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Factors related to academic self-handicapping in Black students attending a predominantly White University

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Abstract

The goal of the present study was to examine factors associated with academic self-handicapping in Black students attending a predominantly white university. Factors examined included sociodemographic factors (gender, first-generation college student status); psychological factors (family support, perceived discrimination, Black identity); and academic goal orientation. Participants were 240 Black/African American students who were part of a deidentified dataset from a larger study examining undergraduate student's personal experiences and psychosocial correlates of academic self-handicapping (mean age 19.20, 107 first-generation students, 96 men, 144 women). First-generation status and gender were not related to academic self-handicapping. Lower family support, higher Black identity positive regard, and higher perceived discrimination were associated with higher academic self-handicapping. Higher self-handicapping was also related to lower mastery orientation, but higher approach and avoidance orientation. In regression models, family support, Black identity positive regard, and approach/avoidance motivation remained unique predictors of academic self-handicapping. Results suggest that higher education stakeholders focus on strategies and systems of supports to minimize self-handicapping. Stakeholders may also consider interventions focused on enhancing racial identity or directly addressing academic self-handicapping tendencies.

Keywords Self-handicapping · Academic goal orientation · Higher education · Black students

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1 Introduction

Emerging adulthood (ages 18 through 25) is a critical developmental juncture (Arnett, 2018) when many students move from dependence to interdependence and matriculate into and through institutions of higher education. Often students at this stage find themselves in settings where they encounter or perceive negative life stressors, which may adversely impact performance, individual self-confidence, and self-efficacy. These stressors are exacerbated for students from underrepresented groups, contributing to disparities in academic outcomes and academic experiences such as lower levels of academic persistence or widespread social challenges (Eisenberg et al., 2009; Musu-Gillette, 2017; Johnson et al., 2014; Stevens et al., 2018). For example, Black college students, particularly those who attend predominately White institutions (PWIs), experience greater isolation, lower satisfaction, greater race-related stressors (Harper, 2013), and have higher rates of depression than White students (Eisenberg et al., 2013). In addition, students of color experience higher attrition and lower graduation rates (Eisenberg et al., 2009), especially at PWIs (de Brey et al., 2019; Grier-Reed et al., 2011; Harper, 2012, 2013). To ensure the success of Black students in higher education, it is essential to identify factors that might contribute to these differing academic outcomes and experiences.

In the present study, we examined factors associated with engagement in a specific academic behavioral pattern, academic self-handicapping, in a sample of Black students attending a PWI. Self-handicapping refers to "any action or choice of performance setting that enhances the opportunity to externalize (or excuse) failures and to internalize (accept credit for) success" (Berglas & Jones, 1978, p. 406). While self-handicapping can protect someone from personal feelings of failure, it can also help someone avoid the judgement of others (Török et al., 2018). Academic self-handicapping (ASH) is the specific use of self-handicapping strategies in the educational setting, where it can serve as a protection to self-esteem due to fear of academic failure (Kalyon et al., 2016; Schwinger et al., 2022) or perhaps as impression management to student peers (Park & Brown, 2014). For example, procrastination until the last minute when studying for an exam can serve as an excuse to oneself or to one's peers for poor performance on the exam. ASH is generally negatively related to academic performance and outcomes, as well as academic motivation and psychological health (see Schwinger et al., 2014 for a review). Thus, ASH is an important psychological mechanism to study, especially when seeking to address disparities in academic trajectories for Black students.

While some researchers (Urdan & Midgley, 2001; Urdan et al., 1998) hypothesized that individuals from underrepresented groups, such as racial/ethnic minorities attending PWIs, may be more likely to engage in ASH, the few studies that have examined this issue have not shown differences between white and non-white students in overall ASH (see Schwinger et al., 2014 for a review). However, a focus merely on racial/ethnic differences does not lead to understanding of sociocultural and individual difference factors that might generally be related to ASH *within* racial/ethnic groups, which might better assist intervention or prevention efforts, especially when considering academic success in college. In the present study, we focused on several factors suggested by prior research findings, including academic goal orien-

tation, gender, first generation status (i.e., being the first in your family to complete college), family support, perceived discrimination, and Black identity.

1.1 Academic goal orientation

The first factor we examined was academic goal orientation, which generally has good support as a factor contributing to college student academic success. Academic goal orientation is the approach that individuals take toward academic tasks, which can influence their choices, engagement, and even persistence in the academic setting. Students with higher mastery orientation towards learning (i.e., a personal goal to expand their competence in, and mastery of, an academic subject) show better academic outcomes, including better academic motivation, higher academic self-efficacy, and higher GPA (D'Lima et al., 2014; Hsieh et al., 2007). Students with higher performance avoidance orientation (i.e., seeking to avoid public demonstration that they are not competent) show worse academic outcomes (D'Lima et al., 2014; Hsieh et al., 2007). Findings for students with higher performance approach orientation (i.e., seeking to show others that they are competent in or have mastered academic material) are mixed regarding academic outcomes (D'Lima et al., 2014; Hsieh et al., 2007). At least one study suggests these findings hold for Black students. D'Lima et al. (2014) found that Black students showed higher performance avoidance orientation both at the beginning and end of their first semester of college relative to White students, and that the relationship between performance avoidance orientation at the beginning of the semester and poor academic performance at the end was strongest (r = -.49) for the Black student sample.

Elliot and Church (1997) were the first to note that students who engage in ASH may have less adaptive academic goal orientations, which may contribute to their academic difficulties. As Török and Szabó (2018) argue, self-handicapping is more likely to occur when there is uncertainty about experiencing success in an upcoming task, especially when that task may threaten core beliefs about the self (such as an academic task that threatens a student's sense of academic competence/confidence). However, even though self-handicapping is self-protective, it can also serve as impression management in the presence of others (Török et al., 2018). Having an excuse for an academic failure (in the form of a self-handicap) would not only protect the student's self-esteem, but also, if publicly acknowledged, would avoid any suggestion of incompetence to others. Thus, high ASH may be associated with both a performance avoidance orientation and a performance approach orientation, which in turn are associated with poor academic performance.

Research supports this argument. Studies show that both high performance avoidance and high performance approach orientations are related to higher ASH, while higher mastery orientation is associated with lower ASH (Chen et al., 2009; Lovejoy & Durik, 2010; Ntoumanis et al., 2010; Ommundsen, 2004; Urdan & Midgley, 2001; Urdan, 2004). A recent meta-analysis suggested that performance avoidance showed a moderate relationship to ASH, while the effects for mastery and performance approach were small (Schwinger et al., 2022) theorize that this might be because, even though both avoidance and approach motivations reflect concerns about self-

portrayal, individuals with high levels of approach motivation also have positive self-efficacy, which is typically associated with less ASH.

1.2 Gender

Gender is the second factor we examined in the present study. While the meta-analysis conducted by Schwinger and colleagues (2014) did not suggest gender was a moderator of the relationship of ASH to academic outcomes, studies have suggested that there are gender differences in ASH, with women/girls generally less likely to engage in ASH than men/boys (Hirt & McCrea, 2009; Yu & McLellan, 2019). Further, research suggests that gender may be related to academic goal orientations. Although findings are not consistent across all studies, male students of various ages generally report more performance approach and performance avoidance orientation than female students, who tend to show more mastery orientation (Cavallo et al., 2004; King, 2016; Yu & McLellan, 2019). Given the general relationship of ASH to academic goal orientations, these findings suggest that men may show more ASH as well. Furthermore, some research suggests that gender differences in academic goal orientation are stronger among Black students (Evans et al., 2011; Swinton et al., 2011). To date, however, no studies have explored whether race/ethnicity and gender interact to affect ASH or academic goal orientation.

1.3 First generation status and family support

The next set of factors we focused on were first-generation status and family support. A unique challenge for first-generation college students is that their family of origin cannot easily provide support for and assistance in navigating the higher education environment, given their own lack of experience in the higher education setting (Davis, 2010) and subsequent lack of cultural capital (Bourdieu, 1986) regarding college/university life (Wells, 2008). They may also experience conflicts between family norms and values and the norms and values they experience in the academic environment (Ward et al., 2012). Overall, first-generation students tend to report less family support than their continuing-generation peers (Cepeda et al., 2021; Garriott & Nisle, 2018; Sy et al., 2011).

Family support could be helpful to university students in multiple ways, including improving student engagement, assisting with college adjustment, improving persistence/retention, and facilitating learning skills (Alfaro et al., 2018; Dennis et al., 2005; Jabbar et al., 2019; Rayle et al., 2006; Tao et al., 2000). There is much more literature on family support as it relates to decisions about, and support for, entering college, than there is related to student success once admitted to college. However, research shows a growing trend for parents to maintain ties with their college-attending children and to support and engage in more frequent communication with these students (Taub, 2008). Family may help to shape student attitudes and behaviors in the college setting and thus facilitate academic outcomes. Family support has also been shown to be related to better academic adjustment (Wintre & Yaffe, 2000) and less academic stress, for graduate students (El-Ghoroury, 2012) and first-generation female undergraduate students (Sy et al., 2011),

First-generation status and family support may be particularly salient for Black students. Orbe (2004) found that students of color and female students are more aware of their first-generation status than White male economically privileged students, demonstrating the importance of intersectionality to understanding these differences. Researchers have also generally found that parental support is particularly important for first-generation students of color (Auerbach, 2006; Roksa & Kinsley, 2019; Berbery, 2013) found that, for Latina/o high school students with high GPAs, family support was related to higher college-going self-efficacy. Thus although prior research suggests that family support alleviates academic stress and bolsters student self-efficacy, its relationship to ASH, particularly for Black students attending a PWI, is as yet unknown.

1.4 Perceived discrimination and black identity

The final set of factors we focused on were perceived discrimination and Black identity. The vast majority of Black college students attending PWIs report experiencing race-related stressors, including discrimination (Snyder et al., 2019). When Black students encounter circumstances of discrimination at PWIs, they have lower engagement in their educational pursuits (Smalls et al., 2007) and often underperform academically (Billingsley & Herd, 2019). In addition, they are prone to depression and mental health challenges (Lipson et al., 2018), experience poor social and emotional adjustment (Billingsley & Herd, 2019; Chao et al., 2012; Eisenberg et al., 2013), and feel less connected on campus (Mattison & Aber, 2007). These challenges can be impediments to academic advancement and have the potential to exacerbate underperformance experienced by Black students.

Merolla and Jackson (2019) found that students who experience discrimination have higher negative attitudes towards school. Lee and colleagues (2021) argue that negative attitudes about education may be related to increased ASH, given that history of low achievement and negative perceptions of one's own academic competence are also related to ASH. Furthermore, they argue that any sociocultural context that creates an increased need for self-protection, such as the experience of discrimination, should increase the use of performance avoidance or performance approach goals, which, as reviewed above, are related to increased ASH.

In Black students, high academic self-efficacy is associated with mastery goal orientations (Long et al., 2007) and is also associated with stronger Black identity, particularly centrality (i.e., the extent to which an individual emphasizes racial group membership in their overall self-concept, Rodgers & Summers, 2008). Studies also suggest that positive racial regard can protect individuals from experiencing negative psychological effects of perceived discrimination (Sellers & Shelton, 2003). In general, racial identity has been related to both academic and psychological adjustment for Black students in PWIs (Beasley & McClain, 2021; Chavous et al., 2018; George Mwangi et al., 2018). In addition, Tyler and colleagues (2016) showed that, for Black male high school students, internalized negative racial stereotypes were associated with increased ASH. Thus, prior literature has demonstrated that Black identity is related to academic self-efficacy, mental health, and academic outcomes in

Black students attending PWIs, but prior studies have not examined the relationship of Black identity to ASH.

1.5 The present study

As reviewed above, several factors are suggested by theory and/or prior research as potentially related to ASH, including academic goal orientation, gender, first generation status, family support, perceived discrimination, and Black identity. However, they have not been examined together in Black students attending a PWI. Thus, the goal of the present study was to examine how ASH presents in Black students attending a PWI. We hypothesized that ASH would be higher in Black students who are first generation college students and among Black women, given prior research findings. We also hypothesized that less family support, higher perceived discrimination, and lower Black identity would be related to higher ASH. Finally, we predicted that lower mastery orientation, but higher avoidance and approach orientation, would be related to higher ASH, even when adjusting for other factors related to ASH.

2 Methods

2.1 Participants

Participants were 241 students identifying as Black/African American attending two PWIs in the Midwest. All participants were part of a larger study ($N = 1942$) of undergraduates' personal experiences and psychosocial correlates of self-handicapping. Data were collected online from December 2017 through December 2021. Only students who identified as Black/African American were selected for the present analyses. Of the 241 students, 96 identified as men, 144 as women, and one as transgender (who was removed from the present analyses given that due to the sample size we would be unable to conduct analyses on this subgroup).

Of the 240 participants, 107 identified as first-generation college students (i.e., neither parent graduated from college; RTI International, 2021), while 133 did not. The students ranged in age from 18 to 36 years old ($M = 19.20$, $SD = 2.86$) and ranged from first-year students to fifth year seniors (70% were in their first year, 24% in their second year, 3% in their third year, and slightly over 2% in their fourth or fifth year). Perceived socioeconomic status was based on the MacArthur Subjective Social Status Scale, which assesses an individual's perceived social rank relative to others (Adler et al., 2000), and scores ranged from 0 to 10 ($M = 6.54$, $SD = 1.86$; higher scores indicate greater perceived socioeconomic status).

2.2 Procedure

The larger study from which this secondary data analysis was conducted was approved by the two participating universities' Institutional Review Boards. The study was conducted online. As a part of the larger study, students voluntarily completed sev-

eral online questionnaires, including those of interest to the present analyses, and received course credit/bonus points for their participation.

2.3 Measures

From the larger study, the following measures were used to test our main hypotheses. ASH was assessed using the Trait Self-Handicapping Scale (Midgley et al., 1996), which measures the tendency of individuals to engage in academic self-handicapping. An example item is "I put off doing schoolwork until the last moment so that I can say that is the reason if I don't do as well as I hope." Internal consistency in the present study was good ($\alpha = 0.89$).

Academic goal orientation was assessed using mastery orientation, approach orientation, and avoidance orientation subscales of the Patterns of Adaptive Learning Scales (PALS; Midgley et al., 2000). The PALS subscales are an assessment of students' reasons for engaging in academic behaviors. An example of a mastery item is "I'd like to show my teacher that I'm smarter than the other students in my class." An example of an approach orientation item is "An important reason why I do my class work is because I like to learn new things." An example of an avoidance orientation item is "The reason I do my work is so others won't think I'm dumb." Internal consistencies for the three subscales were acceptable (mastery 0.80, approach 0.75, avoidance 0.75).

Family support was assessed using a scale developed by Berbery (2013), who modified a family career support scale initially developed by Flores & O'Brien (2002). It is intended to focus on a student's perception of their family's college-going support. An example item is "I feel encouragement from my family for going to college." In the present study, $\alpha = 0.74$.

Black identity centrality and Black identity positive regard were assessed using subscales from the Multidimensional Inventory of Black Identity (Sellers et al., 1997). These scales measure the extent of an individual's racial identity. An example of a centrality item is "Being Black is an important reflection of who I am." An example of a positive regard item is "I am happy I am Black." The internal consistency for the centrality subscale was 0.70 and for positive regard was 0.80.

Perceived discrimination was assessed using the Perceived Discrimination Scale (Williams et al., 1997). This scale measures an individual's experience of daily discrimination behaviors. An example item is "In your day-to-day life, how often are you treated with less respect than other people are?" Internal consistency was excellent ($\alpha = 0.91$).

2.4 Analytic plan

To test the first hypothesis, that ASH would be higher among Black students who are first generation college students and among Black women, we first examined whether gender or first-generation groups differed in other demographic variables or on study variables, using two (men, women) by two (first-generation status) ANOVAs. To test the hypothesis itself, we conducted a two (men, women) by two (first-generation status) ANOVA with ASH as the dependent variable.

To test the second hypothesis, which was that less family support, higher perceived discrimination, and lower Black identity would be related to higher ASH, we conducted univariate correlations and then multivariate regressions, which were informed by the correlational findings.

To test the final hypothesis, which was that lower mastery orientation, but higher avoidance and approach orientation, would be related to higher ASH, even when adjusting for other factors related to ASH, we used multivariate regression.

3 Results

Unless otherwise noted in the text below, all study statistics are presented in the appropriate tables for ease of readability.

3.1 Group comparisons

To test for potential covariates for our first hypothesis, we compared gender and first-generation groups on sociodemographic and other study variables. See Table 1. Groups did not differ in age, year in school, perceived socioeconomic status, or perceived discrimination. There was a significant interaction between gender and first-generation status for Black identity positive regard, $F(1,236)=11.74$, $p<.001$, $\eta_p^2=0.047$, such that female first-generation students scored the highest, while male first-generation students scored the lowest. There was a main effect of gender for Black identity centrality, $F(1,236)=15.68$, $p<.001$, $\eta_p^2=0.062$, with women scoring higher than men, but no first-generation effect, $p=.88$, and no interaction, $p=.87$. There was a main effect of first-generation status for family support, $F(1,234)=4.07$, $p=.045$, $\eta_p^2=0.017$, with first-generation students reporting lower family support than non-first-generation students, but no gender effect, $p=.09$, and no interaction,

Table 1 Differences in study groups on sociodemographic and other study variables

Variable	Men	Women	First Gen	Not First Gen
	$n=96$	$n=144$	$n=107$	$n=133$
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Age	19.2(2.69)	19.2(2.97)	19.08(2.45)	19.30(3.18)
Year in School	1.33(0.72)	1.43(0.71)	1.37(0.64)	1.41(0.77)
Perceived SES	6.66(1.73)	6.48(1.96)	6.49(1.99)	6.59(1.77)
Black Id Centrality[1]	30.74(6.41)	34.84(7.18)	33.71(7.21)	33.14(7.30)
Black Id Regard[2]	42.53(6.34)	43.93(5.32)	42.98(6.17)	43.68(5.44)
Perceived Discrim	27.44 (10.41)	28.99 (10.88)	28.32 (10.86)	28.41 (10.61)
Family Support[3]	38.97(5.57)	39.93(4.47)	38.91(5.62)	40.04(4.30)
ASH	8.56(3.91)	8.63(4.56)	8.80(4.18)	8.44(4.40)
Mastery[1]	20.59(3.18)	21.56(2.98)	21.25(3.30)	21.11(2.93)
Approach	12.51(4.56)	12.91(4.75)	12.45(4.56)	12.99(4.76)
Avoidance[1]	10.94 (3.36)	12.17 (3.41)	11.32 (3.32)	11.97 (3.51)

Note. SES – Socioeconomic status, Id=identity, Discrim=discriminiation, ASH=academic self-handicapping. 1=women scored higher than men, 2=significant interaction between gender and first-generation status, 3=first-generation scored lower than non-first-generation.

$p = .37$. Women reported more mastery orientation and more avoidance orientation than men (Mastery $F(1,236) = 5.62$, $p = .019$, $\eta_p^2 = 0.023$; Avoidance $F(1,236) = 8.18$, $p = .005$, $\eta_p^2 = 0.034$), but there was no gender effect for approach orientation, $p = .43$. There were no first-generation effects and no interaction effects for any academic goal orientation variable, *p*s .10 to .90. The percentage of first-generation and non-first-generation students in the two gender groups did not differ, $\chi 2(2) = 1.02$, $p = .314$.

Contrary to our first hypothesis, ASH was not higher in first-generation college students or among women (see Table 1). There were no main effects of first-generation status, $F(1,236) < 1$, or gender, $F(1,236) < 1$, and no interaction, $F(1,236) < 1$.

3.2 Factors associated with ASH

Univariate correlations were generally consistent with our second hypothesis. See Table 2. As predicted, lower family support was related to higher ASH, of medium effect size. Higher ASH was also related to lower Black identity positive regard, also of medium effect size, but was not related to Black identity centrality. Higher ASH was also related to more perceived discrimination, of small effect size.

Consistent with our final hypothesis, univariate correlations also showed that higher ASH was related to lower mastery orientation, higher approach orientation, and higher avoidance orientation. The effect size for approach was medium, while for mastery and avoidance it was small. Among the academic goal orientations, mastery was not correlated with approach or avoidance, while approach and avoidance were highly correlated, sharing 57% of their variance, consistent with academic goal orientation theory.

3.3 Regression models

To further test our final hypothesis, we ran two separate regression models, both with ASH as the DV. In the first model, family support, Black identity positive regard, perceived discrimination, mastery orientation, and approach orientation were entered as predictors. In the second model, avoidance orientation replaced approach orientation as a predictor; they were not entered into the same model as this violated multicollinearity. See Table 3 for the results of the two regression models.

Table 2 Correlations among study variables

	ASH	BIC	BIR	PD	FS	Mastery	Approach
BIC	.007						
BIR	-.335[4]	.437[4]					
PD	.147[1]	.179[3]	.44				
FS	-.296[4]	.135[1]	.328[4]	-.113			
Mastery	-.266[4]	.208[4]	.408[4]	-.063	.377[4]		
Approach	.354[4]	.100	-.084	.036	.111	.029	
Avoidance	.237[4]	.120	-.023	.090	.157[1]	.078	.759[4]

Note. ASH – academic self-handicapping, BIC – Black identity centrality, BIR = Black identity positive regard, PD – perceived discrimination, FS – family support. 1 = $p < .05$, 2 = $p < .01$, 3 = $p < .005$, 4 = $p < .001$.

Table 3 Results of regression models predicting academic self handicapping

Model 1	**Standardized beta**	***t***	***p***	**partial corr**
Family support	-0.225	-3.665	<.01	-0.233
BI positive regard	-0.188	-3.03	.003	-0.195
Perceived discrimination	0.087	1.577	.116	0.103
Mastery	-0.106	-1.68	.094	-0.11
Approach	0.362	6.477	<.001	0.391
Model 2	**Standardized beta**	***t***	***p***	**partial corr**
Family support	-0.219	-3.416	<.001	-0.218
BI positive regard	-0.214	-3.33	.001	-0.213
Perceived discrimination	0.076	1.309	.192	0.085
Mastery	-0.106	-1.624	.106	-0.106
Avoidance	0.267	4.562	<.001	0.286

Note. BI = Black identity.

In the model with approach orientation, predictors accounted for 28.2% of the variance in ASH, $F(5,233) = 19.709$, $p < .001$. In the final model, family support, Black identity positive regard, and approach motivation remained unique predictors of ASH in the presence of all other variables.

In the model with avoidance orientation, predictors accounted for 23.9% of the variance in ASH, $F(5,233) = 14.61$, $p < .001$. Family support, Black identity positive regard, and avoidance motivation remained unique predictors of ASH in the presence of all other variables.

4 Discussion

Contrary to our first hypothesis, first-generation status and gender were not related to ASH, nor did they interact. However, consistent with our second hypothesis, less family support and lower Black identity positive regard were related to higher ASH, both of medium effect size. In addition, higher perceived discrimination was associated with higher ASH, although the effect size was small, and perceived discrimination did not emerge as a unique predictor in regression models. Further, consistent with our final hypothesis, univariate correlations supported a small to medium relationship between higher ASH and lower mastery, higher approach orientation, and higher avoidance orientation. When these predictors were entered together into regression models, higher family support, higher Black identity positive regard, and lower approach/avoidance motivation were uniquely associated with lower ASH.

Regarding gender, we did not find differences between men and women in ASH. In our review of the literature, it appeared that only two prior papers reported gender differences in ASH, one from a college sample collected more than 13 years ago (Hirt & McCrea, 2009) and one from secondary school students (Yu & McLellan, 2019). Both found higher rates in women/girls than men/boys. Further, we found that women were higher in mastery orientation, which is consistent with many prior studies (Cavallo et al., 2004; King, 2016; Yu & McLellan, 2019), but that they were also higher in avoidance orientation, which is not. However, these prior studies included very small percentages of Black students; our findings may reflect differences unique to the experience of Black

students attending PWIs. For example, it has been theorized that Black college students, particularly those who attend predominately White institutions (PWIs), experience more social identity threats, which could result in more academic disengagement (Verkuyten et al., 2019), regardless of gender. Future studies should consider the intersectionality of race and gender in examining differences in ASH among college students.

While we did not find differences in ASH based on first-generation status, we did find that a variable associated with first-generation student success, family support, was associated with ASH, such that lower family support was associated with higher ASH. Of note, first- generation students reported significantly less family support in the present sample. Family support remained a unique predictor of ASH even in the face of other predictors. While we are not aware of any prior studies that have examined the relationship of family support to ASH, our findings are consistent with studies showing the importance of family support to academic stress and academic self-efficacy, including in Black students.

While perceived discrimination was related to ASH in univariate correlations, the effect size was small, and perceived discrimination did not emerge as a unique predictor of ASH in the presence of other predictors. However, Black identity positive regard was negatively associated with ASH in both regression models. Of note, Black male first-generation students showed the lowest Black identity positive regard in the present sample. While prior research on Black identity has focused on race centrality and its relationship to academic self-concept and GPA (Beasley & McLain, 2021), race centrality was not associated with ASH in our study. As advanced earlier, racial centrality tends to focus on the degree to which being Black is central to an individual's identity, while positive regard focuses more on the degree to which an individual feels positive about their identity as a Black person. It may be that it is the positive feelings about being a Black person that are more strongly associated with engagement in ASH. Consistent with this speculation, Verkuyten and colleagues (2019) argued that a core component of social identity threat, which they believe is related to academic disengagement, is a need for a positive self-view. In general, however, our results support the importance of racial identity to academic and psychological adjustment for Black students who attend PWIs (Beasley & McClain, 2021; Chavous et al., 2018; George Mwangi et al., 2018), expanding that relationship to include engagement in ASH.

Finally, regarding academic goal orientation, our findings are consistent with prior research suggesting a relationship of ASH to both adaptive (mastery) and less adaptive (approach and avoidance) orientations. Specifically, in the context of other predictors, it was the less adaptive academic goal orientations that remained unique predictors. These findings are similar to those of Lee and colleagues (2021), who found that ASH was related to both approach and avoidance orientation, but not mastery orientation, in middle school students from underrepresented minority groups. Overall, given the relationship to both approach and avoidance motivation, our results suggest that ASH may be related to both an individual's inclination toward protecting their self-esteem and a desire to avoid appearing incompetent to others.

4.1 Limitations and future directions

Our results should be considered in light of its limitations. Our data was collected cross-sectionally and thus cannot speak to causal relationships among the variables of interest. Future studies should use longitudinal designs that track changes to these constructs over the course of an academic year or years; attention should also be given to collection of outcome variables such as grades and retention. Second, our data was collected at only two universities, both with students on campuses in more rural midwestern communities that were also predominantly White. It is important to gather data from other PWIs that are in settings where there may be broader community or societal supports for Black students. In addition, future studies could compare the present findings to samples of Black students attending historically Black colleges and universities to see if type of college setting moderates the relationships we identified. Finally, although we examined several variables that prior literature suggested as potentially important for Black students attending PWIs, other variables, such as academic coping styles (Kendall-Brooks & Talley, 2020; Snyder et al., 2014;) and psychological factors such as John Henryism (Adams et al., 1999; Powell et al., 2016) could also be considered in future studies. There may also be unique constructs related to ASH for Black students attending PWIs; qualitative data collection approaches might be useful for identifying such constructs to consider including in future research.

4.2 Implications for higher education stakeholders

Adjusting to college is important and can either positively or negatively affect long-term outcomes (i.e., persistence/retention and graduation), and family support is an important part of that adjustment. For first-generation students, who may have lower family support, education stakeholders may need to "fill in the blanks" of social and cultural capital related to higher education (Laanan et al., 2011). Advisors, faculty, and other trusted institutional personnel need to be aware that not all students - even those with college-educated parents - will 'know' how to be a college student or how to thrive in college settings. As a related point, students do not always know how to seek out help or who to reach out to for resources and support in college. College is a time of transition, where students are moving away from dependence and toward independence. It is possible that they have not had a previous example of needing help, then seeking it out, to rely upon. Coupled with experiencing ASH, the act of reaching out for help could be too large of a barrier to overcome. To meet the needs of students who may need help the most, institutions could identify those at high risk who may need more structure and support. For example, assessing family support, especially for first-generation students, may point to those at most need for additional scaffolding and support. Making structures and supports easily accessible, provided in multiple formats (in person, virtual) and perhaps by individuals with shared identities (peers, other Black students, other first-generation students) would minimize psychological barriers to taking advantage of these supports. Our findings also suggest that higher education interventions and activities designed to enhance racial identity might foster better academic functioning for Black students of PWIs (Chapman-Hilliard et al., 2016; Chavous et al., 2018; Graham & McClain, 2019; McDougal et al., 2018; Szymanski, 2015). It is important to note that we found that Black

male students with first generation status had the lowest Black identity positive regard, which might suggest this is a particularly important area of focus for these students. With regards to provision of interventions or trainings focused specifically on ASH, some cognitive behavioral psychological interventions have shown success in lowering ASH in Australian college students (Kearns et al., 2007) and Iranian nursing students (Zarshenas et al., 2019), suggesting psychological interventions may be useful for Black students attending PWIs. However, our findings suggest that ASH interventions for Black students should consider Black identity and other sociocultural variables to both engage students in the intervention and improve efficacy. Educational stakeholders should also consider best ways to minimize barriers to participation in such interventions, including use of interventionalists with shared identities (race, first-generation status, gender) and developing ways to identify those at risk to refer to these interventions (assessment of ASH tendencies, early referral by instructors).

As colleges and universities explore ways to recruit, retain and support the successful trajectories of Black students, it is apparent that institutions will have to be cognizant of student tendencies to engage in ASH. Institutions of higher education will also need to work to facilitate academic environments where students feel a sense of belonging and experience the encouragement to persist. Our findings are consistent with other scholars and show that the academic achievement and sense of belonging of Black students is linked to a student's sense of mastery, self-concept, and self-efficacy (Kopershoek et al., 2020; Shaheed & Kiang 2021). Although some progress has been made, and educators are more sensitive to the specific needs of Black students, these students, and particularly Black males, continue to lag behind their White peers in persistence to graduation (Druery & Brooms, 2019; Strayhorn, 2017). Consequently, a laser focus on contributing challenges to the academic achievement of Black students and renewed strategies to address these challenges are necessary to successfully move the needle toward better academic outcomes.

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Declarations

Conflict of Interest The authors declare no conflict of interest.

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