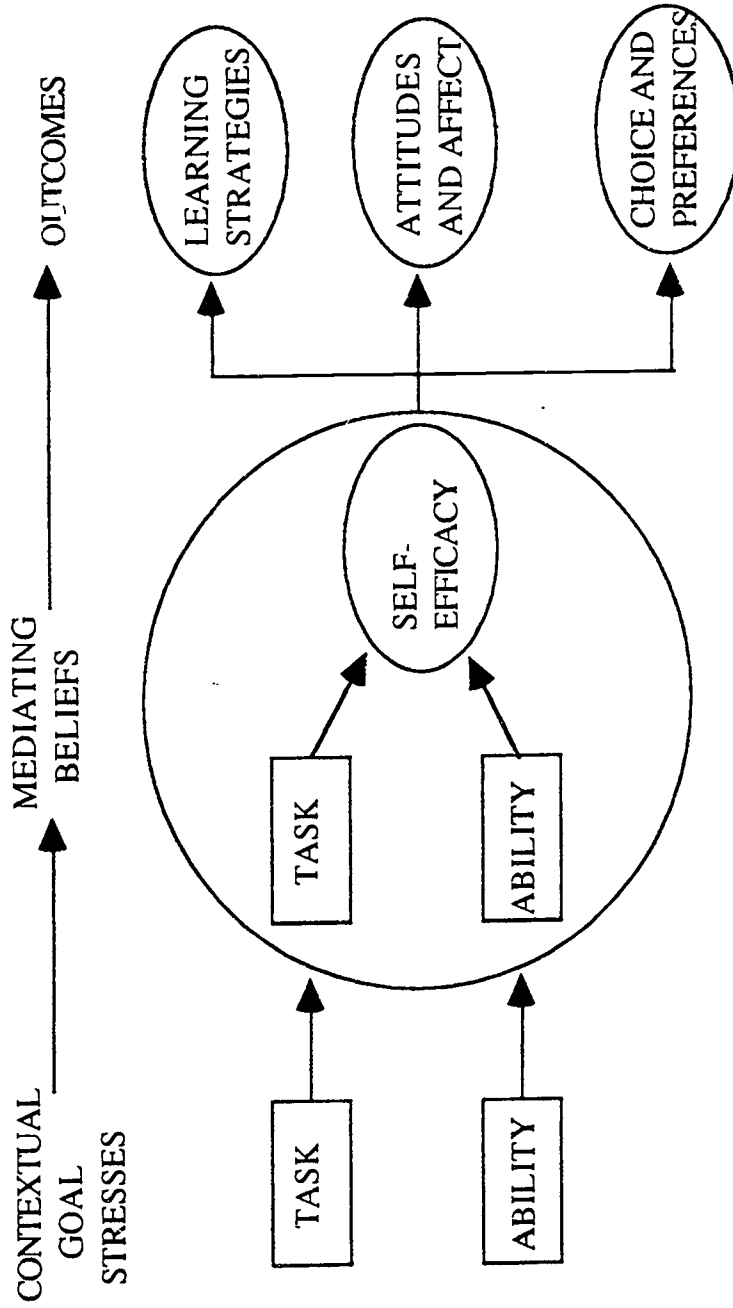
* <.05 **<.01 ***<.001

Table 17: Perceived Goals Stressed in School as Predictors of Well-Being for Euro-American Students

	Task Goals	Ability Goals	Demographics	R ²
Emotional Tone	.06	-.25***		.08
Peer Relationship	.24*	-.11**		.05
Impulse Control	.01	-.19†	Gender -.39*** SES -.24*	.27
Affect to School	.17	-.26*	Gender -.23*	.21
Self-Efficacy	.43***	-.07		.26
Disruptive Behavior	-.12	.37***	Gender .46***	.48
GPA	.12	.03	Gender -.48***	.26

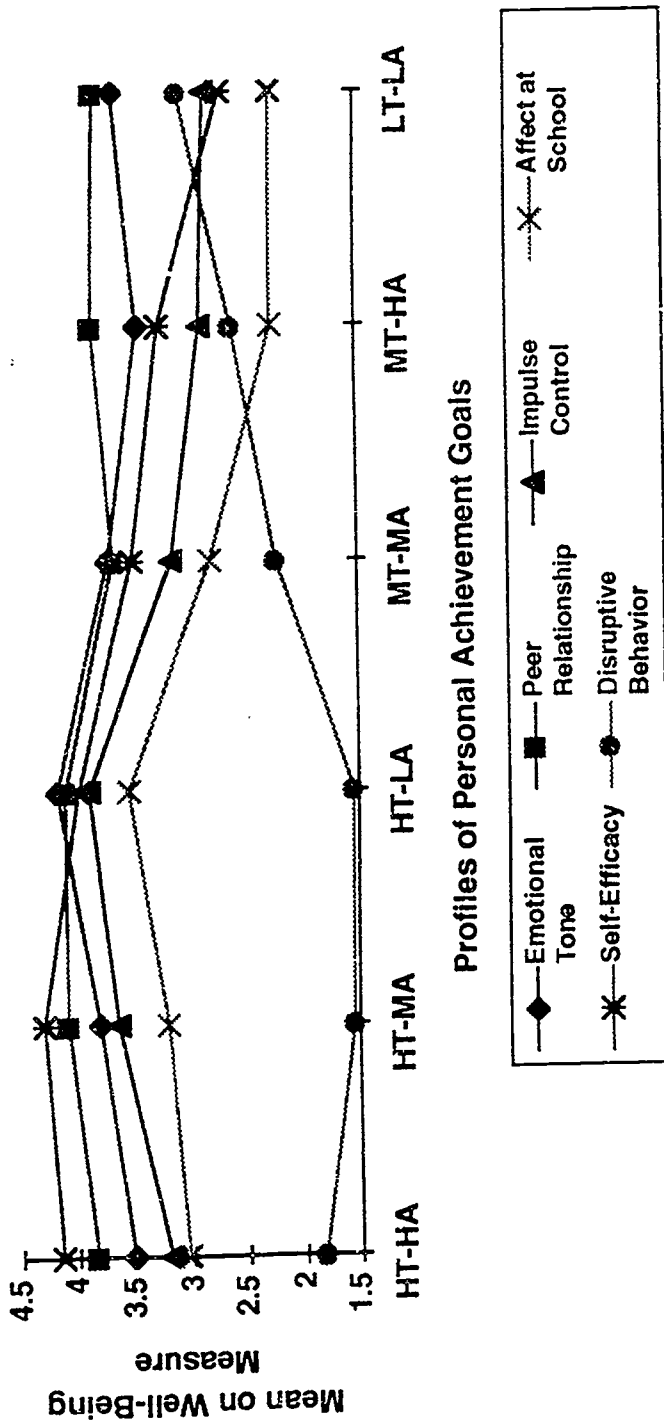
† <.07 * <.05 **<.01 ***<.001

FIGURE 1: SCHEMATIC REPRESENTATION OF GOAL THEORY MODEL



Adopted from Anderman and Maehr, 1994.

Figure 2: Profiles of Personal Goals Means on Psychological Well-Being Measures



Profiles of Personal Achievement Goals

Figure 3: Profiles of Perceptions of Goals Stressed by School Means on Psychological Well-Being Measures

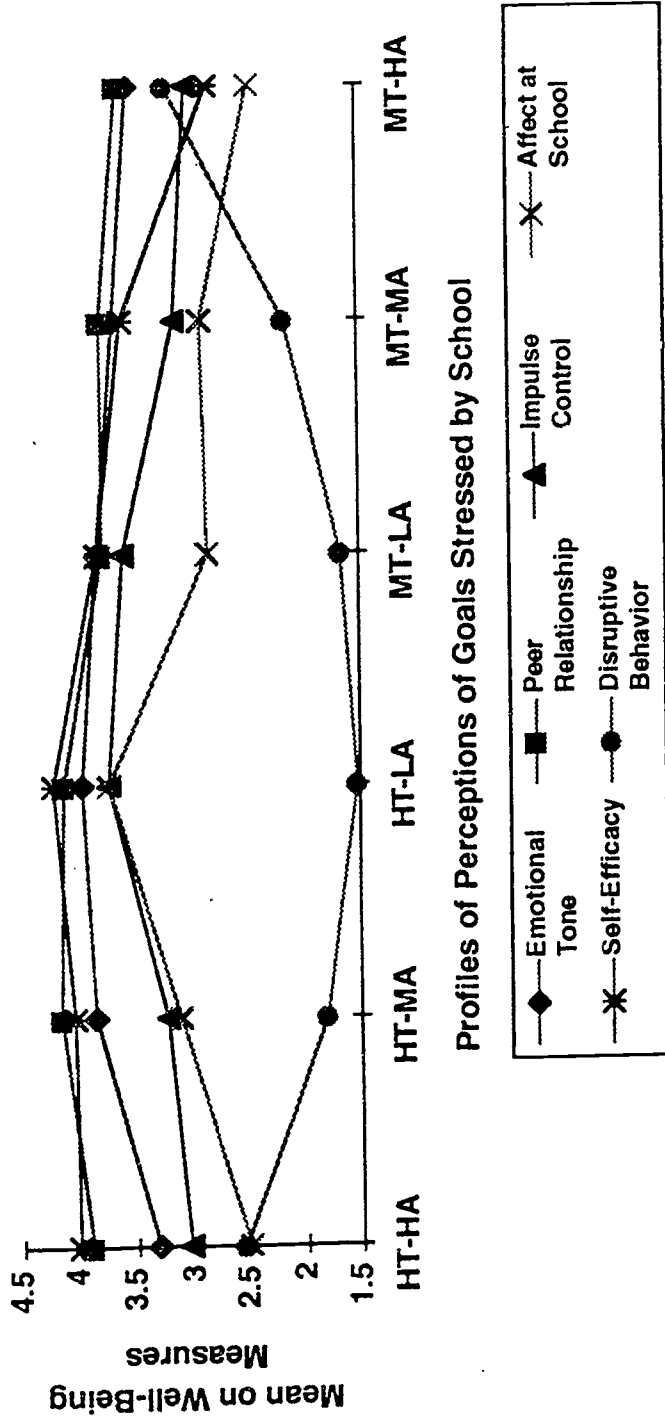


FIGURE 4: SCHEMATIC REPRESENTATION OF REVISED GOAL THEORY MODEL

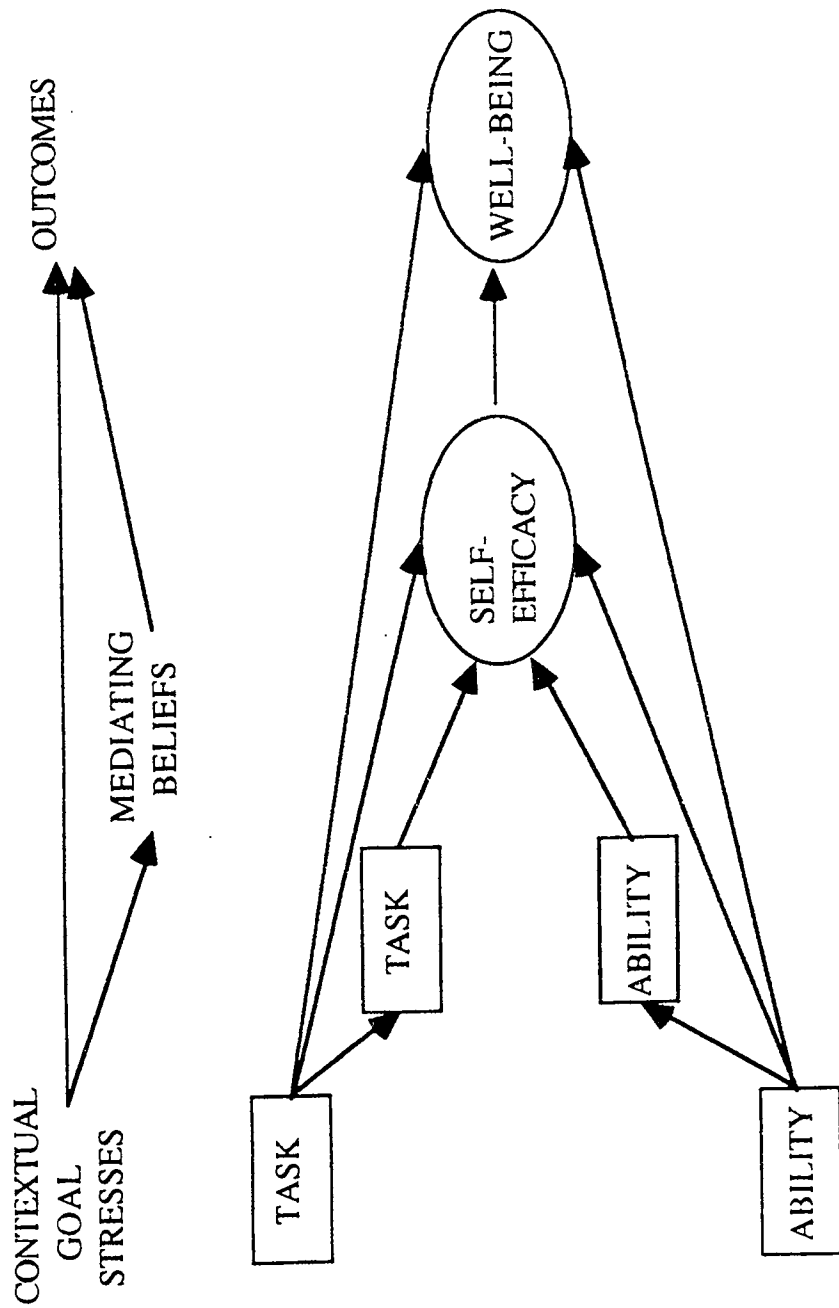
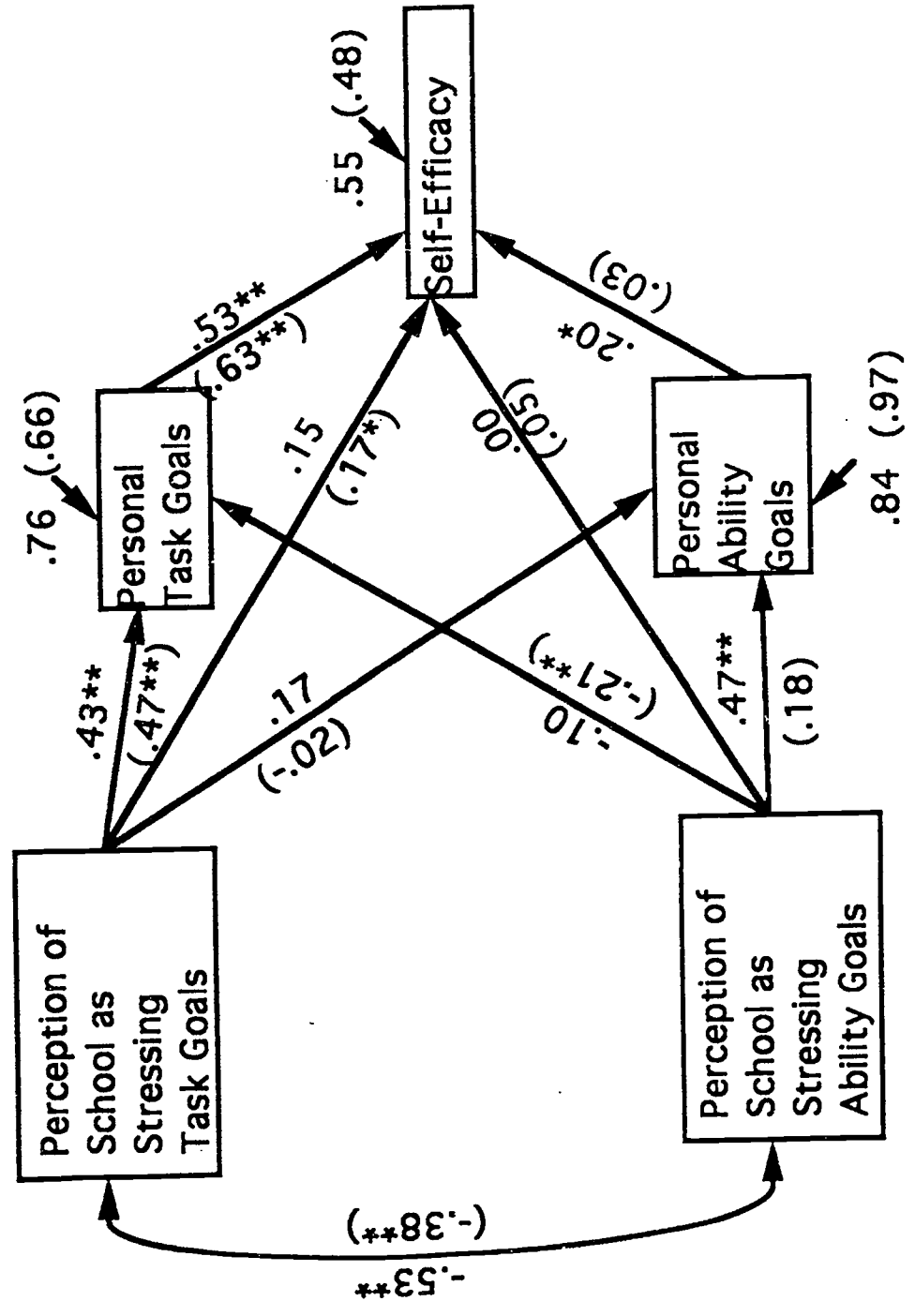


Figure 5: PROCESS MODEL 1

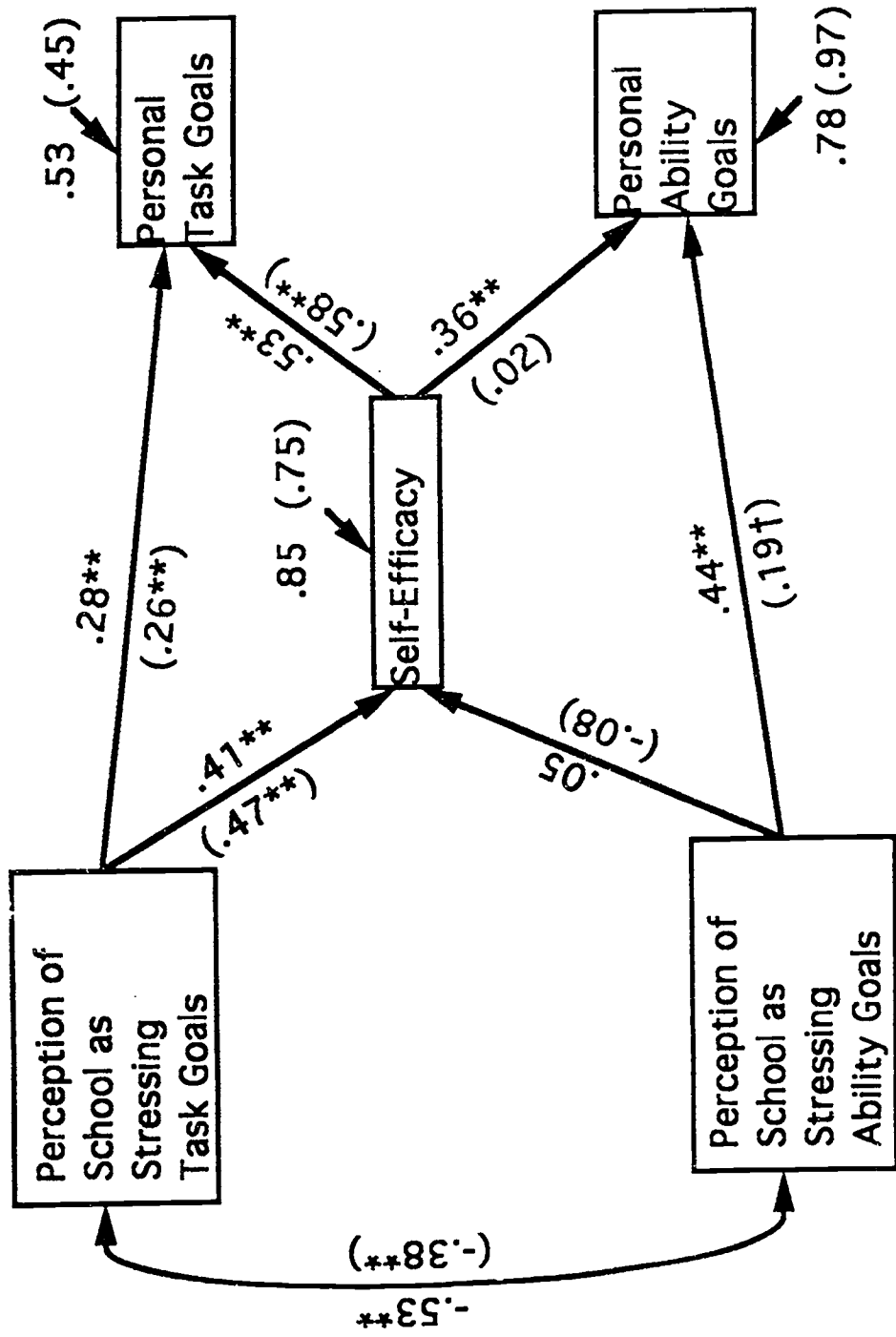


AFRICAN AMERICAN STUDENTS:
 Total coef. of determination = .381
 Chi Square = 7.18, df=1, p=.007
 Adjusted Goodness of Fit = .430
 Root Mean Square of Rez. = .076

EURO-AMERICAN STUDENTS:
 Total coef. of determination = .383
 Chi Square = 0.00, df= 1, p=.959
 Adjusted Goodness of Fit = 1.00
 Root Mean Square of Rez. = .001

† p<.07 * p<.05 ** p<.01

Figure 6: PROCESS MODEL 2



AFRICAN AMERICAN STUDENTS:
 Total coef. of determination = .396
 Chi Square = 4.26, $df=3$, $p=.234$
 Adjusted Goodness of Fit = .918
 Root Mean Square of Rez. = .027

In prantheses
 EURO-AMERICAN STUDENTS:
 Total coef. of determination = .351
 Chi Square = 5.52, $df=3$, $p=.137$
 Adjusted Goodness of Fit = .894
 Root Mean Square of Rez. = .039

$\dagger p < .07$ * $p < .05$ ** $p < .01$

