

Factors of Ethnic Identity and Parents' Goals in Examining College Students' Academic Achievement Goals

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Abstract

The present research was designed to establish the relationship of parental academic achievement goals and racial ethnic identity (REI) to minority college students' adoption of personal achievement goals in college courses. Multiple regression analyses conducted revealed the influence of perceived parental achievement goals and racial ethnic identity on students' adoption of mastery approach, performance approach, and performance avoid goals. The results of the current research suggest that increased parent academic communication may influence students' personal goals for improving their skills and their grades in college. In addition, as these students form their identities, a greater belief of the importance of achievement to their ethnic groups may also play an influential role in their adoption of achievement goals.

Keywords: College Students, Achievement Goals, Motivation, Identity

1. Introduction

As college populations have become more diverse, it has become increasingly important to ensure that college students of varying ethnic backgrounds have the opportunity to be successful in completing their degrees. A number of research studies have identified various combinations of factors that may influence the achievement of college students from diverse ethnicities. As many college students begin a new adventure, they are faced with establishing their own identities.

For students from diverse ethnic backgrounds, in addition to establishing an identity separate from their parents, these students are also faced with establishing their racial ethnic identity as well. The changes that occur for college students from ethnically diverse backgrounds may play a great influence on their academic success in college.

Many students enter college during the period of emerging adulthood, defined as a stage of development for 18-25 year olds between adolescence and adulthood (Arnett, 2000; Arnett & Taber, 1994). This period of development includes opportunities for engaging in personal identity exploration and attaining autonomy from parents. Identity development may be linked to relationships with parents, teachers, and peers, and students' personal motivational goals may influence their need for establishing these relationships (La Guardia, 2009).

For underrepresented, ethnic minority students, additional supportive factors may be necessary to ensure their identity formation and autonomy (Kaylor & Flores 2007; Pascarella, Seifert, & Whitt, 2008; Patterson Lorenzetti, 2008; Rowan-Kenyon, Bell, & Perna, 2008). Among other factors, parental support and appropriate academic preparation may offer students a chance at success in their college pursuits.

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Through the establishment of appropriate goals and strong parental support, minority students entering college may have a greater opportunity for completing their college degrees (Rowan-Kenyon, Bell, & Perna, 2008).

Achievement goal theory explains that students' achievement goals, or their reasons or purposes for engaging in academic work, are related to a number of adaptive and maladaptive outcomes (Elliot & Church 1997; Harackiewicz, Barron, & Elliot 1998; Midgley, Kaplan, & Middleton 2001; Pintrich 2000; Senko, Hulleman, & Harackiewicz 2011; Wolters 2004). Research suggests that students' classroom experiences, prior ability, self-efficacy, and parental influence may assist in understanding why students adopt mastery or performance goals (Harackiewicz, Barron, & Elliot 1998; Moorman & Pomerantz 2008; Levpuscek & Zupancic 2009; Walker & Greene 2009). In addition, some researchers suggest that differences may exist in students' adoption of different goals as a result of their ethnicity or socioeconomic status (Gutman 2006; Witkow & Fuligni 2007).

As college populations have become more diverse, a greater need exists for researchers to understand factors which influence students' adoption of academic achievement goals, given the potential for achievement goals to help them successfully attain their academic degrees

The purpose of this research is to examine the ways in which ethnic minority college students' perceptions of parents' achievement goals for them and their racial ethnic identity are related to their own achievement goals. Because recent research suggests that during the college years, many students experience continued communication with parents while undergoing identity formation, exploring parental influence and sense of racial ethnic identity in emerging adulthood is an important undertaking in order to understand students' motivation in college.

1.1 Racial Ethnic Identity

Recent research has considered the influence of students' racial identity in predicting academic success in college. Negative perceptions of one's race may lead to academic disengagement through the experience of stereotype threat (Osborne & Walker 2006; Steele & Aronson 1995). Students who maintain a positive ethnic identity may experience increased academic achievement (Altschul, Oyserman, & Bybee 2006; Mendoza-Denton, Pietrzak, & Downey 2008). Arnett (2000) describes the period of emerging adulthood as that of instability, change, and exploration of the self, which may also occur as students of diverse backgrounds seek to attain their ethnic identity as well (Phinney 1996).

Oyserman, Gant, and Ager (1995) describe a student's racial-ethnic identity (REI) as an exploration of the self, found in one's connectedness, awareness of racism, and embedded achievement. REI connectedness refers to one's positive sense of belonging to one's cultural group. Maintaining a sense of belonging to one's ethnic group may be a central part of establishing a greater level of REI. Research suggests that low-income African American and Hispanic youth maintaining a higher level of in-group belonging may attain higher academic achievement than those lacking a sense of REI Connectedness (Altschul et al. 2006). For Asian college students, those students with a greater REI connectedness may experience a greater valuation of the label of being Asian (Oyserman & Sakamoto 2007).

REI awareness of racism measures a youth's awareness of how others perceive his or her group. In a recent study of African American adolescents, researchers found that those students with a greater perception of discriminatory experiences reported a lower sense of psychological well-being (Oyserman et al., 1995). By attaining a sense of in-group membership, these youth may be less likely to become affected by negative racial influences. Though they may be aware of racism from others, their in-group membership may allow them to ignore others' perceptions of their abilities. Becoming aware of the perceptions of others and gaining an understanding of one's own identity may lead to greater academic success as students recognize that their abilities, and not others' perceptions, affect their success in education or job attainment (Altschul et al., 2006; Phinney, 1996).

REI embedded achievement identifies achievement as important to the in-group. Oyserman, Gant, and Ager (1995) suggest that minority students with a sense of connection to their racial group may attain greater academic achievement than minority youth lacking a strong connection to their minority group. Oyserman, Harrison, and Bybee (2001) suggest that both male and female African American eighth grade students possessing a higher sense of REI embedded achievement may possess a greater sense of self-efficacy for academics. Also, additional research surveying eighth grade students indicating a higher level of Awareness of Racism revealed a higher GPA than those indicating a lower awareness of racism (Altschul et al., 2006).

Ethnic identity of college students has been analyzed across diverse ethnic groups and socioeconomic levels. Students of varied ethnic backgrounds may benefit from attaining a greater understanding of their own ethnic group and how their ethnic group relates with other ethnic groups in academic settings (Phinney 1996). For example, research examining Latino college students during the period of emerging adulthood suggests that some of these students may still be exploring their connectedness to their racial group (Syed, Azmitia, & Phinney 2007). Ong, Phinney, and Dennis (2006) suggest that with an increased ethnic identity, Hispanic students may be able to achieve greater academic success by buffering the effects of stressful experiences.

In addition, some studies with ethnically diverse college samples have sought to determine college students' ethnic identity as a predictor of students' achievement and motivation (Fuligni, Witkow, & Garcia 2005; Pizzolato et al. 2008; Rivas-Drake 2008). In a study of minority college students, ethnic identity and epistemological development positively predicted students' college grade point average, indicating the importance of ethnic identity to academic achievement (Pizzolato et al.).

1.2 Parental Influence

In addition to establishing their ethnic identity, college students in the period of emerging adulthood are also faced with establishing autonomy from their parents. Current research suggests that students in college may continue to experience influence from parents, as they may stay in close contact with parents through electronic communication (Hofer 2008) or even be likely to still live at home (Strom & Strom 2005).

Fulton and Turner (2008) also examined the influence of parenting on college students' motivation through parental warmth and supervision. Results suggested that for both males and females, parental warmth may provide students with the most effective perception of control. In addition, those students with greater perceptions of control were more likely to attain greater academic scores. Recent research analyzing the period of emerging adulthood suggests this period between adolescence and adulthood may be lengthened for college students who remain influenced by parents. Arnett and Taber (1994) describe emerging adults as those who seek autonomous academic and cognitive beliefs and attempt to become independent, self-sufficient members of society. Those remaining continually influenced by parents may transition more slowly to adulthood, delaying personal independence and autonomy (Cote & Levine 2002).

Parents' academic influence may be understood through goal orientation theory, described by students' perceptions of parenting styles (Chan & Chan 2005; Gonzalez & Wolters 2006), parenting influence and support (Boon, 2007), and parental goals (Friedel et al. 2006; Hruda & Midgley 1997; Spera 2006). Students perceive parental goals as those encouraging them to develop or display their academic competence, in the form of mastery or performance goals.

Students' perception of parents' mastery goals is reflected in students' beliefs that parents wish for them to gain a better understanding of the subject matter. Students' perceptions of parental performance goals are expressed in students' belief that parents desire for higher grades in their class work and outperforming their peers.

1.3 Achievement Goal Theory

Achievement goal theory proposes that students' achievement motivation and engagement in learning may be explained by the type of goal orientation students adopt (Ames 1992; Dweck & Leggett 1988), including mastery and performance-oriented goals (Pintrich 1999). Mastery goals may lead students toward more adaptive outcomes of greater task valuing and increased metacognitive strategy use with a focus on mastering the content (Ames 1992). In contrast, performance-oriented goals often lead students to less adaptive outcomes with decreased strategy use and lower task value by maintaining a focus on performing in relation to others (Ames 1992; Pintrich 1999, 2000). Research in achievement goal theory also identifies that a difference within mastery and performance goals exists through the delineation of approach and avoidance goals (Elliot & McGregor 2001; Wolters 2004). Students adopting mastery approach goal orientations are motivated in pursuing goals to gain competence in the subject area. A mastery avoid orientation is held by students working to avoid a lack of mastery in the subject area. Students adopting performance approach goals engage in learning to demonstrate their ability in relation to others by attaining high grades. Students adopting performance avoidance goals present effort in the classroom in order to avoid appearing incompetent. Though some studies suggest that performance goals may be less adaptive than mastery goals, research in achievement goal theory offers that college students may adopt both mastery and performance goals in their courses, and that a multiple goals perspective may be the most adaptive, especially for college students (Harackiewicz, Barron, & Elliot 1998; Harackiewicz et al. 2000).

1.4 Hypotheses

The present research was designed to better understand the relationship that the parent goals and ethnic identity of ethnic minority college students may have on their academic achievement goals.

Influential factors in the establishment of performance approach and mastery approach goal orientations may be a positive regard for REI connectedness, embedded achievement and awareness of racism, as well as mastery and performance perceived parental goal structures. As a result of recent research (Fulgini, Witkow, & Garcia 2005; Gonzales & Wolters 2006; Harackiewicz et al. 2002; Kerpelman, Eryigit, & Stephens 2008; Mendoza-Denton, Pietrzak, & Downey 2008; Oyserman 2008; Rivas-Drake 2008), it is hypothesized that ethnic minority college students espousing greater levels of REI variables will also espouse greater levels of mastery approach and performance approach achievement goals. Additionally, it is hypothesized that students' perceptions of parents' achievement goals for them will be directly predictive of their own personal achievement goals.

2. Method

2.1 Participants

Participants ($N = 463$) were students at a large public, multiethnic university in the southern United States who were offered a chance to participate in return for course credit or extra credit, as determined by their professors. Only students indicating their ethnicity as African American/Black, Hispanic/Latino, or Asian/Asian American were retained in the sample because of the researchers' interest in the predictive relationship of REI on students' achievement goal adoption. In addition, previous research in REI has only been conducted with samples of African American, Hispanic, and Asian students. The sample was also limited to students ages 18 – 25 years old because that represented the period of emerging adulthood (Arnett 2000). The final sample was comprised of more females ($n = 374$, 80%) than males ($n = 91$, 19%), with an average age of 21.46 years ($SD = 1.74$). Students self-reported their ethnicity as African American ($n = 135$, 29%), Hispanic ($n = 160$, 35%), or Asian ($n = 168$, 36%).

2.2 Measures

The primary instrument in the study was a self-report survey administered online.

Initial survey items asked students to respond to various demographic items, including gender, ethnicity, current living situation (live alone/with a roommate, live at home with parents/guardians, live with other family member, or other), and weekly academic communication with parents (never, rarely, occasionally, very frequently, always). The remainder of the survey consisted of various Likert-scaled items with a response scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) based upon existing measures for achievement goal orientations, perceived parental goals, and racial ethnic identity.

2.21 Achievement Goal Orientations

The measure utilized to assess achievement goal orientations for students' current college courses was the Achievement Goal Questionnaire- Revised (Elliot & Murayama 2008). Each subscale was comprised of three items to assess students' goals to master the material (mastery approach, $\alpha = .82$), to avoid an incomplete understanding (mastery avoid, $\alpha = .78$), to perform better than other students (performance approach, $\alpha = .84$), and to avoid doing worse than other students (performance avoid, $\alpha = .82$).

2.22 Perceived Parental Goals

The second part of the survey assessed students' perceived parental goals. This section was adapted from the Patterns of Adaptive Learning Scales (Midgley et al. 2000). The authors attempted to expand the existing measure into a 2x2 approach/avoid scale, creating new items similar to the student achievement goals scale. Using an exploratory factor analysis with an oblique rotation, only two factors were revealed as in the original work by Hruda and Midgley (1997). Therefore, the researchers decided to utilize the original perceived parental goal scale with perceived parental mastery and perceived parental performance scales. Two subscales were used to assess students' perceptions of parents' goals for them to perform better when compared to others (perceived parental performance goals, $\alpha = .85$) and students' perceptions of parents' goals for them to understand the concepts (perceived parental mastery goals, $\alpha = .85$).

2.23 Racial Ethnic Identity

The third section of the survey assessed students' reported racial ethnic identity. This section was adapted from the Tripartite Model of Racial Ethnic Identity, which was originally developed from open-ended responses from college students' reported strategies to obtain their possible selves (Oyserman, Gant, & Ager 1995). Though the original scale was developed for use with African American students, the researchers adapted the scale by instructing students to think about their race, then use their response to complete the Racial Ethnic Identity scale. Subscales included items to assess students' connectedness to their ethnic community (REI connectedness, $\alpha = .82$), students' awareness of racism in the community (REI awareness of racism, $\alpha = .79$), and students' importance to perform well academically to benefit others in their ethnic community (REI embedded achievement, $\alpha = .74$). Previous research utilizing the REI measure suggests that strong reliability and validity exist with African American adolescent (Oyserman, Gant, & Ager 1995), Hispanic adolescent (Oyserman 2008), & Latino college (Oyserman & Sakamoto 1997) populations.

3. Results

Researchers determined hierarchical linear regression was most appropriate to determine the influence of college students' perceived parental goals and racial ethnic identity on each of their academic achievement goals.

Four three-step hierarchical linear regression analyses were conducted to examine the influence of living situation, parent communication, gender, racial ethnic identity, and perceived parental goals on students' personal achievement goals. Gender, ethnicity, living situation (dichotomously coded 1 = live with parents, 0 = do not live with parents), and parent academic communication were entered in Step 1 as demographic and student personal variables.

In order to include the three ethnic groups in the regression models, two dichotomously-coded variables were created (African American: African American = 1, Hispanic or Asian = 0; Hispanic: Hispanic = 1, African American or Asian = 0). The three racial ethnic identity variables (REI connectedness, REI awareness of racism, and REI embedded achievement) were entered in Step 2.

Finally, the two components of perceived parental goals were entered in Step 3 of the analysis. In the interest of space, Step 3 will be reviewed in the Results.

As shown in Table 1, the first regression analysis examined predictors of students' mastery approach goal orientation. The third step of the analysis increased the amount of variance explained to 22%, indicating that the variables in the model accounted for 22% of students' mastery approach goal adoption ($\Delta R^2 = .09$, $\Delta F(2, 420) = 23.84$, $p < .001$). In the third step, REI embedded achievement ($\beta = .20$, $p < .01$) remained a significant positive predictor of student mastery approach goals, indicating that students who believe achieving to benefit their ethnic community are more likely to adopt goals to master their skills. Perceived parental mastery goals ($\beta = .36$, $p < .001$) were also revealed as a positive predictor, indicating the influence of students' perceptions of parents goals for them to improve their skills as a predictor of their own goals to improve their skills.

Table 1: Hierarchical Regression Predicting Mastery Approach Goals and Mastery Avoid Goals

Predictor variables	<i>Mastery Approach</i>			<i>Mastery Avoid</i>		
	B	SE B	β	B	SE B	β
Step 1						
Ethnicity African American	.12	.09	.08	.01	.14	.01
Ethnicity Hispanic	.02	.08	.01	-.37	.13	-.16**
Living Situation	-.04	.08	-.03	-.06	.12	-.02
Parent Academic Commun.	.12	.04	.17**	.06	.06	.06
Gender	.25	.09	.14**	.08	.14	.03
Step 2						
Ethnicity African American	-.01	.09	-.01	-.04	.15	-.02
Ethnicity Hispanic	-.06	.08	-.04	-.39	.13	-.17**
Living Situation	-.04	.07	-.03	-.06	.12	-.02
Parent Academic Commun.	.09	.04	.13**	.04	.06	.04
Gender	.22	.09	.12*	.07	.14	.03
REI Connectedness	.05	.06	.06	.13	.09	.11
REI Embedded Achievement	.25	.06	.28***	.01	.10	.01
REI Awareness of Racism	.00	.05	.00	-.03	.08	-.02
Step 3						
Ethnicity African American	-.07	.09	-.04	.07	.16	.03
Ethnicity Hispanic	-.06	.08	-.04	-.25	.14	-.11
Living Situation	-.03	.07	-.02	-.50	.11	-.02
Parent Academic Commun.	.03	.03	.04	.00	.06	.00
Gender	.16	.08	.09	.07	.14	.03
REI Connectedness	.02	.06	.02	.16	.09	.13
REI Embedded Achievement	.18	.06	.20**	-.11	.11	-.08
REI Awareness of Racism	.02	.05	.02	-.52	.08	-.04
Parental Mastery	.35	.05	.36***	.17	.08	.12*
Parental Performance	-.02	.05	-.03	.13	.08	.11

Notes. Ethnicity African American: African American = 1, Hispanic or Asian = 0; Hispanic: Hispanic = 1, African American or Asian = 0; Gender: 0 = Male, 1 = Female; Parent Living Situation: 1 = Live with parents, 0 = Don't live with parents; Mastery-Approach: Adjusted $R^2 = .05$ ($p < .001$) for Step 1; $R^2 \Delta = .10$, Adjusted $R^2 = .14$ ($p < .001$) for Step 2; $R^2 \Delta = .09$; Adjusted $R^2 = .22$ ($p < .001$) for Step 3. Mastery-Avoid: Adjusted $R^2 = .02$ ($p < .05$) for Step 1; $R^2 \Delta = .01$ Adjusted $R^2 = .02$ ($p < .05$) for Step 2; $R^2 \Delta = .03$; Adjusted $R^2 = .07$ ($p < .001$) for Step 3.

* $p < .05$. ** $p < .01$. *** $p < .001$

The results of the second regression, presented in Table 1, analyzed students' mastery avoid orientation. The final step of the analysis revealed that with the addition of perceived parental goals, the overall model accounted for 4% of the overall explained variance ($F(2, 413) = 4.323, p < .05$), indicating that a small percentage of students' adoption of mastery avoid goals may be predicted by students' perceived parental goals and racial ethnic identity.

The only significant predictor of students' mastery avoid goals was revealed in students' perceived parental mastery goals ($\beta = .12, p < .05$) to indicate the influence of students' perceptions of parents goals for them to improve their skills in their adoption of goals to avoid losing their skills.

The analyses for students' performance approach goal orientations are found in Table 2. As shown in step 3, perceived parental goals the variance explained by 22% of the model ($\Delta R^2 = .05, \Delta F(2, 418) = 13.10, p < .001$). (With the addition of all variables, living with parents ($\beta = -.06, p < .05$) and academic communication with parents ($\beta = .12, p < .05$) attained significance as predictors of students' adoption of performance approach goals. Therefore, both living at home and communicating more frequently with parents about their academics were more positively related to adoption of performance approach goals. REI embedded achievement ($\beta = .20, p < .01$) attained significance as a positive predictor of students' performance approach goals. Also, perceived parental mastery approach goals ($\beta = .12, p < .05$) and perceived parental performance goals ($\beta = .17, p < .01$) attained significance as positive predictors.

Table 2: Hierarchical Regression Predicting Performance Approach Goals and Performance Avoid Goals

Predictor variables	Performance Approach			Performance Avoid		
	B	SE B	β	B	SE B	β
Step 1						
Ethnicity African American	-.08	.11	-.04	-.07	.12	-.04
Ethnicity Hispanic	-.15	.10	-.09	-.26	.11	-.13*
Living Situation	-.16	.09	-.09	-.11	.10	-.05
Parent Academic Comm.	.16	.04	.18***	.15	.05	.15***
Gender	-.08	.11	-.04	-.05	.12	-.02
Step 2						
Ethnicity African American	-.29	.11	-.16**	-.24	.13	-.11
Ethnicity Hispanic	-.27	.10	-.15**	-.35	.11	-.17**
Living Situation	-.16	.08	-.09	-.11	.10	-.06
Parent Academic Comm.	.12	.04	.14**	.12	.05	.12*
Gender	-.15	.10	-.07	-.09	.12	-.04
REI Connectedness	.06	.07	.06	.03	.08	.03
REI Embedded Achievement	.34	.08	.34***	.30	.09	.24**
REI Awareness of Racism	.04	.06	.04	.03	.07	.02
Step 3						
Ethnicity African American	-.28	.11	-.15*	-.16	.13	-.07
Ethnicity Hispanic	-.18	.10	-.10	-.22	.12	-.11*
Living Situation	-.17	.08	-.06*	-.12	.10	-.06
Parent Academic Commun.	.08	.04	.12*	.09	.05	.09
Gender	-.20	.10	-.09*	-.11	.12	-.04
REI Connectedness	.07	.07	.08	.07	.08	.06
REI Embedded Achievement	.23	.08	.20**	.18	.09	.16*
REI Awareness of Racism	.04	.06	.04	.01	.07	.01
Parental Mastery	.19	.06	.12**	.11	.07	.09
Parental Performance	.22	.06	.17***	.23	.07	.17**

Notes. Ethnicity African American: African American = 1, Hispanic or Asian = 0; Hispanic: Hispanic = 1, African American or Asian = 0; Gender: 0 = Male, 1 = Female; Parent Living Situation: 1 = Live with parents, 0 = Don't live with parents; Performance-Approach: Adjusted $R^2 = .03$ ($p < .001$) for Step 1; $R^2 \Delta = .14$, Adjusted $R^2 = .17$ ($p < .001$) for Step 2; $R^2 \Delta = .05$; Adjusted $R^2 = .22$ ($p < .001$) for Step 3. Performance-Avoid: Adjusted $R^2 = .02$ ($p < .01$) for Step 1; $R^2 \Delta = .07$ Adjusted $R^2 = .10$ ($p < .001$) for Step 2; $R^2 \Delta = .04$; Adjusted $R^2 = .13$ ($p < .001$) for Step 3.

* $p < .05$. ** $p < .01$. *** $p < .001$

The final regression predicting students' adoption of performance avoid goals can be found in Table 2. In the final analysis, a total of 12% ($\Delta R^2 = .04$, $\Delta F(2, 421) = 8.40$, $p < .001$) of explained variance was revealed for the model.

Ethnicity was revealed as a significant predictor ($\beta = -.11$, $p < .05$), indicating that Hispanic students in the study were more likely to adopt performance avoid goals. REI Embedded Achievement was also a significant predictor in the model ($\beta = .16$, $p < .05$) to reveal that students who believe performing well in academics is important to their culture are more likely to adopt goals to avoid making the worst grades when compared to others. Perceived parental performance goals ($\beta = .17$, $p < .01$) were revealed as a positive predictor of students' adoption of performance avoid goals.

4. Discussion

The present research sought to examine the ways in which minority college students' perceptions of parents' goals for them and their racial ethnic identity were related to their academic achievement goals. Because recent research suggests that many college students may experience continued identity formation, exploring students' parental influence and sense of identity in emerging adulthood remains an important aspect of understanding influential relationships leading to students' success in college.

4.1 Ethnic Identity

Students' REI was analyzed as a predictor of students' personal achievement goals. REI embedded achievement was revealed as the only component of the REI scale that was significantly related to students' personal achievement goals. Neither REI connectedness nor awareness of racism predicted students' personal achievement goals.

Students in the current sample who reported greater REI embedded achievement also reported greater personal mastery approach goals. This finding supports prior research in REI suggesting that students of various ethnic backgrounds, who adopt greater REI embedded achievement may be more likely to experience academic success, related to doing well in school (Fulgini, Hughes, & Way 2005; Oyserman et al.1995). Therefore, ethnic minority college students during the period of emerging adulthood, who feel that academic success is valued by their racial group, may be more likely to adopt goals for increasing their academic skills.

REI embedded achievement also significantly predicted students' adoption of personal performance approach and performance avoid goals. Students in the current study, who felt that achievement in school was important to their ethnic group, also reported that they adopted achievement goals to perform better than their peers and avoid not performing the poorest when compared to their peers. Previous results suggest that those with a stronger belief in the importance of academics to their ethnic group also attain higher grades when compared to their peers (Fulgini, Witkow, & Garcia 2009; Oyserman et al.1995). Though GPA was not analyzed as an outcome variable in the current study, prior research in achievement goal theory suggests that students' performance approach goals predict higher GPAs in college (Harackiewicz et al. 2000). Because higher GPAs may lead college students to attain college-level degrees, researchers and educators in higher-level education may increase the number of college graduates by encouraging ethnic minority college students to adopt a stronger ethnic identity. In the current study, students who reported that they engage in learning for the purpose of improving their skills may be more likely to persist in their academic fields of study and increase graduation rates in college.

4.2 Perceived Parental Goals

Perceived parental achievement goal orientations were also analyzed to predict students' personal goal orientations. The results of the analyses to predict students' perceptions of parents' goals as predicting the adoption of their own achievement goals suggest that students aged 18-25 may consider their parents' goals important, regardless of their living situation. The results of the current study further add to the research by offering that parents may remain as an influence in college students' adoption of achievement goals.

Perceived parental mastery goals predicted students' adoption of mastery approach and mastery avoid goals. The goals students adopt are consistent with what they perceive their parents want them to do. For example, students who perceive parents to desire for them to learn to improve their skills may adopt similar personal goals to learn in order to develop their competency in a subject. In addition, students may interpret parents' goals for them to improve their knowledge and skills as goals for them to avoid losing skills. These results support prior research studies in perceived parental goals, which suggest that students' perceptions of parents' espoused goals are influential across multiple ages and ethnic groups (Friedel et al. 2006; Gonida, Kisseoglou, & Voulala 2006).

Perceived parental mastery goals also positively predicted students' performance approach goals. These results offer that as students perceived their parents to adopt mastery approach goals for their learning, they were more likely to adopt personal performance approach goals for themselves. Though these results have not previously been revealed in the achievement goal literature, these findings may support the multiple goals perspective in the current research by suggesting the connection between mastery approach and performance approach goals (Harackiewicz, Barron, & Elliot 1998). Research from Harackiewicz et al. suggests that students, who set goals of increasing their skills in a subject area, as well as goals for attaining higher grades as compared to their peers, may be more likely to achieve success in college.

Finally, perceived parental performance goals positively predicted students' personal performance approach and performance avoidance goals. College students' perceiving parents to desire for them to engage in learning to outperform their peers, were more likely to adopt similar goals of performing better than others and not appearing to be the worst student in the class. These results support prior research in perceived parental goals, which also found positive relationships between perceived parental performance goals and students' personal performance goals (Friedel et al. 2007; Gonida, Kiosseoglou, & Voulala 2006; Gonida, Voulala, & Kisseoglou 2009).

Limitations

The current study included only African American, Hispanic, and Asian/Asian American students, as these ethnic groups were of interest to the researchers. However, the current research cannot delineate between subgroups within each ethnic group presented in the current study. Research analyzing differences in pan-ethnic groups suggests that Latino, Asian, and African American subgroups may experience differences in predictors of academic achievement and adjustment (Corwyn & Bradley 2008; Tseng 2004).

Further, the current study utilized a self-report survey, in which students self-reported their personal achievement goals and REI. It may be that students' reports of their own goals may not represent their actual goals. Also, students' reports of their ethnic identity may not accurately reflect their adoption of REI. Students in the current study also indicated their perceptions of parents' goals. Because parents were not included in the study, students' reported goals for their parents may not represent their parents' goals for them.

In addition, the current sample was not representative of gender and college majors on campus. Also, the sample was largely representative of liberal arts and social science majors. Therefore, the results may not be representative of students in other fields of study, in which a more equal distribution of males and females exist. Future research studies may consider conducting research with an equal number of males and females, representing a more diverse sample across college majors.

Significant findings from this study provide implications to the current education field. One goal of the research was to examine students' perceptions of parents' goals from the perspective of college students. Prior research suggests that college students in the period of emerging adulthood may remain influenced by parents, and this study supports prior research findings by offering that college students' achievement goals may also be influenced by parents. All parents of college students may benefit from knowing that the academic goals they have for their students may remain influential even at the college level and directly impact the goals of their student.

In other words, as parents convey to their college students' the importance of increasing their skills in a subject area, their college students are more likely to internalize the same goal to improve their skills in a given subject area. As a greater number of college students remain living at home and maintain academic communication with parents, both college faculty and parents should understand parents continued influence in emerging adult college students. As suggested by Harakiewicz et al. (2002), parents should be encouraged to emphasize both mastery and performance goals to their student, in order to help them to be academically successful in college. At orientations for parents of college students, universities can provide parents with information regarding their influence in their student's academic goal setting.

References

- Altschul, I., Oyserman, D., & Bybee, D. (2006.) Racial-ethnic identity in mid-adolescence: Content and change as predictors of academic achievement. *Child Development, 77*, 1155-1169.
- Ames, C. (1992.) Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology, 84*, 261-271.
- Arnett, J.J. (2000.) Emerging Adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*, 469-480.
- Arnett, J.J., & Taber, S. (1994.) Adolescence terminable and interminable: When does adolescence end? *Journal of Youth and Adolescence, 23*, 517-537.
- Boon, H.J. (2007.) Low- and high-achieving Australian secondary school students: their parenting, motivations and academic achievement. *Australian Psychologist, 42*, 212-225.
- Chan, K., & Chan, S. (2005). Perceived parenting styles and goal orientations: A study of teacher education students in Hong Kong. *Research in Education, 74*, 9-21.
- Corwyn, R.E., & Bradley, R.H. (2008.) The panethnic Asian label and predictors of eighth-grade student achievement. *School Psychology Quarterly, 23*, 90-106.
- Cote, James E., & Levine, Charles G. (2002.) Identity formation, agency, and culture: A social psychological synthesis. Mahwah, NJ: Laurence Erlbaum Associates Publishers.
- Dweck, C.S., & Legget, E.L. (1988.) A social-cognitive approach to motivation and personality. *Psychological Review, 95*, 256-273.
- Elliot, A.J., & Church, M.A. (1997.) A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology, 72*, 218-232.
- Elliot, A.J., & McGregor, H. (2001.) A 2 x 2 achievement goal framework. *Journal of Personality and Psychology, 80*, 501-519.
- Elliot, A., & Murayama, K. (2008.) On the measurement of achievement goals: Critique, illustration, and application. *Journal of Educational Psychology, 100*(3), 613-628.
- Friedel, J.M., Cortina, K.S., Turner, J.C., & Midgley, C. (2007.) Achievement goals, efficacy beliefs and coping strategies in mathematics: The roles of perceived parent and teacher goal emphases. *Contemporary Educational Psychology, 32*, 434-458.
- Fulgini, A.J., Highes, D.L., & Way, N. (2009.) Ethnicity and Immigration. In R.M. Lerner, & L. Steinberg (Eds.), *Handbook of adolescent psychology, vol. 2: Contextual influences on adolescent development* (3rd ed.). Hoboken, NJ: John Wiley & Sons, Inc.
- Fulgini, A.J., Witkow, M., & Garcia, C. (2005.) Ethnic identity and the academic adjustment of adolescents from Mexican, Chinese, and European backgrounds. *Developmental Psychology, 41*, 799-811.
- Fulton, E., & Turner, L.A. (2008.) Students' academic motivation: Relations with parental warmth, achievement motivation, and supervision. *Educational Psychology, 28*, 521-534.

- Gonida, E.N., Kiosseoglou, G., & Voulala, K. (2006). Perceptions of parent goals and their contribution to student achievement goal orientation and engagement in the classroom: Grade-level differences across adolescence. *European Journal of Educational Psychology*, 22, 23-39.
- Gonida, E.N., Voulala, K., & Kisseoglou, G. (2009.) Students' achievement goal orientations and their behavioral and emotional engagement: Co-examining the role of perceived school goal structures and parent goals during adolescence. *Learning and Individual Differences*, 19, 53-60.
- Gonzalez, A.L., & Wolters, C.A. (2006.) The relation between perceived parenting practices and achievement motivation in mathematics. *Journal of Research in Childhood Education*, 21, 203-217.
- Gutman, L.M. (2006.) How student and parent goal orientations and classroom goal structures influence the math achievement of African Americans during the high school transition. *Contemporary Educational Psychology*, 31, 44-63.
- Harackiewicz, J.M., Barron, K.E., & Elliot, A.J. (1998.) Rethinking achievement goals: When are they adaptive for college students and why? *Educational Psychologist*, 33, 1-21.
- Harackiewicz, J.M., Barron, K.E., Tauer, J.M., Carter, S.M., & Elliot, A.J. (2000.) Short-term and long-term consequences of achievement goals: Predicting interest and performance over time. *Journal of Educational Psychology*, 92, 316-330.
- Harackiewicz, J.M., Barron, K.E., Tauer, J.M., & Elliot, A.J. (2002.) Predicting success in college: A longitudinal study of achievement goals and ability measures as predictors of interest and performance from freshman year through graduation. *Journal of Educational Psychology*, 94, 562-575.
- Hofer, B.K. (2008.) The electronic tether: Parental regulation, self-regulation, and the role of technology in college transitions. *Journal of The First-Year Experience & Students in Transition*, 20, 9-24.
- Hruda, L. Z. & Midgley, C. (1997.) Students perceptions of parental and teacher goal orientations. Paper presented at the American Psychological Association, April 2000, Chicago.
- Kaylor, M., & Flores, M.M. (2007.) Increasing academic motivation in culturally diverse students from low socioeconomic backgrounds. *Journal of Advanced Academics*, 19, 66-89.
- Kerpelman, J.L., Eryigit, S., & Stephens, C.J. (2008.) African American adolescents' future education orientation: Associations with self-efficacy, ethnic identity, and perceived parental support. *Journal of Youth & Adolescence*, 37, 997-1008.
- La Guardia, J.G. (2009.) Developing who I am: A self-determination theory approach to the establishment of healthy identities. *Educational Psychologist*, 44, 90-104.
- Levpuscek, M.P., & Zupancic, M. (2009.) Math achievement in early adolescence: The role of parental involvement, teachers' behavior, and students' motivational beliefs about math. *The Journal of Early Adolescence*, 29, 541-570.
- Mendoza-Denton, R., Pietrzak, J., & Downey, G. (2008.) Distinguishing institutional identification from academic goal pursuit: Interactive effects of ethnic identification and race-based rejection sensitivity. *Journal of Personality and Social Psychology*, 95, 338-351.
- Meyers, L.S., Gamst, G., & Guarino, A.J. (2006.) *Applied multivariate research: Design and interpretation*. Thousand Oaks: Sage.
- Midgley, C., Kaplan, A., & Middleton, M.J. (2001.) Performance approach goals: Good for what, for whom, and under what circumstances, and at what cost? *Journal of Educational Psychology*, 93, 77-86.
- Midgley, C., Maehr, M., Hruda, L., Anderman, E., Anderman, L., & Freeman, K. E. et al. (2000.) *Patterns of Adaptive Learning Survey: PALS*. University of Michigan, Ann Arbor, MI.
- Moorman, E.A., & Pomerantz, E.M. (2008.) The role of mothers' control in children's mastery orientation: A time frame analysis. *Journal of Family Psychology*, 22(5), 734-741.
- Ong, A.D., Phinney, J.S., & Dennis, J. (2006.) Competence under challenge: Exploring the protective influence of parental support and ethnic identity in Latino college students. *Journal of Adolescence*, 29, 969-979.
- Osborne, J.W., & Walker, C. (2006.) Stereotype threat, identification with academics, and withdrawal from school: Why the most successful students of colour might be most likely to withdraw. *Educational Psychology*, 26, 563-577.
- Oyserman, D. (2008.) Racial-ethnic self-schemas: Multidimensional identity-based motivation. *Journal of Research in Personality*, 42, 1186-1198.
- Oyserman, D., Gant, L., & Ager, J. (1995.) A socially contextualized model of African American identity: Possible selves and school persistence. *Journal of Personality and Social Psychology*, 69, 1216-1232.

- Oyserman, D., & Sakamoto, I. (1997.) Being Asian American: Identity, cultural constructs, and stereotype perception. *The Journal of Applied Behavioral Science*, 33, 435-453.
- Pascarella, E.T., Seifert, R.A., & Whitt, E.J. (2008.) Effective instruction and college student persistence: Some new evidence. *New Directions for Teaching & Learning*, 115, 55-70.
- Patterson Lorenzetti, J. (2008.) Recommendations for increasing minority student success. *Recruitment & Retention in Higher Education*, 22, 2-5.
- Phinney, J.S. (1996.) Understanding ethnic diversity. *The American Behavioral Scientist*, 40, 143-152.
- Pintrich, P.R. (1999.) The role of motivation in promoting and sustaining self-regulated learning. *International Journal of Educational Research*, 3, 459-470.
- Pintrich, P.R. (2000.) Multiple goals, multiple pathways: The role of goal orientation in learning and achievement. *Journal of Educational Psychology*, 92, 544-555.
- Pizzolato, J.E., Chaundhari, P., Murrell, E.D., Podobnik, S., & Schaeffer, Z. (2008.) Ethnic identity, epistemological development, and academic achievement in underrepresented students. *Journal of College Student Development*, 49, 301-318.
- Rivas-Drake, D. (2008.) Perceived opportunity, ethnic identity, and achievement motivation among Latinos at a selective public university. *Journal of Latinos and Education*, 7, 113-128.
- Rowan-Kenyon, H. T., Bell, A.D., Perna, L.W. (2008.) Contextual influences on parental involvement in college going: Variations by socioeconomic class. *The Journal of Higher Education*, 79, 565-586.
- Senko, C., Hulleman, C. S., Harackiewicz, J. M. (2011.) Achievement goal theory at the crossroads: Old controversies, current challenges, and new directions. *Educational Psychologist*, 46, 26-47.
- Steele, C.M., & Aronson, J. (1995.) Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69, 797-811.
- Strom, P.S., & Strom, R D. (2005.) Parent-child relationships in early adulthood: College students living at home. *Community College Journal of Research and Practice*, 29, 517-529.
- Syed, M., Azmitia, M., & Phinney, J. S. (2007.) Stability and change in ethnic identity among Latino emerging adults in two contexts. *Identity: An: International Journal of Theory and Research*, 7, 155-178.
- Tseng, V. (2004.) Family interdependence and academic adjustment in college: Youth from immigrant and U.S-born families. *Child Development*, 75, 966-983.
- Walker, C.O., & Greene, B.A. (2009.) The relations between student motivational beliefs and cognitive engagement in high school. *The Journal of Educational Research*, 102, 763-471.
- Witkow, M.R., & Fuligni, A.J. (2007.) Achievement goals and daily school experiences among adolescents with Asian, Latino, and European American backgrounds. *Journal of Educational Psychology*, 99, 584-596.
- Wolters, C.A. (2004.) Advancing achievement goal theory: Using goal structures and goal orientations to predict students' motivation, cognition, and achievement. *Journal of Educational Psychology*, 96, 236-250.