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REVIEW ARTICLE

African American Students at Predominantly White Institutions: A Motivational and Self-Systems Approach to Understanding Retention

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Abstract Predominantly White institutions have not been as effective as historically Black institutions in retaining and conferring degrees upon African American college students. This review seeks to embed the psychological aspects of the retention process proposed by Bean and Eaton [A psychological model of college student retention. In J. M. Braxton (Ed.), Reworking the student departure puzzle (pp. 48–61). Nashville, TN: Vanderbilt University Press, 2000] in a culturally-sensitive framework and consider how African American students attending PWIs may experience the processes in retention. We first give a brief overview of Bean and Eaton's [A psychological model of college student retention. In J. M. Braxton (Ed.), Reworking the student departure puzzle (pp. 48–61). Nashville, TN: Vanderbilt University Press, 2000] model of retention, then we propose and discuss revisions to Bean and Eaton's model that we believe would make the model more applicable to African American students attending predominantly White institutions. Specifically, we address students' attitudes towards their institution, academic self-efficacy, motivation, achievement goals, attributions, and ethnic and bicultural identity development. The discussion concludes with implications and directions for future study.

Keywords African American · College students · Higher education · Retention · Motivation

Despite the increasing popularity of historically Black colleges and universities (referred to hereafter as HBCUs), in a report by the Department of Educational Statistics, Provasnik and

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Shafer (2004) indicate that, in 2001, 87.1% of Black undergraduates attended predominantly White institutions (PWIs), and these institutions accounted for 78.5 of undergraduate degrees conferred upon Black students. In comparison, 12.9% of African American undergraduates (13.5% of all African American male students and 12.6% of all African American female students) attended HBCUs, yet graduates of these institutions accounted for 21.5% of undergraduate degrees conferred upon African American students. Thus, despite enrolling a much larger percentage of African American students, graduates of PWIs account for a disproportionately low percentage of degrees awarded to African American students.

In his study of African American students' academic achievement and self-concept, Cokley (2000) surveyed 206 African American undergraduate students attending predominantly White institutions and historically Black universities. In addition to a questionnaire that collected demographic, faculty-interaction and GPA information, students also completed the Academic Self Concept Scale. Findings indicated that, although they entered college with higher high school grade point averages than African American students attending HBCUs, African American students attending PWIs reported lower academic achievement in college and exhibit lower academic self-concept than students attending predominantly Black institutions. We might expect this to be especially true at private institutions, whether predominantly Black or White, where higher admissions standards usually results in a student population with higher high school achievement and better college entrance exam scores. Thus, PWIs have not been as effective in supporting, and consequently retaining, Black students, especially when compared to predominantly Black institutions. An appropriate retention model for African American students attending PWIs must consider students' motivational and self-systems within the context of their racial or ethnic identity.

To understand the motivational and self systems that contribute to the experiences of African American students at PWIs, and to propose a revised model of retention for students in this population, Bean and Eaton's (2000) retention model will serve as a theoretical framework. The authors' model, which has not been explicitly applied to African American students, uses constructs of psychological and self-systems to describe the interaction between students' initial systems and the institutional environment in an attempt to predict student retention. We propose that while traditional retention models are useful in addressing the retention of African American college students, the effects of race and culture must be accounted for when describing the experiences and psychological processes of African American students attending PWIs. This review seeks to embed the psychological aspects of the retention process proposed by Bean and Eaton in a culturally-sensitive framework and consider how African American students attending PWIs may experience the processes in retention.

We first give a brief overview of Bean and Eaton's (2000) model of retention, then we propose and discuss revisions to Bean and Eaton's model that we believe would make the model more applicable to African American students attending predominantly White institutions. We propose changes to both the *structure* and to the *content* of the model. Specifically, we address students' attitudes towards their institution, academic self-efficacy, motivation, achievement goals, attributions, and ethnic and bicultural identity development, and the manner in which they influence each other. As such, it is important to note we are not proposing that each construct added to the model is limited to African American students. What we are attempting to do is emphasize that the retention *process* may be different for this population of students, while also highlighting how the constructs of the model may manifest themselves in African American students, contributing to this differential process.

Bean and Eaton's Psychological Model of Retention

Tinto's (1988) expanded retention model was sociologically based and described a three stage process through which students became socially integrated into the college culture. Bean and Eaton (2000) revised Tinto's (1988) expanded retention model to reflect a more psychological approach to understanding retention. The authors' model, shown in Fig. 1, purports that there is a high correlation between students' attitudes, intentions (goals), and behavior and that behaviors and attitudes reflect intentions/goals. Bean and Eaton (2000) state that the purpose of the model is to "help others visualize how individual psychological processes can be understood in the retention process" (p. 55).

According to Bean and Eaton's model (Fig. 1), the retention process begins with a set of *entry characteristic*s that students bring into the university environment. In addition to academic skills, based on their past academic experiences, students also bring to college attributes such as efficacy expectations, motivation and coping skills. These entry characteristics affect the *environmental interactions* that students have. Interactions on and off campus, in turn, affect students' psychological processes, with each process being associated with a particular outcome. According to the model, a positive psychological outcome of self-efficacy assessments is the development of positive self-efficacy. Bandura (1997) defined self-efficacy as the "beliefs in one's capacity to organize and execute the courses of action required to produce given attainments" (p. 3). An effective coping process is shown to lead to stress reduction and increased confidence, while attribution assessments (control over learning) can result in increased motivation. Positive psychological outcomes encourage students' social and academic integration, and ultimately, their academic achievement (labeled *Intermediate Outcomes*). According to Bean and Eaton (2000), when students are academically and socially integrated, they form positive *attitudes* about the institution which influences their *intent* to persist, and ultimately, their actual *persistence*.

Although we acknowledge the importance of what Bean and Eaton (2000) refer to as *Entry Characteristics* and *Environmental Interactions* as causal antecedents to these psychological processes and outcomes, the present discussion will focus on the relationship between psychological processes and outcomes, social and academic integration (jointly labeled Intermediate Outcomes in the model) and attitudes toward the institution. More

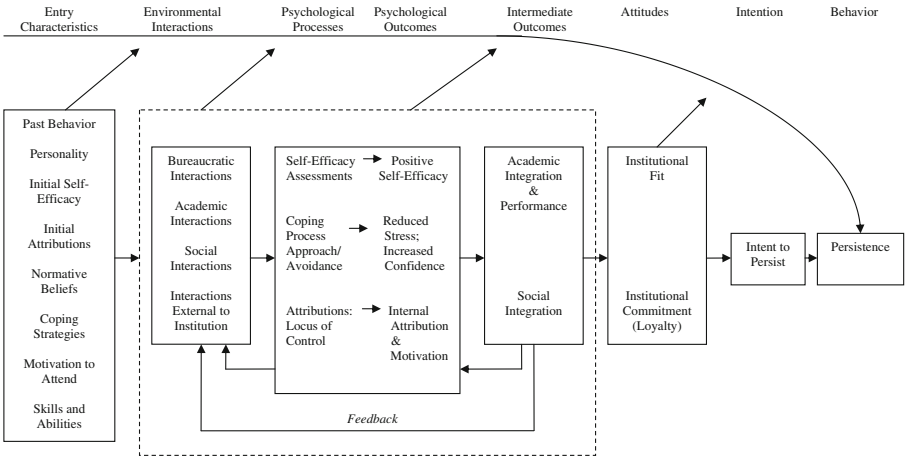

Fig. 1 Bean and Eaton's (2000) psychological model of retention (adapted from Bean & Eaton 2000, p. 57)

specifically, these constructs, and the relationship between them, will be considered as they relate to the experiences to African American students attending predominantly White institutions.

Revised Model of Retention

In the following sections, we present proposed revisions to Bean and Eaton's model, as well as highlight aspects of the authors' model as they relate to African American students attending predominantly White institutions. The adjustments are based on what we believe to be the effect of race/culture on the interaction between African American students and PWIs. The discussion in this section follows the proposed revised model shown in Fig. 2 from left to right. Revisions to the model are indicated in bold. As shown by Fig. 2, the primary areas of interest for the revisions are concentrated near the center of the proposed retention process. Although brief descriptions of the areas of the model not revised are provided, beginning with the area of the model labeled *Attitudes*, the discussion presented in this section will primarily focus on the psychological processes located in the central area of the model in depth. Cross's (1971) negriscence model is also provided in Fig. 2. The processes in Cross' model correspond with processes addressed in Bean and Eaton's (2000) model, and have been grouped accordingly. The applicability of Cross' model of racial identity development is addressed in the final section.

Entry Characteristics

Bean and Eaton (2000) propose that the retention process begins with seven entry characteristics: past behavior, personality, initial self-efficacy, initial attributions, normative beliefs, coping strategies, motivation to attend and skills and abilities. All of these can be

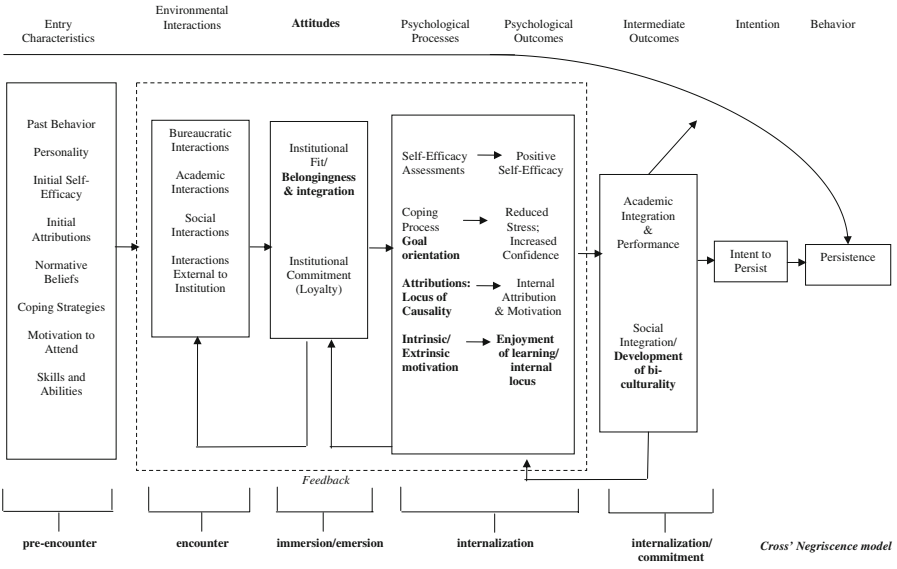

Fig. 2 Revised model of retention for African American students at PWIs

extended to college students in general. The academic self-efficacy with which African American students enter college is of interest because it could suffer an immediate negative blow upon the first experience of academic failure. This goes hand-in-hand with initial attributions. African American students who enter PWIs with a high level of self-efficacy and make internal attributions, upon the first experience of failure, may question their abilities or preparation for college level work, resulting in a negative effect on academic self-efficacy, as well as expectations for positive academic outcomes (van Laar 2005). We acknowledge that this occurrence is not limited to African American students. As such, our revised model does not propose revisions to *Entry Characteristics*, nor to the second major area in the model, *Environmental Interactions.*

Environmental interactions

The aforementioned entry characteristics affect the way in which the academic environment is experienced. Bean and Eaton's (2000) model recognizes four interactions that students encounter in an academic environment: bureaucratic, academic, social and external interactions. Per our revised model, these interactions moderate the relationship between entry characteristics and attitudes toward the institution. They represent the interaction of students (and their personal entry characteristics) and the university environment, ultimately affecting the *fit* between student and university. Fit refers to the degree to which the institution offers what students want and need, whether academically or socially. As is the case with the entry characteristics, such institutional interactions are common to all college students. However, because entry characteristics of many African American students entering PWIs are likely to differ from those of their White classmates, the way in which many Black students experience PWIs will also differ. For example, social support for college students and its effects have been widely studied in the higher education literature (e.g., Calsyn *et al.* 2005; Dulin *et al.* 2006). Building such support systems assumes that appropriate support is available. Support systems can be found in professors or classmates, as well as the surrounding community. There needs to be some measure of "fit" between the student and the potential support system. This need is reflected in the tendency of some African American students at PWIs to seek support among other African American students and faculty (i.e. the "in-group").

Pascarella *et al.* (1996) note the effect of in-group and out-group social organizations such as fraternities and sororities. Greek organizations continue to be very racially segregated. White Greek students are very likely to belong to very predominantly White Greek organizations and Black Greek students are just as likely to belong to very predominantly Black Greek organizations. The authors' findings indicated that, while involvement in a Greek organization had a negative impact on White students' openness to diversity, the reverse was observed for non-White members of Greek organizations. Pascarella *et al.*'s (1996) findings suggest that while strong in-group association may have a negative impact on White students' racial and cultural openness, similar in-group association actually positively impacts African American students' openness to diversity. The positive effect of in-group association on African American students may be explained by Kuh and Love's (2000) concept of "enclaves," wherein African American-centered campus organizations create subcultures of the campus cultures. These subcultures allow African American students to bridge the cultural distance between the African American campus community and the larger, predominantly White campus community. In this way, campus organizations, and African American-centered organizations in particular (e.g. gospel choir, campus Black culture centers), offer both a positive support system for

African American students as well as a way to become more integrated into the larger campus community and encourage the development of a stronger sense of belonging.

Attitudes

As a traditional model of retention, Bean and Eaton's model reflected the goal of increasing retention via institutions' effect on students' social and academic integration. As shown in Fig. 1, the outcome of the authors' model is "institutional fit and commitment (loyalty)." As previously described, fit refers to the congruency between students' needs and values and what institutions' offer to meet these needs. *Commitment* refers to the loyalty that students feel toward the institution. Bean and Eaton's model hopes to ultimately affect students' attitudes toward the institution by first affecting their psychological processes via institutional interactions, which would, in turn, determine students' academic and social interaction.

Campus climate—as defined by current perceptions, attitudes, and expectations that define the institution and its members—has historically examined differences between groups of students in higher education and whether their perceptions of climate vary for different reasons. For example, minority students tend to perceive more negative general campus, racial, and academic climates than White students (Cabrera *et al.* 1999; D'Augelli and Hershberger 1993; Nora and Cabrera 1996; Reid and Radhakrishnan 2003), and that PWI's could benefit retention efforts by helping meet specific needs of African American students in areas of finance, campus involvement, and academic performance to counter the effects of negative perceptions of climate (Furr and Elling 2002; Gregory 2000). From an evaluation perspective, campus climate research suggests that it may be necessary for PWIs to "hook" minority students in some way by assessing negative attitudes early on (Singley and Sedlacek 2004). For example, Hamilton (2006) describes the model for evaluating campus climate, first formulated by Hurtado *et al.* (1998). The authors proposed a four-dimensional framework that evaluates institutional climate by considering (1) institutions' historical legacy of inclusion or exclusion; (2) the numbers of different groups on campus (e.g. how many students of a particular race or ethnicity, gender, sexual orientation, etc.); (3) perceptions and beliefs that people have about institutions' climates; and (4) the extent to which institutional structures and individual personnel are contributing to a positive climate. In her article, Hamilton notes that Hurtado *et al.* now include a fifth dimension, which considers structural and organizational practices. In Hamilton's article, Hurtado *et al.* described this dimension as encompassing "questions like, 'What are hiring practices…how do we define merit, who decides on curriculum, whose experiences are represented in that curriculum and whose are not?'" (2006, p. 34). Thus, this fifth dimension appears to question the importance of what, and consequently whom, the institution values.

In their study of 272 Latino students attending 127 colleges and universities, Hurtado and Carter (1997) found that students who perceived a more racially hostile campus climate also felt a decreased sense of belonging to the larger campus culture. A sense of belonging, defined as feelings of membership in the larger community, is an essential piece of the overall attitude that students develop about their college or university. In general, sense of belongingness or connectedness on campus has been affiliated with students' social acceptance and professors' pedagogical caring (Freeman *et al.* 2007) and openness to diversity (Summers *et al.* 2002), while sense of belongingness in classrooms has been affiliated with adaptive motivation for achievement (Freeman *et al.* 2007; Summers and Svinicki 2007) as well as the use of collaborative or cooperative learning (Summers *et al.* 2005; Summers and Svinicki 2007). However, the research on campus and classroom

belongingness has not accounted for any possible differences between ethnic groups due to homogenous sample data. On the contrary, campus climate research suggests that perceptions of warmer campus climates are associated with positive social adjustment, and has extended this generalization to academic adjustment (Cabrera *et al.* 1999; Nora and Cabrera 1996) and academic achievement (D'Augelli and Hershberger 1993; Solorzano *et al.* 2000) particularly for minority students. Thus, it is reasonable to consider that minority students in particular must perceive feelings of belongingness and/or that the campus climate is warm and supportive before they can become socially and academically integrated. That is, we propose that these students may need to formulate positive attitudes about their place as a member of the institution before healthy academic and social outcomes can be expected.

Psychological processes and outcomes

Per our revised model, students' attitudes toward the institution will affect their psychological processes and outcomes. Bean and Eaton's (2000) model included self-efficacy, coping processes (approach or avoidance) and attributions and locus of control as predominant psychological processes. The externalization of the relationship between African American students and the PWIs that they attend is evident in students' motivational tendencies. The importance of academic goals, motivation and values to college students' academic success is well documented (e.g. Covington 2000; Harackiewicz *et al.* 1998; McGregor and Elliot 2002). Accordingly, these constructs have been included in our revised model, as they relate to African American students.

Self-efficacy As noted by Pintrich (2003), self-efficacy (1) implies a course of action based upon having the tools to be successful; and (2) is used in reference to some kind of goal. Self-efficacy affects the choices that one makes, how much effort is put forth, perseverance in the face of difficulty, as well as thought patterns and affective reactions (Pajares 1996). Defining *ethnic identity* as "a clear understanding of one's ethnicity and value of one's ethnic membership" (p. 231), O'Brien *et al.* (1999) study of ethnic identity and mathematics self-efficacy in a sample of 11th grade students revealed that ethnic identity was significantly and positively correlated with self-efficacy in math and science. Other researchers (e.g. Gainor and Lent 1998; Gloria and Hird 1999.) support a correlation between strong ethnic identity and high and college students' self-efficacy in career decisions, particularly in science, mathematics and engineering fields; fields in which African Americans are under represented.

Given that African American students at HBCUs have reported higher levels of academic competence/efficacy, as well as greater achievement than such students at PWIs (Allen 1992; Cokley 2000; Sellers *et al.* 1998), we propose that HBCUs may be more astute at providing students sources of positive efficacy expectations. Bandura (1977) identified five sources of efficacy expectations: mastery experiences, physiological states, emotional states, vicarious experiences and social persuasion. The latter two sources are of specific importance in a discussion of self-efficacy in minority students. Vicarious experiences as a source of efficacy expectation is dependent upon, at least in part, on identification with others, seeing their abilities and circumstances as similar to our own. Due to close racial, cultural and pre-college background among students, HBCUs offer a wealth of such experiences while for African American students at PWIs, they may be only scant. Somewhat similarly, social persuasion implies a social support system that believes in your efficacy on a task. Some African American students at PWIs do not always perceive

true social support from significant others, such as faculty. Guiffrida (2005) points to Eimer and Pike's (1996) finding that African American students attending PWIs reported more contact with faculty than did their White counterparts, yet African American students expressed less satisfaction with these interactions. Further, given smaller African American populations, the in-group social support systems may also be harder to come by at PWIs. So, many such students who experience an absence of internal motivation to attempt a task may also find themselves lacking sufficient external sources of efficacy and motivation.

Intrinsic motivation Bean and Eaton (2000) list "motivation to attend" as an entry characteristic that is important to the retention process. According to self-determination theory (SDT), "individuals are inherently motivated to integrate within themselves the regulation of extrinsically motivated activities that are useful for effective functioning in the social world but are not inherently interesting" (Deci and Ryan 1985). Thus, SDT focuses on the degree to which human behaviors are volitional, or self-determined. Pelletier *et al.* (2003) describe five types of self-regulation that stretch along a self-determination continuum. At one extreme is the most external form of self-regulation, amotivated regulation, while intrinsic motivation represents the most internal form of motivational self regulation, wherein an individual engages in a task for the enjoyment of the task itself.

Rather than expressing largely intrinsic motives for attending college, the students in a study conducted by Phinney *et al.* (2006) described a more internal form of extrinsic motivation, termed *introjected regulation* by Deci and Ryan (1985), wherein one is motivated by the value of engaging in a task, rather than by the enjoyment of the task itself. The authors surveyed 713 ethnically diverse (participants were Asian American, Hispanic American, African American and European American) college students regarding their reasons for attending college. The authors performed factor analyses on student responses on the Student Motivation for Attending University (Cote and Levine 1997) to determine seven subscales: career/personal motivation, humanitarian motivation, default motivation, expectation motivation, encouragement motivation, help family motivation and prove worth motivation. Minority students considered helping family to be a more important reason for attending college than did European American students. Minority students were also significantly more likely than their European American counterparts to attend college to prove that they could succeed academically. Phinney *et al.* (2006) note that despite the idea that career (financial success) and personal (joy of learning/intrinsic motivation) motives appear to be quite distinct for minority students, these motives were closely related and statistically loaded onto the same factor. The authors theorize that this could be the result of the lower socioeconomic status of many minority students, wherein attending college for the sake of learning and personal development is an ill-afforded luxury, at least without also considering how a college education can lead to a good job. This sentiment is echoed by Cokley (2003), who proposed that minority students' tendency toward more external forms of self-regulation may be attributed to a view of intrinsic motivation as "a luxury" that may appear irrelevant to doing well in school with the goal of getting into college or getting a good job. Reeves *et al.* (2004) suggest that such a demonstration of a more internal type of extrinsic motivation can be facilitative of learning.

Values in education

From the beginning of their educational development, African-American adolescents in diverse schools are faced with issues of racism and discrimination on a day-to-day basis that translates into low achievement, low academic ability self-concept, and low academic

task values (Eccles *et al.* 2006). However, according to Eccles *et al.* (2006), students who had a strong sense of ethnic identity (as measured by their *expressed feelings of connectedness to people in their ethnic group*) in this study were able to buffer the effects of racism, and African American students in general responded to anticipated future discrimination with increased academic motivation. Does this mean that students with a strong sense of ethnic identity and who value future educational opportunities in college are prepared to deal with obstacles presented to them at PWIs?

Eccles *et al.* (1983) expectancy-value motivation model provides a framework for understanding the academic value systems of African American students. The authors' model conceptualizes motivation as the interaction between expectancies for success and subjective task value. Symbolically, Motivation=Expectancy×Value. In the model, subjective task value is described as consisting of four components: interest (intrinsic) value, cost, attainment and utility. As described earlier in the discussion, *interest or intrinsic value* refers to the value one places on an activity as the result of one's own enjoyment of the activity. Therefore, in the case of the present discussion, overall motivation is positively affected when students are interested in and enjoy learning just for the sake of learning. *Cost* refers to what one has to give up in exchange for participation in an activity. African American students may perceive costs of academic success of varying degrees; among them, students may believe that academic success comes at the cost of identification with their ethnic or racial group. Cokley's (2001) findings support this assertion. Surveying a sample of African American college students attending an HBCU, the author found that strong ethnic identity was positively correlated with academic achievement for African American females, but found the reverse for African American males. That is, strong ethnic identity was associated with lower academic achievement among African American males.

Attainment value refers to the value one places on being successful in an activity while *utility value* refers to how useful a behavior or activity is to attaining one's long term and short term goals. AAAccAccording to Graham and Taylor (2002), we cannot be sure whether or why African-American students value or devalue education because research has not been directly concerned with issues of race, ethnicity, and task value. In her own research, Graham *et al.* (1998) asked participants in sixth to eighth grade to nominate the classmates they most admired, respected and wanted to be like, thus indicating the type of characteristics that students value or devalue in their peers. She found that African American girls nominated other girls who were high achieving, admired, and respected among their classmates, while African American boys nominated other boys who were low achievers. Minority males in particular must cope with the dual stressors of academic challenge and negative stereotypes about their group, which may in turn affect their achievement values negatively. For example, Graham found that African American boys in second, fourth, and seventh grades perceived greater educational and occupational barriers, and that these boys tended to value the low achievers in their class. The authors summarize the findings by stating, "To the degree that children and young adolescents anticipate that factors outside their control can negatively influence educational and occupational outcomes, they may be less likely to value effort and success in school" (p. 139).

van Laar (2005) suggests that these trends may be extended to African American college students as well. The author found that, although African American students valued a college education more than White students prior to entering college, by the end of their freshman year, this value had also dropped notably. Moreover, despite having expectancies for future economic success and for academic performance prior to college entrance that were equal or higher to those of their White counterparts, by the end of their first year in college, unlike White students, African American students experienced a significant drop in

their expectancies for economic and academic success. van Laar (2005) explains these findings by proposing that African American students, within their first year of college, begin to understand their academic abilities particularly as they compare to those of White students. Students' attributions play an important role here. As a protective mechanism, these students begin to make more external attributions for failure and lower their perceived value of the outcomes associated with academic achievement in college. Thus, less overall value (evaluation of costs, interest and attainment and utility values) attached to the outcomes combined with lowered expectancies for success results in lower academic motivation, per Eccles *et al.*'s (1983) model. The following section will discuss attribution theory and its academic applications for African American students.

Attributions Bean and Eaton's (2000) model indicates an effect of students' attributions upon entrance to college. The implication is that these attributions affect students' academic self-efficacy, which, consequently, affects their coping skills. Weiner (1979) outlines three causal dimensions to which outcomes are attributed: locus (internal vs. external), controllability (controllable vs. uncontrollable) and stability (stable vs. unstable). Pintrich (2003) asserts that, while internal attributions for success can lead to heightened self-esteem and self-efficacy, internal attributions for failure can have a reverse effect, resulting in feelings of helplessness and shame. A similar effect can be observed for stable perceptions of failure, wherein one does not believe that one's failure is malleable and, thus, is unlikely to be motivated to try and succeed.

African American students are often able to maintain positive academic self-concept in the face of failure. Crocker and Major (1989) explain this somewhat paradoxical finding as the result of three possible attributional patterns: attributional ambiguity, selective comparison, and selective devaluing. *Attributional ambiguity* refers to the idea that outcomes can be attributed internally and externally. The authors contend that this is magnified for stigmatized groups, where outcomes can be attributed to others' reactions to uncontrollable factors, like race and gender. *Selective comparison* refers to students' comparisons of their abilities to select groups. Crocker and Major (1989) claim that African American students may maintain high self-esteem and academic self-concept because they make more within-group comparisons. van Laar (2005) takes this idea a step further, confirming in her own research that while maintaining a higher self-esteem than White students, African American students in the later years of college have significantly less internal attributions for economic outcomes compared to White students and, and lower expectancies for future outcomes compared to African American students in the early years of college. This is indicative of what van Laar calls the "external attribution model", designed to explain the self-protective effects of African American students' external attributions.

In their discussion of the self-protective coping mechanisms employed by stigmatized or oppressed groups such as African Americans, Crocker and Major (1989) describe *selectively devaluing* as the tendency to regard those things at which one's group is perceived to fair poorly as less important to one's self-definition, while valuing those things at which one's group is believed to excel. Thus, according to the authors, African American students may place less value on those areas in which they perceive themselves to be lacking, such as academics, thus allowing them to maintain a positive sense of self. Dweck (1999) investigated the relationship between students' attributions of intelligence and their academic goals. The author found that students who held an incremental theory of intelligence (the belief that intelligence is malleable) tended to adopt mastery goals while those who held an entity view of intelligence (the belief that intelligence is fixed) were more likely to adopt performance goals.

Similarly, Aronson *et al.* (2002) investigated the link between theories of intelligence and academic outcomes in a sample of African American and White college students. Participants were randomly assigned to three groups: two experimental groups and a control group. Over the course of nine weeks, each experimental group was manipulated to adopt either an incremental or entity theory of intelligence, while the control group received no intervention/manipulation. At the conclusion of the academic year, students' long-term beliefs about intelligence, their academic attitudes and grades for the semester were assessed. The authors found that, among African American college students (and White college students, to a lesser degree) an incremental theory of intelligence was linked to positive academic outcomes such as higher academic achievement and greater academic engagement. These findings suggest a link between students' attributions (in this case, to what students attributed intelligence) and their achievement goals. Goal theory will be considered next.

Goal theory Bean and Eaton's (2000) model fails to consider the role that students' achievement goals play in the retention process. This is an interesting omission, given the relationship found to exist between students' achievement goals and their academic outcomes (e.g. Kaplan and Maehr 1999; Midgley *et al.* 1996). The connection between achievement goals and achievement is particularly curious given the inclusion of academic integration in the authors' model. As indicated in Fig. 2, our revised model includes achievement goals among the presented psychological processes.

Achievement goal theory generally divides goal orientations into two categories: task/mastery goals and ego/performance goals. Performance goals are further divided into performance-approach ("I want to be challenged to show how I'm better/smarter than others.") and performance-avoid ("I don't want to attempt a task because I'm afraid I may fail."). Bean and Eaton's (2000) retention model describes approach and avoidance goals as part of students' coping process, but fails to include a distinction between mastery and performance goals.

The role of the academic community in fostering performance goals is well-documented, both at the secondary and post-secondary levels (e.g. Kaplan and Maehr 2002; Garcia and Pintrich 1996; Vansteenkiste *et al.* 2005). Kaplan and Maehr (1999) investigated the effects of the achievement goals of African American and White middle school students attending a predominantly White school. The authors found that for both African American and White students, mastery/task goals were positively related to psychological well-being while performance/ego goals were related to lower levels of psychological well-being. However, findings from Midgley *et al.* (1996) indicated that while African American and White students did not differ on the effects of their achievement goals, there was a stronger relationship between ego goals and self-handicapping for African American students than for White students. As an example of this handicapping, Kaplan and Maehr (1999) describe students who delay studying for an exam until the last minute, which provides an excuse for poor test performance other than low ability.

Kaplan and Maehr (1999) also note that ego/performance oriented academic environments that exist at the college level emphasize differences between students and encourage competition. Although the effects of performance oriented academic environments have been observed in students of varying races and ethnicities, Steele and Aronson (1995) assert that African American students are sensitive to social comparison in a way that is different from how White students cope with social comparison. The authors propose the existence of both an individual self and a collective self for African American students. Thus, Steele and Aronson (1995) contend that a predominantly White academic environment that

emphasizes performance heightens African American students' self awareness and students view their academic performance not only representative of their own ability, but the abilities of African Americans in general.

The authors further suggest that when students are aware of performance stereotypes about members of their group, their heightened sense of self-awareness activates a mechanism that Steele and Aronson label *stereotype threat*. The anxiety that results from stereotype threat debilitates students' performance (Spencer *et al.* 1999; Steele 1997). The effects of stereotype threat have been most widely studied in samples of female students in predominantly male fields (Bergeron *et al.* 2006; Keller 2007; Kiefer and Sekaquaptewa 2007; Spencer *et al.* 1999; Thompson and Dinnel 2007) and in students from underrepresented ethnic or racial groups in academic or testing situations (Cole *et al.* 2007; Harrison *et al.* 2006; Steele 1997; Steele and Aronson 1995; Steele 1997).

Of course, the extent to which stereotype threat is activated is related not only to simple membership in a stereotyped group, but, more importantly, to the extent to which individuals identify with the stereotyped group. For African American students, this means that the effects of phenomena such as stereotype threat about race is a function of students' identification with African American culture.

Intermediate outcomes

Like their classmates of other races and cultural backgrounds, the result of psychological processes and their corresponding outcomes are academic integration and performance, and social integration. For African American students attending PWIs, social integration represents the achievement of bi-culturality, wherein students are able to successfully navigate membership in the larger predominantly White campus community, and also maintain cultural ties to the African American campus culture. In a recursive manner, feedback from academic performance and perceptions of acceptance into the campus community and the in-group influences psychological processes, which influence perceptions of institutional fit and commitment (e.g. students who are successful academically and have high academic self-efficacy are likely to perceive greater institutional fit, even if only academically). This, in turn, may influence students' interactions with the institution.

Ethnic identity and biculturalism As a general model of retention, Bean and Eaton's (2000) model does not include explicit acknowledgement of the role of ethnic and racial identity in the retention process. As emphasized throughout the present discussion, this is a necessary consideration. Although we acknowledge that there are ethnically- and racially-related challenges that most African American college students face, the salience of their race and ethnicity are made even more so in a predominantly White academic environment. Consequently, any discussion of the psychological processes and outcomes of African American students attending PWIs must directly address the ethnic and bicultural identity development.

Grantham and Ford (1998) asserted that there are two principal types of challenges that gifted African American students face: psycho-social (self-perceptions and perceptions of interactions with others) and socio-cultural (perceptions of interactions with others with respect to ethnicity or race). These challenges also apply to African American college students at PWIs. Rucker and Gendrin (2003) cite Du Bois' (1903) acknowledgement of a "double consciousness" that African Americans must develop to function in the majority culture, "twoness, an American, a Negro, two souls, two thoughts… two warring ideals

(2003, p. 208).” Nowhere is the necessity of a double consciousness more salient than for the African American student at a PWI.

It is possible that, more so than what Bean and Eaton’s (2000) model term “psychological processes” (self-efficacy, motivation, etc.), characteristics of ethnic identity may be stronger predictor variables for retention of African American students at PWIs. That is, we assert that retention among this population of students may not be dependent upon the degree to which they are able to separate themselves from their past associations and life patterns, as suggested by Tinto’s original model. Instead, retention may depend upon the extent to which African American students are able to establish a sense of bi-culturalism, maintaining an identity with their ethnic group as well as developing an identity as a member of the larger, predominantly White campus culture. Birman (1998) describes *biculturalism* (the ability to function in two distinct cultures) as one of four acculturation styles, alongside *assimilation* (immersion in a culture not one’s own), *separation* (immersion in one’s own culture), and *marginality* (no immersion/identification in any culture). Acculturation refers to “the process of psychological and behavior change individuals and groups undergo as a consequence of long-term contact with another culture” (Zea *et al.* 2003, p. 108). To become socially and academically integrated, Tinto’s (1988) description of the retention process called for students’ assimilation into the university culture. Tinto (1993) later theorized that this expectation may not hold for African American students. Specifically, Tinto (1993) indicates that African American students, particularly at PWIs, are best socially and academically integrated into the campus community when they are able to demonstrate bicultural competence. That is, African American students must develop that dual identity to which Dubois referred. They are African Americans and they are also African American students maneuvering in a predominantly White campus community; they must retain and develop their African American identity, but must also develop a bicultural identity.

Cross’s (1971) initial negriscence model of Black identity development describes what he termed the “negro-to-Black” conversion. Cross’s model consists of a series of five stages through which one must travel to reach the ultimate goal of reaching “Black liberation.” These stages, which are (1) preencounter, (2) encounter, (3) immersion/emersion, (4) internalization and (5) commitment, depend upon an individual’s experiences and opportunities to have particular experiences. Pre-encounter describes a Black identity that is devoid of identification with the Black experience (“de-racinated,” Cross 1971), while in the encounter stage, a particular racialized experience causes one to begin the process of moving from de-racination to Black identity. In immersion/emersion, one immerses oneself in Blackness, embracing all that is Black even to the extent of rejecting all that is associated with whiteness, and then later begins the process of emerging and slowly incorporating aspects of the white world into one’s new Black consciousness. Jones (1997) describes the final two stages, internalization and internalization-commitment as “a further mellowing of the new identity” (p. 159), in which individuals integrate and commit to this integration. In terms of bicultural identity development, the commitment stage signals the full acknowledgement of the necessity, willingness and ability to function both as an African American and also as a part of the larger, predominantly White campus community.

Implications and Directions for Future Research

The general goal of the present discussion has been to question the applicability of traditional models of retention to minority students, African American students in

particular. Bean and Eaton's (2000) psychological reconceptualization of Tinto's (1988) model was used as an example of how such models can be called into question when attempting to understand the retention patterns of African American students attending predominantly White institutions. Research in this area has been scant, although some scholars have called for a new way of looking at retention in African American students. For example, von Robertson *et al.* (2005) suggested the use of the Nguzo Saba as framework for looking at retaining African American students. The Nguzo Saba is based on the idea of using African American-based values to develop African American college students socially and academically, and it incorporates seven principles: *umoja* (unity), *kujichaguila* (self-determination), *ujima* (collective work and responsibility), *ujamaa* (cooperative economics), *nia* (purpose), *kuumba* (creativity) and *imani* (faith). The authors do not describe the manner in which these principles are related to each other or exactly how they should be combined to socially adjust and integrate African American students at PWIs with the goal of retaining them. Bean and Eaton's model (2000) is a step beyond von Robertson *et al.*'s (2005) idea of using an Afrocentric approach to understanding social integration, adjustment and retention of African American students in that Bean and Eaton's model does propose a relationship between the involved variables (self-efficacy, motivation, etc.). Once again, the applicability of such traditional models of retention for students of varying racial and ethnic backgrounds has been called into question in the present discussion. Further investigation into the applicability of traditional research models for minority students, in light of the things that have been discussed in this paper, would yield significant implications in two major areas: (1) retention and (2) ethnic identity and bicultural development.

Retention The most obvious gains made from reconsidering traditional retention models within a cultural framework would be in retention. Considering that HBCUs graduate a higher percentage of their African American students and that graduates of HBCUs account for a disproportionate percentage of African American professionals compared to graduates of PWIs, the assumption is that HBCUs are providing African American students something that PWIs are not; something that strongly aids in the retention process. Therefore, the first goal should be to statistically test existing retention models for their applicability to African American students attending PWIs. Structural equation and hierarchical models may provide us with a framework for understanding the retention process for this population of students. Using a model such as Bean and Eaton's as a baseline for statistical testing, two outcomes are possible: (1) African American college students' retention process mirrors that of their White classmates or (2) the retention pattern of African American college students is significantly different than that of White students. In the former case, alternate explanations for the discrepancy in actual retention between PWIs and HBCUs will be necessary. Perhaps there are other variables involved in the retention process that the model does not account for, or the included variables may be related to each other differently, resulting in good model fit for both African American and White students but with unequal retention outcomes. For example, as suggested in the present discussion, variables such as ethnic identity and biculturalism may moderate or mediate the relationship between some variables in Bean and Eaton's (2000) model.

Determining or confirming an accurate retention path for African American students at PWIs is the first and most important step in providing institutions the information needed to develop not only special programs to attract minority students, but also more effective programs that are more conducive to retaining them. If biculturalism and ethnic identity are demonstrated via research to be integral parts of the retention process for African American

students at PWIs, institutions may design programs aimed at facilitating the development of bicultural identity. Such programs may include forming cooperatives between predominantly Black student organizations and predominantly White organizations. Collaboration between African American students and selected faculty could also result in an offering of programs designed to incorporate African American students at PWIs into the larger campus culture while also allowing them to retain their connection with the African American campus culture, such as developing research cooperatives and mentorship opportunities, thus facilitating the development of a bicultural identity.

Ethnic identity and bicultural development By further examining the retention process and the role that ethnic identity and bicultural development play in that process will result in a fuller understanding of ethnic identity and bicultural development. Given that American students from minority groups constantly exist within two cultures (American culture and their own ethnic/racial culture), any additional elucidation of the effects or development of a bicultural identity would be beneficial beyond just the college student population. Stronger ethnic identity in particular has been connected to a variety of positive outcomes, including higher self-efficacy for academic achievement (O'Brien *et al.* 1999; Smith *et al.* 1999), enhanced self-esteem (Phinney *et al.* 1997), and more positive relations with people of other races and ethnicities (Phinney *et al.* 1997). Positive relationships with people of other races and ethnicities (members of the outgroup) facilitates the development of biculturality, or the ability to successfully manipulate membership in two cultural groups. Thus, by investigating the role that biculturalism and ethnic identity play in the retention process at the college level, we also identify their relationship to other variables in Bean and Eaton's (2000) model and additional variables included in the proposed revision of this model, such as self-efficacy, motivation, and demographic variables (gender, SES, age). Once the relationships between variables have been determined, then educators and higher education personnel can more readily see how to manipulate one variable to influence others. For example, at the elementary, middle school and high school levels, exposing minority students to minority professionals, particularly in fields where they are underrepresented such as science and engineering, may strengthen students' feeling of ethnic pride and feelings of efficacy.

Based on Phinney *et al.* (1997) finding that strong ethnic group identity was positively correlated with positive relations with people of other ethnic groups, colleges and universities may seek to strengthen alliances between both people of the same ethnicity while simultaneously introducing these groups to other-ethnicity student groups. This would facilitate the strengthening of African American students' within-group ethnic identity and also integrate them into the larger predominantly White campus culture, thereby fostering the development of a bicultural identity.

Bicultural and ethnic identities have been most often measured using scales such as the Bicultural Involvement Questionnaire (Birman 1998) and the Multigroup Ethnic Identity Measure (Phinney *et al.* 1997). However, qualitative research in these areas is needed, particularly at the college level. If quantitative investigations into the role of ethnic and bicultural identity in retention yield weak correlations or determine uncertain relationships, this may be explained by qualitative study into students' perceptions of what it means to be bicultural or to identify with one's ethnic group. For example, Jones (1997) describes biculturalism as consisting of a main culture (in the present discussion, this refers to the larger, predominantly White campus culture) and a subculture (the cultural background and competencies of minority students). Alternately, Phinney and Devich-Navarro (1997) describe biculturalism as being multidimensional, with cultures existing alongside but

distinct from each other, resulting in no quantitative correlations between the two cultures. How do African American students at PWIs conceptualize what it means to be bicultural? Further, how do they conceptualize what it means to identify with their own racial group? These are questions that if answered qualitatively, would further elucidate quantitative findings regarding ethnic identity, biculturalism, motivation and the retention process in general for African American students at PWIs.

Additional qualitative research should also address the experiences of African American students at predominantly White institutions. Such investigations should specifically address (1) students' motivations to attend college in general and their present university in particular; (2) students' perceptions of the academic environment; (3) students' social and academic integration (bicultural development) and their perception of how the university environment contributes to this; and (4) what are their academic and social needs and how can the university support and fulfill these needs. Potential studies should attempt to answer questions such as "How do minority students perceive institutions' commitment to them?" and "What variables affect minority students' perceived institutional loyalty/commitment?" The assumption here is that there are many variables involved in predicting the retention patterns of African American students attending PWIs. Qualitative research, unlike quantitative research, has the ability to reveal variables and relationships that we had not initially considered to be a part of the process. As more recent attention has been turned toward reconsidering traditional models of retention for African American students, it is to researchers' advantage to make an effort to consider as many possible influences on retention, and qualitative investigations of African American students' experiences at PWIs will offer rich examples of the retention process.

Conclusion and Next Steps

The following statement by Pintrich (2003) accurately captures the purpose of our model and recommendations for future research on retention and bicultural identity development issues for African American students in higher education:

> It will not be sufficient to future research to just note that the generalizations [about the role of motivational beliefs in learning and achievement] do not hold for these different groups or different cultures, but rather to grapple with when, why, and how they do or do not hold for different groups. This would include building and developing culture-dependent models of the nomological network of the motivational constructs and their functional relations with other important outcomes, including the addition of new constructs or models if necessary to understand motivation in these different groups (p. 682).

What we have done in the present discussion is use the existing literature base regarding the motivation, socio-emotional development and cultural attributes which underlie the academic achievement, social integration and consequently retention particularly of African American college students attending predominantly White institutions. The goal of the discussion was to use what we know about these students to fashion a theory of what a retention pattern might look like. Thus, the suggested next step following this theoretical discussion is a simple one: apply the model to a sample of African American students attending a PWI and test its empirical merits; suggestions for doing so were offered in the previous section. However, to get a true grasp of the model's worth, the invoking of this

next step should go beyond the target population discussed here, African American students. It is also necessary to consider how the model might apply to other ethnic or racial groups, especially those with high attrition rates, such as Hispanic students. We might also attempt to apply the model to White students, and in doing so, question the timeliness of models such as those proposed by Tinto (1988, 1993) and Bean and Eaton (2000). Another possibility would include looking at any students who are racial or ethnic minorities on their campuses. For example, the findings of Hall and Closson (2005) in their study of White graduate students attending a historically Black college suggest that different psychological and academic mechanisms are at work in those students than in African American students at PWIs, as proposed in the present discussion. By proposing a revised model of retention for African American students at PWIs that emphasizes the role of motivational variables, we hope that this provides a launching point for research not only by educational psychologists, but also in areas such as policy, faculty development, and higher education.

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