# Cultural Diversity and Ethnic Minority Psychology

## Multiple Pathways to Identification: Exploring the Multidimensionality of Academic Identity Formation in Ethnic Minority Males

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Empirical trends denote the academic underachievement of ethnic minority males across various academic domains. Identity-based explanations for this persistent phenomenon describe ethnic minority males as disidentified with academics, alienated, and oppositional. The present work interrogates these theoretical explanations and empirically substantiates a multidimensional lens for discussing academic identity formation within 330 African American and Latino early-adolescent males. Both hierarchical and iterative person-centered methods were utilized and reveal 5 distinct profiles derived from 6 dimensions of academic identity. These profiles predict self-reported classroom grades, mastery orientation, and self-handicapping in meaningful and varied ways. The results demonstrate multiple pathways to motivation and achievement, challenging previous oversimplified stereotypes of marginalized males. This exploratory study triangulates unique interpersonal and intrapersonal attributes for promoting healthy identity development and academic achievement among ethnic minority adolescent males.

*Keywords:* social identification, disidentification, urban education, gender, achievement motivation

National data highlight underachievement trends among African American and Latino males (National Center for Education Statistics, 2006, 2009a, 2009b), raising questions concerning the unique educational experiences of this population. Research demonstrates underachievement for African American male youth in grades and standardized testing (Duckworth & Seligman, 2006; Stinson, 2006) across various academic domains (National Center for Education Statistics, 2006). Latino male youth experience similar difficulties, holding the highest school dropout rates nationally (National Center for Education Statistics, 2012; Podsiadlo & Philliber, 2003), as well as lower academic achievement, effort, and aspirations than their Latina counterparts (E. J. López, Ehly, & Garcia-Vasquez, 2002; Sánchez, Colon, & Esparza, 2005). Although various attributing factors have been discussed broadly, identity-based explanations have dominated psychological discourse, describing how systemic inequities, cultural dissonance, and social threat may spur disidentified identities among marginalized youth, particularly African American and Latino males (Cunningham, 1999; Majors, Tyler, Peden, & Hall, 1994; Noguera, 2003; Osborne, 1999; Steele, 1997; Thomas & Stevenson, 2009).

Academic identity formation is an individual's attempt to construct self-understanding and meaning by defining himself through academic values, school belonging, regard, and performance (Os-

borne & Jones, 2011; Schachter & Rich, 2011). The current study takes a person-centered, multidimensional approach toward understanding the multiple components of academic identity formation, and applies it toward understanding motivation and achievement trends for urban ethnic minority males. The overarching goals of this study are to (a) explore the multidimensional composition of academic identity, (b) use this multidimensional framework to challenge oversimplified notions of ethnic minority males as predominantly disengaged and oppositional, and (c) investigate diverse academic identity profiles and the multiple pathways to achievement and motivation within an urban sample of ethnic minority males.

## Identity and the School Experiences of Ethnic Minority Males

Identifying with academics is an essential element for motivation and achievement (Marsh & Craven, 2006). Moreover, disidentification has been conceptualized as the disconnection between self-esteem and academic performance, and is hypothesized as the crux of underachievement for ethnic minority students (Osborne & Jones, 2011; Steele, 1992), particularly African American and Latino males (Osborne, 1999; Sánchez et al., 2005; A. Z. Taylor & Graham, 2007). However, many ethnic minority males face unique contextual challenges in urban schools that may frustrate their identity development, motivation, and performance. For example, many African American males within urban schools incur disproportionate disciplinary practices (Skiba, Michael, Nardo, & Peterson, 2002), contend with stigma and disparaging expectations from teachers (Entwisle, Alexander, & Olson, 2007; Ferguson, 2000), and are overrepresented within remedial and special education classes (Noguera, 2003; Thomas & Stevenson, 2009). Additionally, many Latino males are also socialized and perceived by teachers through a similar oppositional-antagonistic lens (N. López, 2002).

Thus, the positive identity development of marginalized ethnic minority males may suffer adversely from negative and controlling school environments (Swanson, Cunningham, & Spencer, 2003). At the same time, developmental declines in motivation, efficacy, and interest that are common to many young adolescents (Eccles, 2004) may be exacerbated for youth confronted with such discouraging school experiences (Roderick, 2003). This may incite marginalized students to consciously or unconsciously cultivate identities that are disconnected from school-based values (Davis, 1999; Sewell, 1997), particularly for young males who may display more negative reactive coping in response to the social pressures of pernicious school environments (Cassidy & Stevenson, 2005; Swanson et al., 2003).

### The Need for a Multidimensional Framework

In general, the identification literature has produced a mercurial understanding of academic identity formation that inaccurately projects a limited range of identity constructions that students can form. A focus on singular-dimension conceptualizations of identity may be the impetus for this. On the other hand, theoretical work has begun to discuss individual variation in the construction of the self and how individuals utilize diverse intra- and interpersonal resources to attain desired goals (Ashmore, Deaux, & McLaughlin-Volpe, 2004; Lee, 2008). Specifically, Lee (2008) describes learning as a complex self-system that includes multiple aspects of the self that manifest differently across cultural communities. This discourse on the centrality of culture suggests there may be multiple pathways to adaptation in learning and development.

A few empirical studies have begun to underscore the multidimensional components of identity (Garrett, Antrop-González, & Vélez, 2010; Nasir, McLaughlin, & Jones, 2009; Roderick, 2003; Wright, 2011). Wright (2011) describes ethnic minority males' constructions of racial and academic identities as multifaceted, complex, and even conflicted at times. Empirically, he found that academically successful African American male adolescents identified with the achievements of their peers (i.e., belonging) but also possessed a confidence in their own abilities to be successful (i.e., academic self-efficacy). In another study, high-achieving Puerto Rican males in an urban high school developed a strong sense of school belonging through positive relationships with teachers, but also possessed a strong ethnic identity and developed social capital through extracurricular supports such as family and religious groups (Garrett et al., 2010).

Altogether, studying successful ethnic minority males within classrooms helps mitigate research that overly focuses on the academic shortcomings of this population. However, limitations persist in that the predominant literature still portrays academic identity construction as rather dichotomous (academically identified vs. disidentified). Theory would suggest that ethnic minority males may have multiple ways of engaging in school (Lee, 2008), reflecting the need for a multidimensional framework to capture such complexity. The current study explores the existence of various multidimensional profiles of identity for urban males. This work, therefore, will illustrate diverse means of identifying with academics, ultimately challenging rigid and monolithic conceptualizations of urban male identities that lack the flexibility to account for multiple pathways toward engagement and achievement.

### Academic Identity Formation: A Multidimensional Conceptualization

Scholars have relied on various conceptualizations of academic identity for studying achievement. Some of these include domain identification (Osborne, 1999), school belonging (Voelkl, 1997), academic contingencies of self-worth (Crocker & Wolfe, 2001; Griffin, Chavous, Cogburn, Branch, & Sellers, 2012), and intrinsic values (Wigfield & Eccles, 2000), among others. However, two limitations have undermined the development of this literature. First, many scholars use isolated dimensions of academic identity to infer overgeneralized claims regarding motivation and achievement. Although the multidimensionality of identity is endorsed conceptually (Ashmore et al., 2004; Eccles, 2009; Marsh & Craven, 2006), in practice, the operationalization of academic identity is often narrowly unidimensional, or worse, confounds multiple dimensions of identity. Second, the analytical methods for identity research have become overwhelmingly variable-centered, neglecting to fully leverage the value of person-centered analyses, which can illustrate how nuanced dimensions of identity covary with one another at the level of the individual (Ashmore et al., 2004; Marsh, Lüdtke, Trautwein, & Morin, 2009). For example, academic intrinsic value and school belonging would likely be positively correlated in a variable-centered analysis; however, a person-centered approach is more apt to detect individual or patterned nuances, such as when a student may possess high academic intrinsic value but may have a low sense of belonging to the school community, possibly due to any number of contextual issues (e.g., discrimination, teacher–student conflict, bullying).

Ashmore and his colleagues (2004) have disentangled decades of identity research to present a comprehensive framework outlining the multiple dimensions of social identity. Regarding academics, a few of these dimensions are integral for supporting the present study, and they also align with previous research on academic identity formation (see Table 1) and the achievement motivation literature more broadly. These dimensions are evaluation, importance, attachment and interconnectedness, behavioral involvement, and self-efficacy. Utilizing this framework underscores academic identity as both social and personal, with implications for student motivation and achievement.

First, *evaluation* is the regard or affect one subscribes to a social identity, namely, how one feels about their identity or being a member of their group (e.g., being an achiever). It is the extent to which one derives positive or negative affect from their identity, which could be reflected through feelings of satisfaction, pride, or shame (e.g., "Doing well in school gives me a sense of self-respect"; Griffin et al., 2012; Luhtanen & Crocker, 1992). This conceptualization draws from contingencies of self-worth theory (Crocker & Wolfe, 2001), specifically, the extent to which individuals link a positive sense of self to academic success. However, some scholars also illustrate the dangers of evaluating a sense of worth based on academic performance, which can include disengagement in the face of failure, self-handicapping, or defensive pessimism (Covington, 2000), particularly for marginalized students who face social threat and stigma.

Table 1
*Conceptual Chart for Academic Identity Dimensions*

| Social identity dimensions (Ashmore et al., 2004) | Description | Conceptual equivalent for academic identity formation | Example statements |
|---|---|---|---|
| Evaluation | The attitude an individual has toward being a part of the group in question. This can range from positive to negative and can be situated within private and/or public regard. | Academic contingencies of self-worth | "Being a good student gives me a sense of satisfaction." |
| Importance | The degree of importance or value one places on an identity for their overall sense of self. | Intrinsic value Educational utility Academic centrality | "Being a good student is central to how I think of myself." |
| Attachment and interconnectedness | An emotional involvement or feeling of belongingness with in-group members. Perception of shared values among group members or feeling like a respected member of the group. | School belonging | "My relationships with my teachers and peers at school make me feel like I belong there." |
| Behavioral involvement | The individual's attempt to engage in behaviors that scaffold or reinforce the desired identity and the goals of that identity. | Self-regulated learning | "When I study for class, I set goals for myself in order to direct my focus and energy." |
| Self-efficacy (not specified by Ashmore et al., 2004) | The personal belief that one possesses the necessary skills, disposition, and resources to be successful within the domain in question. | Academic self-efficacy | "I believe I possess the abilities to be successful at the tasks that make me a good student." |

The second dimension, *importance*, is the degree of value a person attaches to an identity. Although evaluation may seem to imply importance, it is essential to note these as related, but distinct, dimensions. Individuals may evaluate an identity favorably but not necessarily as important, especially compared with competing self-categorizations (e.g., academic identification vs. sports identification). In the field of education, the importance of education has been measured via achievement values. The expectancy-value literature shows achievement values to be integral for scaffolding identity formation (Eccles, 2009; Wigfield & Eccles, 2000). Intrinsic value is the interest and perceived importance of engaging in an academic domain. Over time, intrinsic values develop in task specificity, reflecting enduring qualities that are construed as self-defining (i.e., attainment values) (Eccles, 2009). Educational utility (Mickelson, 1990; Midgley et al., 2000) is a future-oriented construct that assesses students' beliefs about the role educational success plays for becoming self-actualized or attaining future goals. Together, intrinsic values and educational utility reflect present and future perceptions of the importance of academic success for the self.

Third, the *attachment and interconnectedness* dimension reflects the emotional-affective component of wanting to belong or contribute to a group of which the individual is a member. The need to interconnect with like-minded individuals is a fundamental human desire, a critical aspect of developing self-understanding (Baumeister & Leary, 1995), and necessary for sustained motivated engagement (Maslow, 1999). In education, this dimension adheres to Voelkl's (1996, 1997) work on school belonging. Here, academic identity is conceptualized as more than simply *intra*personal perceptions of "importance" or "evaluation," but also *inter*personal interactions with key people within the school context (e.g., teachers and peers). This emphasizes a context-sensitive conceptualization of students' bond with the school as a community (Voelkl, 1997).

The *behavioral involvement* dimension is the commitment of the individual to engage in actions that reinforce or ascribe in-group status. Such behaviors align with how scholars in social psychology and education define self-regulated behaviors (or self-regulated learning) (Oyserman, 2007; Zimmerman & Schunk, 2001). Self-regulated learning is an important contributor in developing academic identities by helping individuals plan, monitor, and evaluate cognitive and affective processes that calibrate a positive understanding of the self (Oyserman, 2007) within the academic domain (Zimmerman & Schunk, 2001).

Finally, academic *self-efficacy* is a self-determinant that is a critical factor for the development of achievement identities in school settings, although Ashmore et al. (2004) do not include a specific dimension on how agency relates to social identities. Self-efficacy, the belief that one possesses the ability to complete a task successfully, develops from a collective of personal and social data sources about the self and is an integral component for activating motivation in context (Eccles, 2009). Low academic self-efficacy is associated with psychological disengagement from academic activities, a preference for nonacademically oriented peers, feelings of futility, and a decreased sense of self (Bandura, 1997; Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Schunk & Pajares, 2004). Academic self-efficacy is also related to self-regulated learning, in which one construct continually informs the next in the iterative process of goal attainment and self-actualization (Schunk & Ertmer, 2000; Zimmerman & Schunk, 2001). Hence, this study contends that academic self-efficacy is a critical component of academic identity formation.

## The Present Study

The present study proposes three research questions that attempt to address gaps within the current literature. I intend to demon-

strate that distinct dimensions of academic identity exist, and assessing these dimensions simultaneously adds informative complexity to understanding how ethnic minority males perceive school and negotiate their identity development.

The first question is, are there multiple identity profiles that exist beyond the highly identified versus disidentified dichotomy? I hypothesize that multiple highly identified, conflicted, and disengaged profiles will emerge from the data concurrently. Bringing these profiles in focus highlights the brilliant diversity within urban ethnic minority males, while also illustrating how they utilize diverse resources, capabilities, and perceptions to scaffold identity development. Concerning these diverse profiles, the second question examines whether a disidentified/oppositional orientation toward academics constitutes a predominant proportion of ethnic minority boys. I hope to show that disidentified attitudes reflect the perceptions of only a minor percentage of males in the current sample. Finally, on an exploratory basis, the identity profiles will be used to predict grades, mastery orientation, and self-handicapping. Taken together, these questions should provide clarity on whether disidentification with academics is a substantive component of identity development unique to ethnic minority males and how varied profiles of academic identification relate to achievement and motivation outcomes.

## Method

### Participants and Context

This cross-sectional study consisted of 330 African American, Dominican, Puerto Rican, and Mexican males in the sixth, eighth, and tenth grades. Youth were recruited from seven public middle and high schools in Harlem and the South Bronx, New York City. This urban context hosts a diverse population of ethnic minority students at various levels of academic engagement. Each of the seven schools received Title 1 funding.

Forty-three percent of participants self-identified as African American or Black, 25.5% as Dominican, 17% as Puerto Rican, 5.2% as Mexican, and 7.9% as Latino (nonspecific ethnic delin-

eation). Two participants (0.6%) identified as biracial. Twenty-eight percent of participants were in the sixth grade, 26.7% in the eighth grade, and 45.7% were in the tenth grade (see Table 2).

Twenty-two percent of mothers had less than a high school education, 34.7% had a high school diploma or equivalent degree, 27.6% had a high school diploma and some college, 7.7% had a bachelor degree, and 6.1% had an advanced or professional degree. Eighty-two percent of the student participants were born in the United States, with the remainder foreign-born.

### Procedure

Student participants were recruited from their respective schools with the endorsement of administrators and teachers. Study materials were sent home with students and included a guardian consent form, information about the study, institutional review board information, and a background questionnaire for guardians to complete. The response rate for consent was approximately 73%. Participating students also completed assent forms. The survey instruments were administered during one classroom period during a school day in the spring of 2009.

### Measures

**Profile indicators.**

*Academic contingencies.* Items from the Academic Contingencies of Self-Worth subscale (Crocker & Wolfe, 2001) were used to assess the evaluation dimension of identity. This subscale measures how personal self-worth (i.e., regard) is associated with success on academic endeavors (e.g., "Doing well in school gives me a sense of self-respect."). All items were scaled from 1 (*very untrue for me*) to 5 (*highly true for me*). However, two reverse-coded items (e.g., "Whether or not I am a good student is unrelated to my overall opinion of myself") were dropped from analysis after showing that the six items were not internally consistent ($\alpha = .56$). The phrasing of the reverse-coded items seemed difficult for younger adolescents to decipher and may have hampered the consistency of responses. In the present sample, the internal con-

Table 2
*Group Differences by Grade Level, Ethnicity, and Native Origin*

| | Grade level | | | Ethnicity | | Native origin | |
|---|---|---|---|---|---|---|---|
| | Sixth grade[a] | Eighth grade[b] | Tenth grade[c] | African American | Latino | U.S. born | Foreign born |
| Listwise *n* | 90 | 87 | 149 | 144 | 181 | 269 | 55 |
| Age | 11.9 | 13.9 | 15.4 | | | | |
| 1. School belonging | 3.83 (0.54) | 3.75 (0.51) | 3.69 (0.53) | 3.82 (.50)* | 3.70 (.55) | 3.76 (.52) | 3.70 (.62) |
| 2. Academic contingencies | 3.95 (0.72) | 3.81 (0.75) | 3.74 (0.80) | 3.83 (.77) | 3.80 (.77) | 3.81 (.76) | 3.82 (.83) |
| 3. Intrinsic value | 3.86 (0.73)[c] | 3.76 (0.65) | 3.60 (0.65) | 3.70 (.71) | 3.73 (.66) | 3.69 (.68) | 3.87 (.70) |
| 4. Educational skepticism | 2.34 (1.00) | 2.24 (0.93) | 2.26 (0.89) | 2.39 (.98)* | 2.19 (.87) | 2.29 (.92) | 2.17 (.95) |
| 5. Self-regulated learning | 3.08 (0.46)[c] | 2.96 (0.47) | 2.91 (0.45) | 2.99 (.45) | 2.96 (.48) | 2.96 (.46) | 3.05 (.48) |
| 6. Self-efficacy | 3.78 (0.69) | 3.72 (0.62) | 3.70 (0.66) | 3.69 (.68) | 3.75 (.63) | 3.70 (.65) | 3.91 (.64)* |
| 7. Grades | 5.97 (1.14)[bc] | 5.58 (1.12) | 5.49 (1.18) | 5.59 (1.11) | 5.71 (1.20) | 5.62 (1.15) | 5.80 (1.28) |
| 8. Mastery orientation | 5.16 (0.72) | 4.92 (0.77) | 5.01 (0.69) | 5.06 (.74) | 5.01 (.73) | 5.02 (.72) | 5.10 (.81) |
| 9. Self-handicapping | 2.57 (0.78)[bc] | 2.21 (0.77) | 2.05 (0.70) | 2.21 (.79) | 2.26 (.74) | 2.25 (.78) | 2.19 (.68) |

*Note.* Grades (Likert scale): 8 = mostly As; 7 = As and Bs; 6 = mostly Bs; 5 = Bs and Cs; 4 = mostly Cs; 3 = Cs and Ds; 2 = mostly Ds; 1 = Ds and Fs.
[a] Sixth grade.   [b] Eighth grade.   [c] Tenth grade.
* $p < .05$.

sistency of the four remaining positively coded items was adequate ($\alpha = .71$) and consistent with alphas obtained for this measure among African American students (Griffin et al., 2012).

*Intrinsic value.* The Intrinsic Value subscale from an adolescent version of the Motivated Strategies for Learning Questionnaire (MSLQ; Pintrich & De Groot, 1990) was used to assess the importance dimension. It measures the perceived importance of course work (e.g., "It is important for me to learn what is being taught in class"), intrinsic interest (e.g., "I think what we are learning in class is interesting"), and a preference for challenge (e.g., "I prefer class work that is challenging so I can learn new things"). Although the MSLQ has been validated across various populations, it has not been widely used among ethnic minority youth. In the present sample, the intrinsic value scale showed strong reliability ($\alpha = .80$) and a well-fitting factor structure (comparative fit index [CFI] = .97; normed fit index [NFI] = .93). Further, an assessment of measurement equivalence between African American and Latino students showed metric equivalence across the factor loadings of both groups.

*Educational utility–skepticism.* To assess future-oriented perceptions of the importance of education, the Skepticism about the Relevance of School for Future Success scale was used from the broader Patterns of Adaptive Learning Scales (PALS; Midgley et al., 2000). Five items reflect skepticism about the need for school for personal future success (e.g., "My chances of succeeding later in life don't depend on doing well in school"). For ease of interpretation in the profile analyses, the scale was recoded to reflect positive values (i.e., *utility* instead of *skepticism*). In the present sample, these five items showed strong internal consistency ($\alpha = .81$) and a well-fitting factor structure (CFI = .95; NFI = .92) with metric equivalence between African American and Latino males.

*School belonging.* To measure the attachment and interconnectedness dimension of identity, the Identification with School Questionnaire (ISQ; Voelkl, 1996) was utilized, assessing student feelings of being a valued and respected member of the school community. Sixteen items measure school belonging and value (e.g., "I feel comfortable when I am at school, like I belong there"). All items were measured from 1 (*strongly disagree*) to 5 (*strongly agree*). This scale has been validated among ethnic minority youth (Voelkl, 1997) and shows strong internal consistency in the present sample ($\alpha = .80$).

*Self-regulated learning.* To assess the behavioral involvement dimension, the Strategies for the Regulation of Academic Cognition, Motivation, and Behavior (Wolters, Pintrich, & Karabenick, 2005) was used. Three subscales measured cognitive regulation (e.g., metacognitive or organizational strategies), motivation regulation (e.g., self-consequating), and behavioral regulation (e.g., persistence strategies). Each subscale showed adequate internal consistency (cognitive $\alpha = .89$; motivation $\alpha = .93$; behavioral regulation $\alpha = .65$). The three subscales were averaged to create one self-regulated learning score. The full scale showed a strong fit (CFI = .96; NFI = .92) and metric equivalence between African American and Latino males.

*Academic self-efficacy.* The Self-Efficacy scale was also derived from the MSLQ and consists of nine items regarding perceived competence and confidence in performance of class work (e.g., "I know that I will be able to learn the material for class"). The Self-Efficacy scale showed strong internal consistency ($\alpha =$

.80), with adequate fit (CFI = .94; NFI = .90), and metric equivalence between African American and Latino male youth.

**Profile outcomes.**

*Classroom grades.* To measure academic achievement, students self-reported their grades in math, science, and language arts. Students were asked, "What kind of grades do you normally get in science?" Students responded to this and similar questions for math and language arts through an 8-point Likert scale (8 = *mostly As*; 7 = *As and Bs*; 6 = *mostly Bs*; 5 = *Bs and Cs*; 4 = *mostly Cs*; 3 = *Cs and Ds*; 2 = *mostly Ds*; 1 = *Ds and Fs*). Similar achievement measures have been utilized with success, and meta-analytic research on student self-report of grade point average shows these reports to be generally valid and reliable, although acute precision may be compromised (Kuncel, Crede, & Thomas, 2005; Roeser et al., 2008). To corroborate student reports, parent reports of their child's grades were also collected separately. Students' reports of their composite math, science, and language-arts grades were strongly correlated with parent grade reports ($r = .66$, $p < .01$), which suggest concurrent validity.

*Mastery orientation.* The mastery orientation measure (Midgley et al., 1998) was utilized to measure achievement motivation as conceptualized by an emphasis on mastery learning, effortful persistence, and interpreting failures as opportunities. The four items (e.g., "One of my goals in class is to learn as much as I can") showed strong reliability ($\alpha = .83$) in the present sample.

*Self-handicapping.* The Academic Self-Handicapping Strategies (Midgley, Arunkumar, & Urdan, 1996) measure assessed whether students use strategies that sabotage their academic success and blame these circumstances if they underperform academically rather than their ability (e.g., "Some students put off doing their class work until the last minute. Then if they don't do well on their work, they can say that is the reason. How true is this of you?"). This scale contained five items and showed strong reliability ($\alpha = .80$) in the present sample.

## Analytic Strategy

First, a matrix of correlations was constructed to assess concurrent validity and substantiate the discrete dimensions of academic identity. Group differences by native origin, ethnicity, and grade level were also assessed across the study variables via independent samples and chi-square analyses. The four Latino subgroups were analyzed as one group for analyses that involved ethnicity. The identity dimensions included academic contingencies of self-worth, intrinsic value, educational utility, school belonging, self-regulated learning, and self-efficacy (see Tables 2 and 3). All variables were standardized for ease of interpretability. In order to test metric (i.e., measurement) equivalence across ethnic groups (i.e., African American vs. Latino), confirmatory factor analyses were conducted across the identity measures with multigroup analysis, in which the $\chi^2$ of the unconstrained model was compared with the $\chi^2$ of the model with equivalence constraints across the factor loadings. A significant increase in $\chi^2$ for the constrained model would suggest that full metric equivalence should be rejected.

Next, to address the first and second research aims, a combination of hierarchical and k-means cluster analyses were utilized, first separately then in conjunction with one another. Similar grouping classifications across the differing algorithms of these

Table 3

*Unstandardized Descriptive Statistics and Correlation Matrix*

| Variable | $n$ | $M$ (SD) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. School belonging | 329 | 3.75 (0.53) | — | .33** | .51** | −.26** | .53** | .32** | .23** | .43** | .04 |
| 2. Academic contingencies | 328 | 3.82 (0.77) | | — | .31** | −.15** | .46** | .32** | .10 | .39** | −.02 |
| 3. Intrinsic value | 327 | 3.72 (0.68) | | | — | −.33** | .56** | .63** | .22** | .46** | .04 |
| 4. Educational skepticism | 323 | 2.27 (0.93) | | | | — | −.23** | −.30** | −.20** | −.21** | .28** |
| 5. Self-regulated learning | 330 | 2.97 (0.47) | | | | | — | .48** | .18** | .59** | .09 |
| 6. Self-efficacy | 327 | 3.37 (0.65) | | | | | | — | .26** | .44** | −.09 |
| 7. Grades | 329 | 5.65 (1.17) | | | | | | | — | .16** | −.12* |
| 8. Mastery orientation | 328 | 5.03 (0.74) | | | | | | | | — | −.04 |
| 9. Self-handicapping | 329 | 2.24 (0.76) | | | | | | | | | — |

*Note.* Educational skepticism and self-handicapping are negatively coded.
$^{*} p < .05.$   $^{**} p < .01.$

cluster methods provide validation to the robustness of the clusters derived from the data (Mandara, 2003). Starting with the hierarchical analysis, the Ward method of clustering with a squared Euclidean distance measure was applied. This linkage method creates distinct clusters with minimized error variance. Several criteria were used to determine the appropriate number of clusters, such as the hierarchical dendrogram, the agglomeration schedule coefficients, the distinctiveness of the clusters, the theoretical interpretability of the cluster solution, and a Bayesian information criterion (BIC) score (Aldenderfer & Blashfield, 1984; Nylund, Asparouhov, & Muthén, 2007).

Next, the centroids derived from the hierarchical analysis were used as start values for the iterative k-means analysis, which takes advantage of the strengths of both methods and minimizes the limitations of the iterative k-means analysis (Henry, Tolan, & Gorman-Smith, 2005; Mandara, 2003; S. Taylor et al., 2001). The clusters were described by their standardized mean scores. To check for internal consistency, a rigorous cross-validation procedure was conducted (Breckenridge, 2000; Mandara, 2003) and is described in the results. Beyond internal validity, the relation of the profiles to the study outcomes along with their alignment to previous empirical and theoretical work suggests external and criterion-related validity.

For the final research aim, multivariate analyses were employed using the clusters to predict grades, mastery orientation, and self-handicapping. English, math, and science grades were used to compute an overall achievement score. The compiled grades were normally distributed. The maximum score was 8, which indicated all As, and the minimum score was 1, which indicated mostly Ds and Fs. The mean for the sample was 5.65 ($SD = 1.17$).

## Results

### Descriptive Statistics and Cluster Validation

The various dimensions of academic identity showed moderate to strong correlations (see Table 3), indicating interdependent components of a multidimensional conceptualization of identity. There were few group differences across these variables by ethnicity and native origin (see Table 2). Most notable, African American youth reported significantly higher levels of school belonging, but also higher levels of educational skepticism, compared with the collective Latino subgroups.

The person-centered analyses revealed five distinct, theoretically meaningful profiles (see Figure 1), which address the first research question of this study. The initial hierarchical cluster analysis revealed a five-cluster solution as most theoretically interpretable. The agglomeration schedule of coefficients showed a consistent increase of 0.006 at each stage through the first four stages, then an increase of 0.010 between the fourth and fifth stages, suggesting the tenability of five clusters. To corroborate the clusters identified in the hierarchical cluster analysis, an iterative nonhierarchical cluster analysis (k-means) was performed next, specifying a five-cluster solution. Comparisons of cases across the two cluster methods indicated that 74.7% of cases were similarly classified, suggesting robust clusters within these data.

The final cluster solution was derived by using the cluster centroids from the hierarchical analysis as start values for the k-means cluster analysis, specifying five clusters. The five clusters were labeled through examining and describing the cluster means (see Figure 1) across the identity dimensions. The names of the five clusters are as follows: model students ($n = 80$), calloused-poor students ($n = 53$), sensitive-poor students ($n = 62$), dispirited-connectors ($n = 37$), and moderate students ($n = 82$). Unstandardized means and variation by cluster are presented in Table 4. Cross-validation procedures were conducted to test internal validity (Breckenridge, 2000). First, the data were randomly split into Sample A and B. Next, a full cluster analysis (hierarchical and k-means) was performed on both samples independently. Third, Sample B was classified into clusters according to the centroids derived from Sample A, leaving two different Sample B solutions. Finally, the agreement between the two Sample B solutions was computed using Cohen's Kappa ($\kappa = 0.69$), showing adequate internal consistency. This cross-validation method is a well endorsed and effective indicator of validity (Breckenridge, 2000), suggesting the robustness of the clusters derived from the present data.

Finally, a BIC score was computed to corroborate the appropriateness of a five-cluster solution. BIC values closer to zero indicate better fitting models. A spherical, unequal volume orientation (VII) show cluster Solutions 4, 5, and 6 to be well fitting: one cluster ($-5420.96$), two clusters ($-5088.63$), three clusters ($-5042.61$), four clusters ($-5019.34$), five clusters ($-5014.08$), and six clusters ($-5009.33$). However, a diagonal, unequal volume, equal shape orientation (VEI) showed a five-cluster solution as best fitting: one cluster ($-5449.48$), two clusters ($-5104.60$),

| | Model Student (n=80) | Calloused Poor Student (n=53) | Sensitive Poor Student (n=62) | Dispirited Connectors (n=37) | Moderate Students (n=82) |
|---|---|---|---|---|---|
| ■ Self-Regulated Learning | 0.89 | -1.13 | -0.42 | 0.51 | -0.10 |
| ■ Self-Efficacy | 0.95 | -1.17 | -0.20 | -0.29 | 0.10 |
| ■ Intrinsic Value | 1.04 | -1.20 | -0.36 | -0.14 | 0.09 |
| ■ School Belonging | 0.79 | -1.01 | -0.84 | 0.74 | 0.17 |
| ■ Academic Contingencies | 0.62 | -1.22 | 0.31 | 0.44 | -0.32 |
| ■ Educational Utility | 0.72 | -0.56 | -0.45 | -1.42 | 0.62 |

*Figure 1.* Student academic profiles: Standardized mean scores. Note: Educational utility was recoded to reflect positive values. Higher values reflect more utility. This was done for ease of graphical interpretation.

three clusters (−5053.35), four clusters (−5030.32), five clusters (−5013.05), and six clusters (−5025.54).

The representation of each cluster by native origin, ethnicity, and grade level was assessed through chi-square analysis using Cramer's V coefficient for measuring strength of association (Cohen, 1988). There were no differences beyond what would be expected by chance across the profiles by native origin (U.S. born vs. foreign born), $\chi^2(4, N = 315) = 2.98$, $p = .56$. The relation between the five profiles and ethnicity (African American vs. Latino) was statistically significant, $\chi^2(4, N = 315) = 11.09$, $p < .05$; however, the effect size was small (Cramer's V = .18, $p < .05$). A closer inspection of the frequencies by ethnicity shows that the representation of African American versus Latino males in each profile was as expected based upon their representation

within the entire sample (i.e., no group differences by profile). However, the dispirited-connected profile was the only exception. Here, African American males were overrepresented by approximately 54% more than what would be expected by chance.

Regarding grade level differences among these profiles (sixth, eighth, and tenth grades), there were no significant differences in sixth versus eighth graders', or eighth versus tenth graders' representation across the clusters relative to what would be expected by chance. However, there were significant differences in representation between sixth- and tenth-grade students, $\chi^2(4, N = 226) = 10.07$, $p < .05$ (Cramer's V = .21, $p < .05$). Model students and dispirited-connected students were underrepresented among tenth-grade students, by approximately 20% and 16%, respectively. Alternatively, calloused-poor students and moderate students were

Table 4
*Unstandardized Means and Standard Deviations for Profiles Across the Dimensions of Academic Identity*

| | (5) Model student M (SD) | (4) Calloused-poor student M (SD) | (3) Sensitive-poor student M (SD) | (2) Dispirited-connector M (SD) | (1) Moderate student M (SD) |
|---|---|---|---|---|---|
| 1. School belonging | 4.16 (.36) | 3.21 (.47) | 3.30 (.36) | 4.13 (.32) | 3.83 (.30) |
| 2. Academic contingencies | 4.30 (.54) | 2.90 (.67) | 4.06 (.49) | 4.16 (.46) | 3.57 (.69) |
| 3. Intrinsic value | 4.42 (.39) | 2.89 (.52) | 3.47 (.41) | 3.62 (.56) | 3.78 (.45) |
| 4. Educational skepticism | 1.61 (.63) | 2.79 (.81) | 2.69 (.60) | 3.59 (.67) | 1.71 (.49) |
| 5. Self-regulated learning | 3.39 (.31) | 2.46 (.40) | 2.78 (.33) | 3.21 (.32) | 2.93 (.29) |
| 6. Self-efficacy | 4.36 (.44) | 2.97 (.49) | 3.61 (.46) | 3.54 (.54) | 3.80 (.44) |

*Note.* Lower values of educational skepticism reflect higher perceptions of educational utility.

overrepresented in the tenth grade, by approximately 21% and 11%, respectively. Finally, a one-way analysis of variance (ANOVA) was conducted to examine whether the profiles differed by mother education. Calloused-poor and sensitive-poor students had mothers with the least amount of years of education. Conversely, model students had mothers with the most years of education. However, these differences did not reach statistical significance, $F(4, 185) = .42$, $p = .79$.

## Profile Descriptions and Predictions

The configuration of means across the dimensions guided the labeling of the five profiles. The model student profile was labeled as such because youth in this cluster were two thirds of a standard deviation above the mean on every dimension: academic contingencies, intrinsic value, educational utility, school belonging, self-regulated learning, and self-efficacy. Conversely, the group labeled calloused-poor averaged a standard deviation or more below the mean across the dimensions. The low overall representation of calloused-poor students (16%) provides evidence supporting the hypothesis of the second research question in this study. The sensitive-poor profile was also below the mean on most dimensions but only moderately (i.e., less than one half a standard deviation); however, their academic contingences were moderately above the mean. Although both of these groups are described as *poor*, meaning poorly identified, the descriptive distinction between *calloused* and *sensitive* reflects the severely versus moderately low mean scores, as well as the moderate academic contingences for sensitive-poor students. The implications of these distinctions are described in the Discussion section.

The dispirited-connected profile displayed varied mean scores across the dimensions. They were approximately one half of a standard deviation above the mean on school belonging, academic contingencies, and self-regulatory skills. However, they were also below the mean on self-efficacy, intrinsic value, and educational utility. The label of this profile signifies connectedness but discouragement simultaneously. Finally, the moderate profile was close to the mean on nearly all the indicators, not deviating more than one tenth of a standard deviation from the mean in either direction; however, they were one third of a standard deviation below the mean on academic contingencies, meaning these students were not likely to evaluate themselves based on their academic performance. This profile also had educational utility about one half of a standard deviation above the mean (see Figure 1). These varied profiles address the first two research questions, simultaneously demonstrating the luminous diversity within the current sample and that disidentified males do not constitute the majority of the sample population.

To address the final research question, a multivariate analysis of variance (MANOVA) was conducted, using the clusters as the between subjects factor, on classroom grades, mastery orientation, and self-handicapping as outcomes. Results from the MANOVA yielded a significant multivariate effect of the clusters on the dependent variables as a whole (Wilk's $\lambda = .59$), $F(12, 812) = 14.7$, $p < .001$, $\eta^2 = .20$. Univariate tests were significant across the outcomes. Pairwise comparisons, using Tukey's honestly significant difference (HSD) test, showed how the profiles compared with one another regarding grades, mastery orientation, and self-handicapping (see Table 5).

Table 5
*Outcome Comparisons Across the Five Clusters*

| | (5) Model student (n = 80) M (SD) | (4) Calloused-poor student (n = 53) M (SD) | (3) Sensitive-poor student (n = 62) M (SD) | (2) Dispirited-connector (n = 37) M (SD) | (1) Moderate student (n = 82) M (SD) | $F_{(4,309)}$ | $\eta^2$ | Tukey's HSD |
|---|---|---|---|---|---|---|---|---|
| 1. Grades | 6.14 (1.07) | 5.14 (1.07) | 5.47 (1.21) | 5.52 (.89) | 5.66 (1.25) | 7.04*** | .08 | 5 > 4, 3, & 2 |
| 2. Mastery | 5.55 (.47) | 4.30 (.88) | 4.87 (.54) | 5.22 (.61) | 5.08 (.58) | 35.21*** | .31 | 5 > 1–4 3 > 4, 2 > 3 & 4, 1 > 4 |
| 3. Self-handicapping | 2.23 (.83) | 2.41 (.84) | 2.17 (.68) | 2.68 (.84) | 1.97 (.67) | 7.08*** | .08 | 2 > 1, 3, & 5, 1 < 2 & 4 |

*Note.* Listwise $N = 314$. All posthoc tests reported in this table are significant at $p < .05$. Tukey's HSD = Tukey's honestly significant difference test.
*** $p < .001$.

## Discussion

The present study takes a person-centered approach toward demonstrating varied identity profiles of urban ethnic minority males. With few exceptions, the identity dimensions mainly show moderate correlations ($r = .15$ to $.33$), providing evidence that related, yet nuanced, dimensions of academic identity exist (Ashmore et al., 2004). However, academic self-efficacy is strongly correlated with both intrinsic value and self-regulated learning ($r = .63$ and $.48$). This indicates that feelings of academic competency are paramount in predicting students' value of their academic experiences (Bandura, 1997; Pintrich & De Groot, 1990), and their likelihood of exhibiting high effort and sophisticated strategies for learning (Bandura et al., 1996; Schunk & Ertmer, 2000). Finally, intrinsic value and school belonging are also strongly correlated ($r = .51$), showing that as an individual bonds with the school community, the school's values can become internalized over time, manifesting as the values of the individual (Voelkl, 1997).

### Describing the Identity Profiles

Multiple profiles emerged from the data. The two preeminent profiles represented were the *highly engaged* versus the *severely disengaged* students (i.e., model vs. calloused-poor students), reflecting the academic dichotomy often discussed across psychological and education literatures. In this sample, the model student is high on all the attributes that predict academic success, corroborating research that describes the qualities of high-achieving ethnic minority males (Garrett et al., 2010; Roderick, 2003; Wright, 2011). Model students are thoughtful and effortful workers, as seen through their self-regulatory skills. They feel well connected to the school community, think of academics as important, and perceive the value of education for their future. They also believe they have the ability to be successful academically. Their personal regard is contingent upon academic success, which means that these males derive a sense of pride and satisfaction from being successful on academic tasks. The combination of these attributes likely work in concert to support and perpetuate one another.

Conversely, calloused-poor students are well below the mean on every dimension of academic identity. This profile may very well represent the *disidentified oppositional* archetype commonly discussed in the literature (Cassidy & Stevenson, 2005; Majors et al., 1994; Osborne, 1999). Calloused-poor students do not perceive the importance of school and see academic effort as futile. They feel alienated within the school community and have low self-efficacy. Further, these males have a low regard for academics, which suggest they evaluate their self-worth based on things other than academic success. In other words, their disdain for school does not seem to bother their sense of pride or respect for themselves (Osborne, 1999). These students make up 16% of the entire sample, which indicates that severely disidentified attitudes are not widely prevalent within this sample of urban ethnic males, challenging disidentification as the crux of underachievement trends for marginalized youth (Steele, 1992).

Sensitive-poor students are also low across the identity dimensions, but only moderately. A noteworthy distinction for sensitive-poor students compared with calloused-poor students is their sense of contrition for their poor engagement, as evidenced by their regard for academics, which is above the mean. Although these males do not think school is valuable/important, feel incompetent, and are estranged in school, they are not quite *disidentified*, as they still evaluate school success as a parameter for how they feel about themselves personally (in terms of pride, respect, or satisfaction). Thus, one could speculate that these males would likely respond well to intervention, at least in comparison with calloused males. Perhaps appropriate scaffolding to improve feelings of school belongingness, or developing sound regulatory strategies, would help these students reengage academically. The distinction between poorly identified students (i.e., calloused vs. sensitive-poor students) has not been widely elucidated in previous research, although Roderick (2003) shows some parallels through her work on *withdrawers*, described as avoidant/oppositional, and *the disengaged*, described as previously achievement-oriented students who disengage due to a complexity of internal and contextual issues. However, the present work begins to elucidate the specific qualities of each profile.

Next, dispirited-connectors' seemingly contrasting attributes may highlight different realms of self-perception at conflict within the individual (Sewell, 1997; Wright, 2011). Self-efficacy predicts intrinsic value, both of which these students are low on unfortunately. Nonetheless, these males possess a high sense of school belonging and regard for academic success. They are also above average regulators, which suggest these students are strategic thinkers. Taken together, this profile is effortful and well connected to the school community; however, these students perceive themselves as incapable of completing school tasks successfully, which predicts their low value of the work and a low perception of educational utility. Though these students are giving an honest effort, their regulatory strategies may be ineffective or basic skills insufficient, which perpetually predict their poor self-efficacy (Oyserman, 2007). These males are likely overwhelmed by their academic responsibilities; however, their school belonging and connectedness with teachers and peers are likely a critical support in keeping effortful and engaged (Matthews & Banerjee, 2013; Schachter & Rich, 2011).

Conflicted profiles, such as dispirited-connectors, may be particularly unique to marginalized males, as this population has historically internalized divergent messages, such as understanding the importance of school on an abstract level, but perceiving their incapability to be academically successful on a pragmatic level (Davis, 1999; Sewell, 1997). Teachers may play a role in perpetuating this by providing verbal encouragement for ethnic minority males in the classroom while simultaneously conveying low expectations implicitly, through remedial work, for example. This can allow for connectedness with teachers but simultaneously reinforce feelings of low efficacy or value. In fact, African American males, who are overrepresented in this profile in this sample, demonstrate significantly higher levels of school belonging than Latino males, but also greater skepticism about the importance of education for future success. For this profile, a targeted intervention aimed at promoting high self-efficacy, through challenging work with acute scaffolding, would likely be impactful for increasing educational value and performance.

Finally, moderate students remain close to the mean across the dimensions; however, they do not evaluate academic success as imperative for a sense of self-worth. These students know the value of school, work hard, and feel efficacious, but they do not tie their worth to doing well in school. These males may be involved

in other arenas from which they derive pride or satisfaction (e.g., religious groups, service, family), and may have learned to successfully transfer positive habits from those realms to their academic functioning. Noguera (2003) discusses the support that church organizations and community mentorship programs play for African American males in affirming identity and instilling a sense of pride and responsibility for culture and community. Similarly, a profile analysis of high-achieving Latino males underscores the importance of family support and ethnic-cultural pride (Garrett et al., 2010). Possessing a low regard for academic success might also have utility for these males in the face of failure. Because failure has less of a negative impact on self-worth for these students, they are more likely to persist and try new strategies instead of becoming discouraged when they fail (Covington, 2000; Crocker, Karpinski, Quinn, & Chase, 2003).

Overall, the results suggest that academic identity is more than just the connection between self-esteem and academic performance, but the cogitation of self-efficacy, self-regulation, school belonging, and perceptions of importance and regard. Considering any one of these dimensions alone provides a limited, even biased, depiction of academic identity formation. These profiles are likely not unique to ethnic minority males only; however, the goals of this article are most translucent in demonstrating how assessing the multiple dimensions of academic identity concurrently underscores the various ways students construct identity, particularly for marginalized youth who historically have been boxed into disparaging and rigid identity classifications. Future work will need to substantiate these findings in female and mainstream students from diverse cultures; however, the present study has generalizability for African American and Latino adolescent males within urban settings.

## Achievement and Motivation Outcomes

The second aim of this study was to assess the functionality of the identification attributes for supporting varied pathways to adaptation and achievement (Lee, 2008). As one might expect, model students have the highest grades of all the profiles. However, their grades are no different statistically from moderate students. Interestingly, moderate students have equitable levels of achievement to the most identified students, despite the fact that they do not evaluate their sense of worth as contingent upon academic performance. This disconnection between the self and performance, as exhibited by moderate students, confronts the fundamental assumptions of the dis-identification framework (Osborne, 1999; Steele, 1992). This study provides evidence that students can disconnect their sense of worth from academics and still be high performing academically (Marsh & Craven, 2006; Marsh & O'Mara, 2008).

Regarding mastery orientation, sensitive-poor males are significantly more mastery-oriented than calloused-poor males, signifying a third distinction between sensitive-poor and calloused-poor students. This reflects sensitive-poor students' willingness to give more effort, persist through academic difficulties, evaluate their performance in terms of progress (vs. failure), and be more responsive to scaffolding and teacher support. In the classroom, it is likely easy to confuse calloused-poor and sensitive-poor students, as they share many of the same attitudes, behaviors, and performance. However, despite their low indicators, sensitive-poor males

seem ripe for targeted intervention due to their moderate regard for academic success and their mastery orientation compared with calloused-poor students. These distinctions are small, but noteworthy, and it is debatable whether *disidentified* is an appropriate supposition for sensitive-poor males, even in lieu of their generally low identity attributes.

Self-handicapping is a less studied behavior that can have implications for academic achievement (Midgley et al., 1996). Dispirited-connected students report the highest levels of self-handicapping. The combination of high belonging and regard and low efficacy likely facilitates this. These students evaluate themselves based upon academic success while simultaneously feeling incapable of academic success (Noguera, 2003), creating a recipe for anxiety and the need to protect their sense of self-worth at all costs (Covington, 2000).

Enigmatically, model students and calloused-poor students do not differ on self-handicapping. One might expect self-handicapping among poorly identified students as a defense mechanism from perceived failure. However, this study shows that model students are also under a lot of pressure to succeed and though they may outperform other students, they are also anxious about being able to maintain optimal performance and thus may resort to self-handicapping and other defensive behaviors (Covington, 2000; Crocker et al., 2003; Geddes, 2011; Osborne & Walker, 2006). Model students cope less well when they fail, as their high regard for academic success would allow failure to have a particularly aversive effect on their self-worth. In other words, although model students are generally high functioning, these students have much to lose when threatened with failure, namely, their pride and self-worth, of which academic success in the foundation.

Further, moderate students show the least frequency of self-handicapping behaviors, which may be due to their balanced qualities and low dependency on academic success for self-worth. Moderate students are strong achievers, but also embody good psychological health for steering clear of self-handicapping and maladaptive behaviors that even strongly identified students (i.e., model students) struggle with (Crocker et al., 2003). This underscores that disconnecting one's performance from self-worth can be potentially adaptive.

## Developmental Inferences and Limitations

Last, despite the limits of a cross-sectional design, the results suggest the developmental nature of these profiles. For example, model and dispirited-connected males were both underrepresented in the tenth grade compared with the sixth grade. In addition, calloused-poor and moderate students were overrepresented in tenth grade. Thus, the profiles are less likely to reflect static personality traits rather the evolution of identity over time. Longitudinal research supports the development of identity throughout adolescence (Meeus, Schoot, Keijsers, & Branje, 2012). Younger boys tend to overestimate their abilities and experience declines in academic self-concept, beliefs, and efficacy as they enter and progress through secondary school (Pomerantz, Altermatt, & Saxon, 2002; Wigfield, 1994). This may explain the underrepresentation of model male students in tenth grade compared with sixth grade. Furthermore, dispirited-connectors' underrepresentation among older youth may be associated with their resolve to

work through internal discord and negotiate more balanced and stable identities as they transition into high school. Recent research corroborates this, revealing that youth in *moratorium* (see Marcia, 1980)—an identity status which reflects the insecure and noncommittal attributes of dispirited-connectors in this study—were more likely to be represented among early adolescents and males (Meeus et al., 2012). Simultaneously, that study revealed that youth are more likely to become *achieved*—firmly committed and stable (Marcia, 1980)—during middle to late adolescence, which may account for the higher representation of moderate students in tenth grade in the present study.

Although unfortunate, the calloused-poor profile is also achieved—by Marcia's description (1980)—as well as overrepresented among tenth graders. Developmental research describes how urban male youth are most likely to become alienated and negatively reactive during the early years of high school (Roderick, 2003; Spencer, Fegley, Harpalani, & Seaton, 2004; Stearns & Glennie, 2006; Swanson et al., 2003). The nature of social change from elementary to middle school is exacerbated in the subsequent transition into high school. This may mean not just an increase in the pejorative school experiences described in the literature review, but the stakes for academic achievement become dire, performance feedback becomes more threatening, and quality social support is declining (Roderick, 2003). The convergence of these issues early in high school may cause disenchanted students—perhaps sensitive-poor or dispirited connectors—to perceive academic engagement as a futile endeavor, essentially becoming more calloused and despondent.

In appropriately considering the contribution of this work, some limitations must be addressed. This study is limited by its heavy reliance on self-report survey methodology for measuring dynamic psychological processes. Thus, the potential for social desirability bias must be considered. However, many of the measures utilized here are well validated and represent the most widely used instruments for assessing academic identity. Further, this work is exploratory and purposed to promote conceptual change regarding the multidimensionality of academic identity formation and the pathways to achievement and engagement. Future work will need to utilize observational and interview methods to substantiate the present findings.

Additionally, some survey instruments used in this study are limited in how well they assess their intended dimension. For example, the ISQ (Voelkl, 1996) is a strong measure of school belongingness but also confounded this with the *importance* dimension of identity in how it operationalized. In addition, it is debatable whether intrinsic value or attainment value is best suited to measure the importance dimension. However theoretically, intrinsic values are the root for the development of attainment values over time (Eccles, 2009) and may be better suited to capture global versus task-specific values. In all of this, future work should rely less on previously constructed measures of academic identity and move toward the creation of new scales that acutely assess the nuanced dimensions of identity. Finally, objective assessments of school climate would add informational value for understanding the development of identity in context.

This study urges the field to move beyond simplistic conceptualizations of identity and toward multidimensional methods that consider variation in the individual identity constructions of students. Examining the diverse dimensions of academic identity simultaneously allows for a rich description of the multifarious qualities of student self-perceptions and accounts for individual variation. Ultimately, this allows for targeted intervention efforts that can address the specific, diverse, and nuanced needs of ethnic minority adolescent males.

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