


Can Identity Conflicts Impede the Success of Ethnic Minority Students? Consequences of Discrepancies Between Ethnic and Ideal Selves

Personality and Social Psychology Bulletin
2018, Vol. 44(12) 1725–1738
© 2018 by the Society for Personality and Social Psychology, Inc
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/0146167218777997
journals.sagepub.com/home/pspb


Régine Debrosse^{1,2}, Maya Rossignac-Milon³,
Donald M. Taylor¹, and Mesmin Destin²

Abstract

Because of stigma and underrepresentation, many ethnic minority students may find it difficult to align their ethnicities with their ideal selves. However, these difficulties and their potential consequences have been empirically neglected. To inform this gap in the literature, we propose that the novel concept of ethnic/ideal self-discrepancies (i.e., perceived mismatches between who a person aspires to be and this person's conception of their ethnic self) is associated with the academic outcomes of ethnic minority students. As hypothesized, large ethnic/ideal self-discrepancies predict high academic disengagement, according to cross-sectional data from Study 1 ($n = 147$) and Study 2 ($n = 105$), as well as high academic disengagement 2 months later according to half-longitudinal data from Study 2 ($n = 78$). In Study 3 ($n = 99$), ethnic minority students experimentally induced to perceive high ethnic/ideal self-discrepancies reported significantly higher academic disengagement than ethnic minority students in a low discrepancy condition.

Keywords

ethnicity, academic achievement, self-discrepancies, self-concept

Received October 16, 2016; revision accepted April 15, 2018

Ethnic minority students often dream big and have immense academic potential (e.g., Fuligni, 1997; Krahn & Taylor, 2005; Mau & Bikos, 2000; Russell, 2005). At the same time, misalignments, whether apparent or real, between achieving and belonging to an underrepresented group are an underlying theme in the literature on the academic experiences of ethnic minority students, that is, students who belong to ethnic or racial groups that are not dominant in their society (Phinney, 1996). Perhaps, in part, because low-status groups are judged negatively in general (Biernat & Dovidio, 2000), and as less competent in particular (Caprariello, Cuddy, & Fiske, 2009; Fiske, Cuddy, Glick, & Xu, 2002), achievement settings can trigger feelings of threat for ethnic minority students¹ (Cohen & Garcia, 2008). Some ethnic minority students doubt that they belong in academic institutions (Walton & Cohen, 2007), or report that achieving academically does not align well with belonging to their group (Altschul, Oyserman, & Bybee, 2006; Arroyo & Zigler, 1995).

Negative stereotypes often conveyed about nondominant groups, whether in the media or in public discourse, can impede the performance of ethnic minority students. For instance, the fear of confirming negative stereotypes generates “stereotype threats” characterized by stress-related

arousal that impede the performance of ethnic minority students (Steele & Aronson, 1995), as well as immigrant students (Armenta, 2010; Deaux et al., 2007; Gonzales, Blanton, & Williams, 2002), women (Shih, Pittinsky, & Ambady, 1999), and working-class students (Croizet & Claire, 1998). Experiencing these stereotype threats in academic settings is common (Steele, Spencer, & Aronson, 2002), even for students who do not endorse the negative stereotypes associated with their group (Leyens, Désert, Croizet, & Darcis, 2000). Furthermore, awareness of unfair treatment or discrimination against their group in academic environments is also associated with underrepresented students' academic disengagement (Schmader, Major, & Gramzow, 2001; Smalls, White, Chavous, & Sellers, 2007), lower grades (Huynh & Fuligni, 2010), and poor academic outcomes (Neblett, Philip, Cogburn,

¹McGill University, Montréal, Québec, Canada

²Northwestern University, Evanston, IL, USA

³Columbia University, New York, NY, USA

Corresponding Author:

Régine Debrosse, Department of Psychology, Northwestern University, Swift Hall 403A, 2029 Sheridan Road, Evanston, IL 60208, USA.

Email: regine.debrosse@northwestern.edu

& Sellers, 2006). Anticipating and being sensitive to discrimination is also associated with reduced identification with academic institutions (Mendoza-Denton, Pietrzak, & Downey, 2008; Rheinschmidt & Mendoza-Denton, 2014). As a reaction to the stigma associated with their group, many underrepresented students stop viewing their academic performance as relevant to their self-esteem (Nussbaum & Steele, 2007; Osborne, 1995).

Despite the low expectations that other people often have for them, many ethnic minority students have high aspirations for themselves (e.g., Fuligni, 1997; Krahn & Taylor, 2005; Mau & Bikos, 2000). Yet, considering how nondominant groups are generally represented culturally and in media, it is possible that some ethnic minority students perceive that their academic and aspiration-related ideals do not align well with their collective or ethnic self. Myriad studies have examined how other people's views and expectations affect ethnic minority students' achievement. However, less work has explored how ethnic minority students' idiosyncratic views about their group fit with their academic selves. Building on recent research introducing self-discrepancies that involve ethnic selves, the present studies use cross-sectional, half-longitudinal, and experimental designs to address this gap in the literature and investigate for the first time whether perceiving mismatches or similarities between ethnic and ideal selves are associated with academic disengagement for ethnic minority students.

The Influence of Collective Selves on Motivation

Recent research suggests a relation between motivation and collective selves (e.g., Eccles, 2009; Oyserman & Destin, 2010). For instance, students persist on academic tasks they view as congruent with their collective selves (Oyserman & Destin, 2010). Moreover, members of stigmatized groups devalue areas in which they believe that their group does not perform well (Crocker & Major, 1989; Schmader & Major, 1999). In academic environments, cues reminiscent of stereotypes or discrimination can decrease motivation (Cohen & Garcia, 2008). Therefore, dissociating traits, skills, habits, or domains from one's ethnic self can lead to disengagement, whereas associating them to one's ethnic self might lead to sustained engagement.

The literature further suggests that collective selves might influence motivation indirectly, through their influence on personal selves. Components of collective and personal selves are often strongly related (Crocker, Luhtanen, Blaine, & Broadnax, 1994; Osborne & Taylor, 2010). Indeed, belonging to social groups can shape personal components of the self-concept. For instance, Taylor (2002) postulates that, over time, many personal self-aspects emerge from collective selves, and that even distinct personal self-aspects are developed in relation to collective self-aspects.

Furthermore, self-stereotyping research suggests that people can adopt group-related attributes (Hogg & Turner, 1987). Both people who highly identify with a group and members of minority groups are especially prone to self-stereotyping (Simon & Hamilton, 1994; Sinclair, Hardin, & Lowery, 2006; Spears, Doosje, & Ellemers, 1997). Although self-stereotyping is more likely when the internalized attributes are positive (Biernat, Vescio, & Green, 1996; Ellemers, Spears, & Doosje, 2002), it also occurs when they are negative (Latrofa, Vaes, Cadinu, & Carnaghi, 2010; Pickett, Bonner, & Coleman, 2002). Interestingly, people do not self-stereotype as often when they are placed in a new context, but self-stereotyping tendencies and the internalization of group attributes can increase over time, so that internalization of group attributes increase over time as well (van Veelen, Otten, Cadinu, & Hansen, 2016).

Together, these studies indicate that collective selves influence how people define themselves as individuals, which goals they select, and how they pursue these goals. Thus, insofar as collective selves are associated with motivation, personal selves should also be associated with motivation. When placed in the perspective of findings on underrepresented students' experiences, they suggest that mismatches between an ideal personal self and a collective self could be especially detrimental to academic outcomes. These effects could occur directly, but also indirectly: when ethnic selves, over time, shape personal selves. Research has not addressed whether ethnic minority students tend to perceive wide mismatches between academic-related and ethnic-related components of their self-concept and, if they do, whether such wide mismatches are problematic for motivation. Before further exploring this idea, we will provide a theoretical foundation through a brief discussion of self-discrepancy research, which focuses on mismatches within the self-concept.

Self-Discrepancies

Self-discrepancy theory (Higgins, 1987) distinguishes between several forms of self-concept mismatches. Actual/ideal self-discrepancies capture perceived mismatches between the ideal self (i.e., characteristics that people wish they possessed as individuals) and the actual self (i.e., characteristics people believe they *actually* possess as individuals). Actual/ideal self-discrepancies are often contrasted with actual/ought self-discrepancies—perceived mismatches between the ought self (i.e., characteristics that people feel they should possess as individuals) and the actual self. Actual/ideal and actual/ought self-discrepancies are both associated with negative emotions and poor psychological health (e.g., Strauman & Higgins, 1987). Self-discrepancies also predict motivation (e.g., Higgins, Roney, Crowe, & Hymes, 1994; Higgins, Shah, & Friedman, 1997): Large self-discrepancies are associated with more indecision and confusion, for instance (Van Hook & Higgins, 1988). Of particular interest to the present research is the fact that actual/ideal self-discrepancies are associated with

academic outcomes, such as school achievement (Ferguson, Hafen, & Laursen, 2010), assessment of academic difficulty (Cantor, Norem, Niedenthal, Langston, & Brower, 1987), and even the selection of future aspirations (Pinquart, Silbereisen, & Wiesner, 2004).

Although research has identified several channels through which collective selves influence academic outcomes (Cohen & Garcia, 2008; Miller-Cotto & Byrnes, 2016), self-discrepancies involving collective selves are understudied. Self-discrepancy theory has been instrumental in clarifying the consequences of mismatches between different self-concept components, but only a handful of studies have examined self-discrepancies incorporating experiences associated with collective selves (e.g., Bizman, Yinon, & Krotman, 2001; Sekerdej & Roccas, 2016). Other researchers, such as Stephens, Fryberg, Markus, Johnson, and Covarrubias (2012), have examined mismatches occurring between the independent self-construal promoted in academic institutions' cultures and the interdependent self-construal promoted by working-class students' culture. However, these mismatches occur outside of the self-concept: They occur between institutions and individuals, rather than within individuals.

Recent research by Debrosse, Rossignac-Milon, and Taylor (2018) has introduced self-discrepancies between ethnic actual selves and personal ideal and ought selves (referring to them as "collective actual/personal ideal self-discrepancies" and "collective actual/personal ought self-discrepancies," but for concision and clarity, we will refer to them as ethnic/ideal self-discrepancies and ethnic/ought self-discrepancies, respectively). In this first investigation of the association between psychological health and self-discrepancies between ethnic and possible selves, ethnic minority students who perceived large self-discrepancies between their collective ethnic selves and personal ought selves reported more severe depression and anxiety symptoms. The same study also suggested that actual/ought self-discrepancies mediated the association between these self-discrepancies and psychological health. These findings highlight the relevance of self-discrepancies between ethnic and personal selves for ethnic minority students; but no study yet has examined ethnic/ideal self-discrepancies in relation to academic outcomes.

The Present Research

We propose that ethnic minority students' perceptions of their ethnic group in relation to their perceptions of their career aspirations affect their academic outcomes. Whereas small self-discrepancies can motivate individuals to bridge the gap between their possible and actual selves, large discrepancies can be a source of disappointment and discouragement (Higgins, 1987). Furthermore, given that actual/ideal self-discrepancies are more strongly associated with discouragement-related emotions than actual/ought self-discrepancies (Strauman & Higgins, 1987), we expect that ethnic/ideal

self-discrepancies will be particularly relevant to academic disengagement.

Our central hypothesis is that perceiving large (v. small) ethnic/ideal self-discrepancies is associated with higher (v. lower) academic disengagement for ethnic minority students. We further expect that ethnic/ideal self-discrepancies influence academic disengagement to the extent that they shape actual/ideal self-discrepancies. In the context of ethnic minority students' daily lives, where ethnic/ideal self-discrepancies, whether small or large, are likely to be activated often, actual/ideal self-discrepancies likely mediate the relation between academic disengagement and ethnic/ideal self-discrepancies. Indeed, people tend to build their personal selves from their collective selves over long periods of time (van Veelen et al., 2016). In short, the present three studies will test the following hypotheses:

Hypothesis 1: Larger (v. smaller) ethnic/ideal self-discrepancies predict higher (v. lower) academic disengagement.

Hypothesis 2: Actual/ideal self-discrepancies mediate the association between ethnic/ideal self-discrepancies and academic disengagement, such that ethnic/ideal self-discrepancies influence academic disengagement to the extent that they shape actual/ideal self-discrepancies.

Study 1

Study 1 aims to explore our central claim linking ethnic/ideal self-discrepancies with academic disengagement, using data from a larger study on the psychological health of ethnic minority students.² We sought cross-sectional evidence that larger ethnic/ideal self-discrepancies are associated with higher academic disengagement and that this association remains robust when taking into account alternative explanations (Hypothesis 1), as well as evidence that this association is mediated by actual/ideal self-discrepancies (Hypothesis 2).

In investigating whether ethnic/ideal self-discrepancies predict academic disengagement over and above the effects of other collective factors, we controlled for collective self-esteem (Crocker et al., 1994), to rule out the explanation that the relation between ethnic/ideal self-discrepancies and academic disengagement is due to a low attachment to or pride in one's group. Considering the importance of distinguishing actual/ideal and actual/ought self-discrepancies in self-discrepancy theory, we also assessed whether ethnic/ideal self-discrepancies were associated with academic disengagement when accounting for ethnic/ought self-discrepancies.

Method

Participants. We used data from a larger study in which 151 students identifying with ethnic minority groups were recruited in a Canadian university. Four students who did not answer at least one complete scale were removed from the final sample, which consists of 147 students³ (109 women

and 38 men, M age = 20.33 years, SD = 1.74 years). Students listed 50 different cultures as ethnicities, and about half of them were born in Canada (51.7%).⁴

Ethnic/ideal and ethnic/ought self-discrepancies. Consistent with previous research (Higgins et al., 1997), participants listed five characteristics describing how they felt they ideally wanted to be as students, and five describing how they felt obligated to be as students. Critically, rather than being asked about the characteristics that they believe are generally ideal for students to possess or, alternatively, about the characteristics that they believe students perceive as ideal, participants were asked to reflect upon the characteristics that they wished they *personally* possessed as students, to capture their personal ideal selves.

Then, students rated how much each characteristic could generally be used to describe members of their ethnic group, on a 4-point Likert-type scale ranging from 1 (*slightly*) to 4 (*extremely*). We reversed and averaged the ratings on the extent to which ethnic groups possess ideal characteristics to compute ethnic/ideal self-discrepancies scores, such that large ethnic/ideal self-discrepancy scores reflect the belief that members of one's ethnic group generally do not possess the traits, skills, and habits of one's personal ideal self as a student. Using ought characteristics, we used the same method to compute ethnic/ought self-discrepancies.

Actual/ideal and actual/ought self-discrepancies. Students also rated the extent to which each of the five ideal and five ought characteristics described themselves as individuals, on a 4-point Likert-type scale ranging from 1 (*slightly*) to 4 (*extremely*). Ratings regarding ideal characteristics were reversed and averaged to compute actual/ideal self-discrepancies scores. Thus, participants who do not believe that they *personally* possess the traits, skills, and habits of their ideal self had large actual/ideal self-discrepancy scores. Using ought characteristics, we applied the same method as the one using ideal characteristics to compute actual/ought self-discrepancies.

Academic disengagement. Next, participants completed an adapted version of the four-item Goal Disengagement Scale (Wrosch, Scheier, Miller, Schulz, & Carver, 2003; α = .76). On a 5-point Likert-type scale ranging from 1 (*almost never true*) to 5 (*almost always true*), they indicated their agreement with items assessing commitment and efforts toward academic goals (e.g., It is easy for me to reduce my effort toward my academic goals).

Collective self-esteem. On a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), participants rated their agreement to the 16 Collective Self-Esteem Scale items (Luhtanen & Crocker, 1992; α = .90). This scale captures positive feelings that people have for their ethnic group (e.g., I feel good about my ethnic group).

Results and Discussion

Preliminary analyses. On average, participants reported that they experienced discrepancies to some degree, but not to an extreme degree, between their ethnic and ideal selves as well as between their actual and ideal selves (see Table 1). As expected, academic disengagement was significantly correlated with both ethnic/ideal self-discrepancies (r = .226, p = .006) and actual/ideal self-discrepancies (r = .270, p < .001). As variance inflation factor (VIF) statistics were between 1.227 and 2.006, there was no evidence of multicollinearity between the predictors of academic disengagement (see Table 1). Similar to past research, ethnic/ideal self-discrepancies were highly correlated with ethnic/ought self-discrepancies (r = .638, p < .001), and actual/ideal self-discrepancies were highly correlated with actual/ought self-discrepancies (r = .689, p < .001).

Mediation model. We expected larger ethnic/ideal self-discrepancies to be associated with higher academic disengagement (Hypothesis 1), and actual/ideal self-discrepancies to mediate this association (Hypothesis 2). Thus, we used the PROCESS Macro Model 4 (Hayes, 2013) to assess the role of the ethnic/ideal self-discrepancies (X independent variable) and actual/ideal self-discrepancies (M mediator) in predicting academic disengagement (Y dependent variable).

Overall, the total effect model predicted academic disengagement, $F(1, 145) = 7.801$, p = .006, R^2 = .051: When entered as a sole predictor, ethnic/ideal self-discrepancies significantly and positively predicted academic disengagement (β = .226, p = .006, η^2 = .051, 95% confidence interval [CI] = [0.066, 0.386]). The link between ethnic/ideal self-discrepancies and academic disengagement became weaker, but remained significant, when adding actual/ideal self-discrepancies as a predictor (β = .165, p = .046, η^2 = .027, 95% CI = [0.003, 0.328]), $F(2, 144) = 7.827$, p < .001, R^2 = .098. Larger ethnic/ideal self-discrepancies were associated with larger actual/ideal self-discrepancies, β = .269, p < .001, η^2 = .073, 95% CI = [0.111, 0.427], $F(1, 145) = 11.350$, p < .001, R^2 = .073, and larger actual/ideal self-discrepancies with higher academic disengagement (β = .225, p = .007, η^2 = .051, 95% CI = [0.063, 0.388]). The 5,000-sample bootstrapping-generated mean estimate for the standardized indirect effect of ethnic/ideal self-discrepancies on academic disengagement was of 0.061 (SE = 0.030) with a 95% bias-corrected confidence interval excluding zero [0.016, 0.137], thus supporting the mediating role of actual/ideal self-discrepancies.

These analyses supported Hypotheses 1 and 2: Ethnic minority students who report large ethnic/ideal self-discrepancies also tend to report large actual/ideal self-discrepancies, and those reporting large actual/ideal self-discrepancies also report high academic disengagement. Furthermore, actual/ideal self-discrepancies partially mediated the relationship between ethnic/ideal self-discrepancies and academic disengagement.

Table 1. Study 1 Correlations and Descriptive Statistics.

	Descriptive statistics				Correlations				
	Range	M	SD	VIF	1.	2.	3.	4.	5.
1. Ethnic/ideal self-discrepancies	1-4	2.24	0.58	1.734	—				
2. Actual/ideal self-discrepancies	1-4	2.34	0.58	2.003	.27***	—			
3. Ethnic/ought self-discrepancies	1-4	2.21	0.61	1.794	.64***	.26**	—		
4. Actual/ought self-discrepancies	1-4	2.36	0.69	2.006	.24**	.69***	.31***	—	
5. Collective self-esteem	1-7	4.91	0.95	1.227	-.28***	-.35***	-.30***	-.33***	—
6. Academic disengagement	1-5	2.42	0.91	—	.23**	.27***	-.13	.29***	.12

Note. VIF = variance inflation factor.
 * $p < .05$. ** $p < .01$. *** $p < .001$, two-tailed.

Alternate mediation model (with covariates). We also aimed to examine whether the effects of ethnic/ideal self-discrepancies were, in part, attributable to ethnic/ought self-discrepancies, actual/ought self-discrepancies, or collective self-esteem. However, although there was no evidence of multicollinearity, high correlation between ethnic/ideal and ethnic/ought self-discrepancies, as well as between actual/ideal and actual/ought self-discrepancies, suggests that teasing apart their respective influences would pose a challenge. To address it, we used residual scores, a strategy used in previous self-discrepancy research accounting for this common issue (Bizman et al., 2001; Shah & Higgins, 2001; Tangney, Niedenthal, Covert, & Barlow, 1998).

Thus, we used the PROCESS Macro Model 4 (Hayes, 2013) to assess the role of the ethnic/ought-free ethnic/ideal self-discrepancies (X independent variable) and actual/ought-free actual/ideal self-discrepancies (M mediator) in predicting academic disengagement (Y dependent variable), while adding ethnic/ideal-free ethnic/ought self-discrepancies, actual/ideal-free actual/ought self-discrepancies, and collective self-esteem as covariates, as well as the respective interaction terms between ethnic/ideal self-discrepancies of these three variables.

The total effect model predicted academic disengagement, $F(7, 139) = 2.098, p = .048, R^2 = .096$, where ethnic/ought-free ethnic/ideal self-discrepancies significantly and positively predicted academic disengagement ($\beta = .256, p = .022, \eta^2 = .066, 95\% \text{ CI} = [0.038, 0.474]$). None of the covariates predicted academic disengagement: neither ethnic/ideal-free ethnic/ought self-discrepancies ($\beta = .126, p = .262, \eta^2 = .016, 95\% \text{ CI} = [-0.096, 0.348]$), actual/ideal-free actual/ought self-discrepancies ($\beta = .125, p = .134, \eta^2 = .016, 95\% \text{ CI} = [-0.039, 0.289]$), collective self-esteem ($\beta = -.077, p = .373, \eta^2 = .006, 95\% \text{ CI} = [-0.248, 0.094]$), or interaction terms involving ethnic/ought-free ethnic/ideal self-discrepancies and, respectively, ethnic/ideal-free ethnic/ought self-discrepancies ($\beta = -.016, p = .835, \eta^2 < .001, 95\% \text{ CI} = [-0.166, 0.134]$), actual/ideal-free actual/ought self-discrepancies ($\beta = .063, p = .336, \eta^2 = .004, 95\% \text{ CI} = [-0.066, 0.193]$), nor collective self-esteem ($\beta = .144, p = .088, \eta^2 = .021, 95\% \text{ CI} = [-0.022, 0.310]$).

The link between ethnic/ought-free ethnic/ideal self-discrepancies and academic disengagement became marginally significant ($\beta = .203, p = .068, \eta^2 = .041, 95\% \text{ CI} = [-0.016, 0.421]$), when adding actual/ought-free actual/ideal self-discrepancies as a predictor, $\beta = .308, p = .012, \eta^2 = .095, 95\% \text{ CI} = [0.068, 0.548], F(8, 138) = 2.713, p = .008, R^2 = .136$. In this model, actual/ideal-free actual/ought self-discrepancies had a significant effect on academic disengagement ($\beta = .351, p = .004, \eta^2 = .123, 95\% \text{ CI} = [0.112, 0.589]$), but none of the other covariates did—not ethnic/ideal-free ethnic/ought self-discrepancies ($\beta = .075, p = .501, \eta^2 = .006, 95\% \text{ CI} = [-0.146, 0.297]$), collective self-esteem ($\beta = -.007, p = .934, \eta^2 < .001, 95\% \text{ CI} = [-0.184, 0.169]$), or interaction terms involving ethnic/ought-free ethnic/ideal self-discrepancies and, respectively, actual/ideal-free actual/ought self-discrepancies ($\beta = -.006, p = .935, \eta^2 < .001, 95\% \text{ CI} = [-0.153, 0.141]$), ethnic/ideal-free ethnic/ought self-discrepancies ($\beta = .064, p = .322, \eta^2 = .004, 95\% \text{ CI} = [-0.063, 0.191]$), and collective self-esteem ($\beta = .114, p = .173, \eta^2 = .013, 95\% \text{ CI} = [-0.051, 0.278]$).

Considering that larger ethnic/ought-free ethnic/ideal self-discrepancies were marginally associated with larger actual/ought-free actual/ideal self-discrepancies, $\beta = .142, p = .087, \eta^2 = .020, 95\% \text{ CI} = [-0.021, 0.304], F(1, 145) = 2.976, p = .087, R^2 = .020$, and larger actual/ideal self-discrepancies with higher academic disengagement as reported above, the present results provide some support for the role of actual/ideal self-discrepancies as a mediator between ethnic/ideal self-discrepancies and academic disengagement. Testing for this mediating role, a 5,000-sample bootstrapping procedure generated a mean estimate for the standardized indirect effect of ethnic/ideal self-discrepancies on academic disengagement of 0.044 ($SE = 0.037$), $95\% \text{ CI} = [-0.005, 0.156]$.

In short, controlling for the potential role of ethnic/ought self-discrepancies, actual/ought self-discrepancies, and collective self-esteem did not alter the pattern of the results linking ethnic/ideal self-discrepancies to academic disengagement, thus suggesting that ethnic/ideal self-discrepancies is a distinct predictor of academic disengagement.

Table 2. Study 2 Correlations and Descriptive Statistics.

	Descriptive statistics			Correlations			
	Range	M	SD	1.	2.	3.	4.
1. Ethnic/ideal self-discrepancies	1-6	2.77	0.78	—			
2. Actual/ideal self-discrepancies	1-6	2.29	0.79	.50***	—		
3. Perceived fit between ethnic and aspiration-related values	1-6	2.61	0.71	.49***	.43***	—	
4. Academic disengagement (Time 1)	1-5	2.28	0.94	.21*	.32**	.04	—
5. Academic disengagement (Time 2)	1-5	2.33	0.81	.17	.37**	-.09	.69***

* $p < .05$. ** $p < .01$. *** $p < .001$, two-tailed.

Study 2

Study 2 aims to replicate and extend Study 1 by examining whether middle-of-the-semester ethnic/ideal self-discrepancies indirectly predict academic disengagement 2 months later, during the final exams. We tested this with a half-longitudinal design (see Cole & Maxwell, 2003), examining whether a predictor at Time 1 (i.e., ethnic/ideal self-discrepancies) predicts a dependent variable at Time 2 (i.e., academic disengagement), through a mediator at Time 1 (i.e., actual/ideal self-discrepancies).

Study 2 also sought to rule out another factor: the perceived fit between the values of their ethnic group and the values that they associate with their aspiration. Ethnic/ideal self-discrepancies capture mismatches in traits, attributes, and behavior rather than mismatches in values. Yet, nondominant group members' emotional, social, and academic adjustment is often associated with the gap between the values of their nondominant group culture and the dominant culture that they live in (e.g., Beiser, Puente-Duran, & Hou, 2015). Thus, we sought to rule out perceived value fit as an explanation for the relationship between ethnic/ideal discrepancies and academic disengagement.

Method

Participants. Students identifying as ethnic minority students were recruited in a Canadian university (86 women and 19 men, M age = 19.72 years, SD = 2.11 years), and completed the first part of the study between the fifth and the seventh week of a 15-week semester. Among them, 78 completed the second part of the study during the 2-week exam session scheduled at the end of the semester (64 women and 14 men, M age = 19.90 years, SD = 2.28 years). Over a third of the students were born in Canada (Time 1: 36.2%, Time 2: 42.3%), and they listed 40 different groups as ethnicities.

Self-discrepancies. Mirroring Study 1 procedures, students listed five characteristics associated with their ideal occupation. Then, they indicated the extent to which the members of their ethnic group generally possessed these ideal characteristics, on a 6-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). These ratings were reversed

and averaged to compute ethnic/ideal self-discrepancies. They also indicated whether they personally possessed these ideal characteristics on the same 6-point Likert-type scale, and these ratings were reversed and averaged to compute actual/ideal self-discrepancies.

Perceived fit between ethnic and aspiration-related values. Students listed five values that they believed were generally shared by the people holding their ideal occupation. They then indicated whether, on average, members of their ethnic group endorsed these values on a Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). These ratings were reversed and averaged to compute a score of perceived fit between ethnic and aspiration-related values.

Academic disengagement. Participants completed the same adapted version of the four-item Goal Disengagement Scale as in Study 1 (Wrosch et al., 2003) at Time 1 ($\alpha = .85$) and at Time 2 ($\alpha = .75$).

Results and Discussion

Preliminary analyses. Similar to the results of Study 1, the participants of Study 2 reported that they perceived some discrepancy between their ethnic and ideal selves, as well as between their actual and ideal selves, but not an extreme level of discrepancy. Ethnic/ideal self-discrepancies and actual/ideal self-discrepancies were strongly correlated ($r = .495$, $p < .001$, $n = 105$; see Table 2). Ethnic/ideal self-discrepancies and actual/ideal self-discrepancies correlated with academic disengagement at Time 1, but ethnic/ideal self-discrepancies at Time 1 were not significantly related with academic disengagement at Time 2 ($r = .169$, $p = .139$). Therefore, the connection between ethnic/ideal self-discrepancies at Time 1 and academic disengagement at Time 2 might only appear indirectly, through the mediating effect of actual/ideal self-discrepancies. This is a common occurrence in longitudinal designs and small samples; in this case, it is appropriate to test for indirect effects using bootstrapping procedure (Shrout & Bolger, 2002).

Cross-sectional mediation. First, we examined whether the findings of Study 1 replicated, that is, whether ethnic/

ideal self-discrepancies predict academic disengagement, even when considering alternative explanations (Hypothesis 1), and through actual/ideal self-discrepancies (Hypothesis 2). Using Time 1 data, we computed mediation analyses with the PROCESS Macro (Model 4). We entered ethnic/ideal self-discrepancies as the X independent variable, actual/ideal self-discrepancies as the M mediator, academic disengagement as the Y dependent variable, and the perceived fit between ethnic and aspiration-related values as a covariate.

Replicating Study 1, large ethnic/ideal self-discrepancies were associated with large actual/ideal self-discrepancies, $\beta = .378, p < .001, \eta^2 = .143, 95\% \text{ CI} = [0.198, 0.559], F(1, 103) = 17.208, p < .001, R^2 = .143$. In turn, large actual/ideal self-discrepancies were associated with high academic disengagement ($\beta = .300, p = .005, \eta^2 = .090, 95\% \text{ CI} = [0.094, 0.507]$). The marginally significant link between ethnic/ideal self-discrepancies and academic disengagement, $\beta = .200, p = .059, \eta^2 = .040, 95\% \text{ CI} = [-0.008, 0.407], F(2, 102) = 1.836, p = .165, R^2 = .035$, became nonsignificant when accounting for actual/ideal self-discrepancies, $\beta = .111, p = .295, \eta^2 = .012, 95\% \text{ CI} = [-0.098, 0.321], F(3, 101) = 4.077, p = .009, R^2 = .108$, a pattern similar to the findings of Study 1. The perceived fit between aspiration-related and ethnic minority group-related values did not predict academic disengagement, when accounting for actual/ideal self-discrepancies ($\beta = -.170, p = .235, \eta^2 = .029, 95\% \text{ CI} = [-0.452, 0.112]$) or not ($\beta = -.076, p = .594, \eta^2 = .006, 95\% \text{ CI} = [-0.360, 0.208]$). The 5,000-samples bootstrap-generated mean estimate for the standardized indirect effect of ethnic/ideal self-discrepancies on academic disengagement of 0.114 ($SE = 0.046, \eta^2 = .013, 95\% \text{ CI} = [0.041, 0.232]$) suggested a mediating role of actual/ideal self-discrepancies.

Half-longitudinal mediation. The main purpose of Study 2 was testing for the predictive value of ethnic/ideal self-discrepancies over time. We computed mediation analyses using the Model 4 of the PROCESS Macro, where we entered ethnic/ideal self-discrepancies at Time 1 as the X independent variable, actual/ideal self-discrepancies at Time 1 as the M mediator, academic disengagement at Time 2 as the Y dependent variable, and academic disengagement at Time 1 as a covariate.

This overall model significantly predicts academic disengagement, $F(3, 74) = 25.51, p < .001, R^2 = .508$. Similar to the association found with the 105 students who completed Time 1, ethnic/ideal self-discrepancies were associated with large actual/ideal self-discrepancies with 78 students who completed the academic disengagement measure at both times ($\beta = .512, p < .001, \eta^2 = .262, 95\% \text{ CI} = [0.316, 0.709]$). Large actual/ideal self-discrepancies were associated with high academic disengagement at Time 2 ($\beta = .211, p = .034, \eta^2 = .045, 95\% \text{ CI} = [0.016, 0.406]$), even when accounting for academic disengagement at Time 1 ($\beta = .643, p < .001, \eta^2 = .413, 95\% \text{ CI} = [0.471, 0.814]$).

Ethnic/ideal self-discrepancies alone did not significantly predict academic disengagement at Time 2 ($\beta = .169, p = .139, \eta^2 = .029, 95\% \text{ CI} = [-0.056, 0.394]$). When considering actual/ideal self-discrepancies and academic disengagement at Time 1, the link between ethnic/ideal self-discrepancies and academic disengagement at Time 2 weakened ($\beta = -.082, p = .391, \eta^2 = .007, 95\% \text{ CI} = [-0.272, 0.108]$). A bootstrapping procedure with 5,000 samples generated a mean estimate for the standardized indirect effect of ethnic/ideal self-discrepancies measured at Time 1 on academic disengagement measured at Time 2 of 0.108 ($SE = 0.054, \eta^2 = .012, 95\% \text{ CI} = [0.030, 0.264]$), thus revealing a significant indirect association between ethnic/ideal self-discrepancies at Time 1 and academic disengagement at Time 2.

In short, Time 1 results replicated the findings of Study 1, by supporting the association of ethnic/ideal self-discrepancies and academic disengagement mediated by actual/ideal self-discrepancies, which held when controlling for related variables. Time 2 results indicated that even when accounting for academic disengagement in the middle of the semester, ethnic/ideal self-discrepancies in the middle of the semester indirectly and significantly predicted academic disengagement 2 months later, during the exam session, but only through actual/ideal self-discrepancies. Thus, Study 2 provides support for both Hypotheses 1 and 2.

Study 3

Study 3 was designed to extend Study 1 and Study 2, which did not permit causal testing, by experimentally increasing perceptions of ethnic/ideal discrepancies among minority students, and measuring short-term effects of momentarily increased ethnic/ideal self-discrepancies on academic disengagement. Past research on “assimilation” manipulations, whereby one’s perceptions or attitudes are inferred from one’s past behavior, indicates that anchors can lead people to select a specific answer, which, in turn, momentarily shifts their perception (Fazio, Zanna, & Cooper, 1977; Salancik, 1974; Srull & Wyer, 1980). We thus subtly manipulated anchors to lead participants to perceive high or low ethnic/ideal self-discrepancies and, based on previous research on the assimilation effect (Abele & Gendolla, 1999; Mussweiler, Rüter, & Epstude, 2004), we expected these effects to momentarily affect academic disengagement (Hypothesis 1) through actual/ideal self-discrepancies (Hypothesis 2).

Method

Participants. We recruited 107 ethnic minority students in a Canadian university. Four did not complete the study, and four did not pass the manipulation check (they were in a condition leading them to answer yes several times and they only answered no, or in a condition leading them to answer no several times and they only answered yes). The final sample is, thus, composed of 49 women, 49 men, and one student who

did not disclose gender information (M age = 20.67 years, SD = 1.29 years). One student out of two was born in Canada (50.5%). Students' ethnicities were European (32.3%), Asian (29.3%), Arab or Middle Eastern (15.2%), or Other (e.g., South Asian, Caribbean, Latin/South American, or African).

Procedure. To manipulate ethnic/ideal self-discrepancies, we adapted the procedure used in Studies 1 and 2. After asking participants to list five characteristics describing their ideal self as students, we asked them to indicate whether these characteristics were common among members of their ethnic group on one of two scales. In the high discrepancy condition, participants indicated whether each characteristic is common for members of their ethnic group by checking a box indicating the following: *No, this attribute is not characteristic, or only moderately characteristic*; or *Yes, this attribute is extremely characteristic*. According to the assimilation literature, believing that their ethnic group *moderately* possesses a characteristic should increase the likelihood that participants select "no" rather than "yes." As a consequence of answering "no" more often, participants should momentarily perceive larger ethnic/ideal self-discrepancies. In the low discrepancy condition, participants indicated whether each trait characterized the members of their ethnic minority group by checking a box indicating either *No, this attribute is not characteristic* or *Yes, this attribute is moderately characteristic or extremely characteristic*.

Actual/ideal self-discrepancies and academic disengagement. As in Studies 1 and 2, students reported their actual/ideal self-discrepancies and academic disengagement (Wrosch et al., 2003; α = .81).

Debriefing. Participants were fully debriefed and invited to ask questions about the study. They were also asked to indicate whether they were still comfortable with their data being used as part of the study, and provided with time on their own to think about it. Before participants left the study, they were offered copies of the debriefing form and provided with contact information for the research team, ethics board, and free on- and off-campus counseling options.

Results and Discussion

Manipulation check. The manipulation was successful: Participants in the low discrepancy condition were more likely to report that members of their ethnic group possessed their ideal characteristics (they did 70.43% of the time, on average, SE = 3.52%), than participants in the high discrepancy condition (they did 56.60% of the time, on average, SE = 3.57%), $t(97) = 2.740$, $p = .007$, $\eta^2 = .071$, 95% CI = [3.81%, 23.85%].

Academic disengagement. Consistent with Hypothesis 1, participants reported higher academic disengagement in the high discrepancy (M = 2.550, SD = 0.974) than in the low

discrepancy condition (M = 2.118, SD = 0.847), $t(97) = 2.340$, $p = .021$, $\eta^2 = .053$, 95% CI = [0.066, 0.799].

Mediation with actual/ideal self-discrepancies. A t test comparing actual/ideal self-discrepancies across study conditions yielded no significant difference between the low (M = 2.336, SD = 0.622) and the high discrepancy condition (M = 2.217, SD = 0.592), $t(97) = 0.977$, $p = .331$, $\eta^2 = .010$, 95% CI = [-0.123, 0.362], thus, not supporting Hypothesis 2.

Moderation with actual/ideal self-discrepancies (alternate model). Reasoning that ethnic/ideal self-discrepancies should influence academic disengagement to the extent that they shape actual/ideal self-discrepancies, we examined whether actual/ideal self-discrepancies interacted with students' ethnic/ideal self-discrepancies to predict academic disengagement. To do so, we used the PROCESS Macro Model 1, entering actual/ideal self-discrepancies as a continuous X predictor, experimental condition as a dichotomous M predictor, and academic disengagement as a dependent Y variable.

Actual/ideal self-discrepancies, experimentally induced ethnic/ideal self-discrepancies, and their interaction predicted academic disengagement ($r = .358$, $p = .004$, $\eta^2 = .129$). Main effects on academic disengagement were found for condition ($\beta = .498$, $p = .011$, $\eta^2 = .248$, 95% CI = [0.117, 0.880]) and actual/ideal self-discrepancies ($\beta = .202$, $p = .038$, $\eta^2 = .041$, 95% CI = [0.011, 0.393]). These effects were qualified by the interaction of condition and actual/ideal self-discrepancies, which marginally predicted academic disengagement ($\beta = .365$, $p = .061$, $\eta^2 = .133$, 95% CI = [-0.018, 0.747]). Simple slopes revealed that actual/ideal self-discrepancies predict academic disengagement in the high discrepancy condition ($\beta = .384$, $p = .005$, $\eta^2 = .148$, 95% CI = [0.117, 0.652]), but not in the low discrepancy condition ($\beta = .020$, $p = .885$, $\eta^2 = .000$, 95% CI = [-0.253, 0.293]).

Put simply, Hypothesis 1 was supported: Experimentally induced high (vs. low) levels of ethnic/ideal self-discrepancies increased (vs. decreased) academic disengagement. Furthermore, the larger the actual/ideal self-discrepancies in the high discrepancy condition, the higher their academic disengagement; whereas academic disengagement and actual/ideal self-discrepancies were unrelated in the low discrepancy condition (see Figure 1). Thus, actual/ideal self-discrepancies were not mediators in this study (Hypothesis 2) and, yet, played a role, because ethnic/ideal self-discrepancies influenced academic disengagement for students perceiving large actual/ideal self-discrepancies.

General Discussion

The mismatches that some ethnic minority students face when contrasting their academic ideals with their actual self could represent a barrier to their academic success. Yet, self-discrepancies

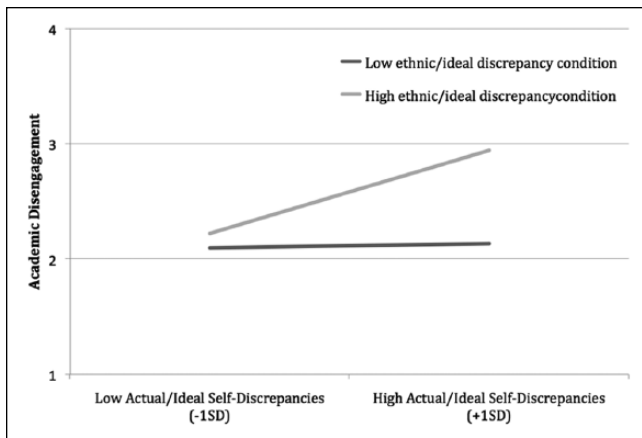


Figure 1. Actual/ideal self-discrepancies predict academic disengagement for students in the high ethnic/ideal self-discrepancy condition, but not for students in the low ethnic/ideal self-discrepancy condition.

between ethnic minority students' ideal academic selves and their ethnic selves have never been examined in relation to academic outcomes. We addressed this gap in the literature using diverse methods and investigating whether ethnic minority students who perceive larger (v. smaller) self-discrepancies between their ideal self and their ethnic self experience higher (v. lower) academic disengagement.

The present studies provide cross-sectional, half-longitudinal, and experimental support for our central claim. In Studies 1 and 2, cross-sectional data suggest that self-reported ethnic/ideal self-discrepancies predict ethnic minority students' academic disengagement, an association mediated by actual/ideal self-discrepancies. Half-longitudinal data from Study 2 suggest a similar pattern over time: Ethnic/ideal self-discrepancies measured in the middle of the semester indirectly predicted academic disengagement at the end of the semester, through actual/ideal self-discrepancies. Studies 1 and 2 also suggest that these patterns cannot be attributed to related constructs such as ethnic actual/ought self-discrepancies, collective self-esteem, or perceived fit between ethnic group values and aspiration-related values: If ethnic minority students perceive a large mismatch between their ethnic and ideal self and disengage academically, it is not because of a lack of fit in values or because they are not proud of their ethnic group.

The findings of Study 3 provided further support to our central claim by suggesting that ethnic/ideal self-discrepancies can be a source of academic disengagement for ethnic minority students. Momentarily induced ethnic/ideal self-discrepancies caused academic disengagement, especially for participants with large actual/ideal self-discrepancies. Because students who reported higher actual/ideal self-discrepancies after being exposed to the high ethnic/ideal self-discrepancies manipulation also reported higher academic disengagement, the results of Study 3 suggest that

momentarily induced ethnic/ideal self-discrepancies can increase academic disengagement insofar as they increase actual/ideal self-discrepancies. Together, the present studies examine for the first time the novel concept of ethnic/ideal self-discrepancies in relation to academic outcomes, and indicate that they can be a source of academic disengagement for ethnic minority students.

Factors Relevant to Ethnic Minority Students' Academic Outcomes

Several factors have been identified as playing a role in the academic outcomes of underrepresented students, including anticipated and perceived discrimination (Mendoza-Denton et al., 2008; Neblett et al., 2006; Smalls et al., 2007), lack of trust toward teachers (Yeager et al., 2014), stereotype threat (Steele et al., 2002), and negative feedback about the group's academic performance (Nussbaum & Steele, 2007; Osborne, 1995). By demonstrating that ethnic minority students who see a mismatch between their ethnic and ideal selves disengage from school, the present studies point to a novel, distinct self-related factor explaining the academic outcomes of ethnic minority students.

Furthermore, the research of Oyserman and her collaborators suggests that minority students appraise difficulties differently depending on whether they perceive that academic tasks are congruent or not with collective selves (Oyserman & Destin, 2010). When a task is congruent with their collective self, they interpret task difficulties as challenges that are worth overcoming; but when it is not, they interpret task difficulties as signals that they should stop trying. The present studies complement the idea of academic difficulty misattributions by suggesting that at the self-concept level, and perhaps even before they attempt to accomplish academic tasks, ethnic minority students can disengage from school if their aspirations appear incongruent with their ethnic selves, whereas they might not disengage if they appear congruent to them.

Implications for Underrepresented Students

Much attention has been given to students from groups that are underrepresented in their academic discipline. The core question of the present research pertains to whether perceiving large mismatches between their ethnic group and their ideal self impedes the odds of success of such minority students. Our findings indicate that ethnic/ideal self-discrepancies can cause ethnic minority students to disengage academically. However, the implications of this work are relevant to different forms of underrepresentation.

Many students who disengage from an aspiration might reengage toward another. For instance, ethnic minority students who perceive large ethnic/ideal self-discrepancies might eventually reengage themselves in disciplines that they perceive better aligned with their group. Similar issues of underrepresentation affect women and working-class

students in science, technology, engineering, and math (Diekman, Weisgram, & Belanger, 2015; Harackiewicz et al., 2014; Hernandez, Schultz, Estrada, Woodcock, & Chance, 2013; MacPhee, Farro, & Canetto, 2013; Syed, Azmitia, & Cooper, 2011). Further research could explore the role of ethnic/ideal self-discrepancies—as well as the role of similar gender/ideal self-discrepancies or class/ideal self-discrepancies—in explaining why some students step away from disciplines where their group is underrepresented.

More broadly, becoming aware of the variety of ways one can be a member of one's underrepresented group while reaching one's aspiration could help underrepresented students. Believing that there are many ways to reach their ideal future could expand the range of ideal characteristics, thereby increasing the likelihood that these will overlap with ethnicity characteristics. Furthermore, perceiving more characteristics as typical (or as less atypical) of their group should reduce the likelihood that underrepresented students perceive a mismatch between their group-related and ideal selves. Demonstrating that different pathways can lead to success might, therefore, help students from underrepresented groups, whether they are ethnic, class, or gender minorities in their discipline (e.g., Stephens, Hamedani, & Destin, 2014). Ultimately, however, the underlying societal causes leading to large ethnic/ideal self-discrepancies, such as the poor representation of and negative stereotypes associated with many nondominant groups, need to be addressed: Systematic disparities in representation have recurring effects on subsequent generations of students that cannot entirely disappear if they are not directly challenged.

Limitations and Future Studies

The present research indicates that a novel form of self-discrepancies predicts the academic disengagement of ethnic minority students. Although it represents a significant contribution to the literature on the experiences of ethnic minority students, the present studies were limited in several ways. In Study 2, a third point of measure would have allowed for a more complete analysis of the mediation effects of actual/ideal self-discrepancies (Maxwell & Cole, 2007), and a larger sample would clarify whether there is a small direct effect of ethnic/ideal self-discrepancies on academic disengagement or only an indirect effect. The absence of a neutral condition in Study 3 calls for a conservative approach when interpreting the results. Also, although the diversity of ethnicities in the three samples is representative of the ethnic composition of major Canadian cities, it makes it difficult to examine whether and how student experiences vary across ethnicities; yet, supplemental exploratory analyses reinforce the relevance of doing so.

A limitation that deserves to be addressed in future studies pertains to the pattern of results found in Study 3, which was somewhat but not entirely aligned with our hypotheses. The results of Study 3 suggest that momentarily increasing ethnic/

ideal self-discrepancies might not always increase actual/ideal self-discrepancies. However, students who reported large actual/ideal self-discrepancies after having been exposed to the high ethnic/ideal self-discrepancies manipulation reported higher academic disengagement. What remains unclear is why some students reported high actual/ideal self-discrepancies whereas others did not in the high ethnic/ideal self-discrepancies condition. The findings of Study 3 highlight the necessity to tease out the role of actual/ideal self-discrepancies in future studies, by investigating, for instance, whether ethnic/ideal are slowly rather than quickly internalized into actual/ideal self-discrepancies.

Another limitation pertains to the types of self-discrepancies assessed. The present research focuses on self-discrepancies between ideal selves and ethnic selves, but there are numerous manners in which actual, ideal, and ought selves (both personal and ethnic) can be contrasted to produce self-discrepancies. Although engagement and discouragement should be associated with contrasting an actual self with an ideal self (Higgins, 1987), other self-discrepancies are less relevant in predicting motivation. Yet, other self-discrepancies involving ethnic actual and ethnic ideal selves that were not examined in the present studies could inform ethnic minority students' motivation. Future studies could investigate outcomes associated with other forms of self-discrepancies, as few forms have been examined thus far.

Finally, the present research, like a large portion of research on the experience of ethnic minority students, focuses on the barriers that they sometimes face; yet, the experiences of ethnic minority students are often positive—sometimes, in a distinct fashion. For instance, ethnic identities have been identified as having protective effects for students' achievement. In that sense, the present findings could also signify that perceiving strong similarities between ethnic and ideal selves fosters academic engagement for ethnic minority students. Similar to a positive psychology framework, research documenting ethnic minority group members' experiences would gain from paying particular attention to positive and protective experiences.

Conclusion

The present research provides evidence that perceived ethnic/ideal self-discrepancies represent a distinct phenomenon that has not been previously accounted for by research on collective selves, self-discrepancies, or academic achievement. Three studies provided support for our main hypothesis that incompatibilities between the beliefs about one's ethnic group and the characteristics of one's dreamed future predict ethnic minority students' academic disengagement. A cross-sectional study clarified that mismatches between collective selves and personal ideal selves are not attributable to a lack of collective self-esteem for one's ethnic group. A half-longitudinal study suggested that mismatches between ethnicities and aspirations assessed in the middle of the

semester predict academic disengagement during the exam session, 2 months later, even when considering the perceived fit between ethnic group values and aspiration-related values. Finally, an experiment suggested that ethnic/ideal self-discrepancies can cause academic disengagement. Together, they point to a distinct phenomenon that speaks to the experiences of ethnic minority students. We hope that ethnic/ideal self-discrepancies research will complement and expand knowledge on the unique experiences of members of non-dominant groups.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by Vanier and postdoctoral fellowships awarded to the first author by the Social Sciences and Humanities Research Council of Canada (numbers 770-2011-0018 and 756-2016-0572).

Notes

- In the present article, we will refer to students who belong to ethnic or racial groups that are not dominant in the society they live in as “ethnic minority students.” Ethnic minority students are the focus of the present article, but we sometimes will cover research on students belonging to groups in minority in certain disciplines (e.g., women studying in science, technology, engineering, and math [STEM]; ethnic minority students; first-generation college students). We will refer to ethnic/racial minority group members who are underrepresented in their domains or in school settings as “underrepresented students” (Syed et al., 2011).
- The data of Study 1 were collected as part of a large study investigating ethnic minority students’ psychological health (Debrosse et al., 2018). This study was designed to examine the added value of ethnic/ideal and ethnic/ought self-discrepancies in predicting anxiety and depression symptoms.
- Our sample sizes were not selected as a function of a power analysis. However, we performed post hoc analyses with G*Power 3.1 (Faul, Erdfelder, Buchner, & Lang, 2009), using actual sample sizes. We calculated the power to detect small to medium effects ($R^2 = .06-.15$): This is the range found in previous work on ethnic/ideal self-discrepancies (Debrosse et al., 2018). These R^2 values correspond to f^2 values of .05, .10, and .15 in Studies 1 and 2, and to d values of 0.46, 0.67, and 0.84 in Study 3. In Study 1 ($n = 147$, $\alpha = .05$), the power to detect these effects was of 0.668, 0.935, and 0.991 in the two-predictor equation. In Study 2, the power to detect these effects was of 0.512, 0.823, and 0.948 in the two-predictor equation at Time 1 ($n = 105$, $\alpha = .05$), and of 0.333, 0.616, and 0.801 in the three-predictor equation at Time 2 ($n = 78$, $\alpha = .05$). In Study 3 ($n_{exp} = 53$, $n_{neut} = 46$, $\alpha = .05$), the power to detect these effects in independent t tests was of 0.733, 0.951, and 0.994. Thus, the three studies, particularly Study 2, lacked power to detect small but not medium–small and medium effects. Thus, smaller effects such as the effect of ethnic/ideal self-discrepancies at Time 1 on academic disengagement at Time 2 in Study 2 might have been underestimated.
- We acknowledge that taking ethnicity into consideration is very meaningful; yet, the highly varied samples pose challenges in that regard. Thus, following the recommendations of a reviewer, we performed analyses where ethnicity was entered as a random factor for all three studies. The results, which are included in supplemental materials, were inconsistent: Ethnicity at times played a significant or marginal role on its own, at times significantly or marginally interacted with other variables, and at times did not generate significant or marginal main or interaction effects. Although the number of groups entered, the number of participants, and the inconsistent pattern of results overall make it difficult to confidently interpret those results, they reiterate the need for examining further the role of ethnicity.
- Following the suggestion of a reviewer, we also tested for moderation effects in Study 1 and in Study 2. The results, appended in supplemental materials, indicate that the interaction of ethnic/ideal and actual/ideal self-discrepancies does not significantly predict academic disengagement in Study 1 or in Study 2 (at Time 1 or at Time 2).

Supplemental Material

Supplementary material is available online with this article.

References

- Abele, A. E., & Gendolla, G. H. (1999). Satisfaction judgments in positive and negative moods: Effects of concurrent assimilation and contrast producing processes. *Personality and Social Psychology Bulletin*, *25*, 883-895. doi:10.1177/0146167299025007010
- Altschul, I., Oyserman, D., & Bybee, D. (2006). Racial-ethnic identity in mid-adolescence: Content and change as predictors of academic achievement. *Child Development*, *77*, 1155-1169. doi:10.1111/j.1467-8624.2006.00926.x
- Armenta, B. E. (2010). Stereotype boost and stereotype threat effects: The moderating role of ethnic identification. *Cultural Diversity & Ethnic Minority Psychology*, *16*, 94-98. doi:10.1037/a0017564
- Arroyo, C. G., & Zigler, E. (1995). Racial identity, academic achievement, and the psychological well-being of economically disadvantaged adolescents. *Journal of Personality and Social Psychology*, *69*, 903-914. doi:10.1037/0022-3514.69.5.903
- Beiser, M., Puente-Duran, S., & Hou, F. (2015). Cultural distance and emotional problems among immigrant and refugee youth in Canada: Findings from the New Canadian Child and Youth Study (NCCYS). *International Journal of Intercultural Relations*, *49*, 33-45. doi:10.1016/j.ijintrel.2015.06.005
- Biernat, M., & Dovidio, J. F. (2000). Stigma and stereotypes. In T. F. Heatherton, R. E. Kleck, M. R. Hebl, & J. G. Hull (Eds.), *The social psychology of stigma* (pp. 88-125). New York, NY: The Guilford Press.
- Biernat, M., Vescio, T. K., & Green, M. L. (1996). Selective self-stereotyping. *Journal of Personality and Social Psychology*, *71*, 1194-1209. doi:10.1037/0022-3514.71.6.1194
- Bizman, A., Yinon, Y., & Krotman, K. (2001). Group-based emotional distress: An extension of self-discrepancy theory.

- Personality and Social Psychology Bulletin*, 27, 1291-1300. doi:10.1177/01461672012710005
- Cantor, N., Norem, J. K., Niedenthal, P. M., Langston, C. A., & Brower, A. M. (1987). Life tasks, self-concept ideals, and cognitive strategies in a life transition. *Journal of Personality and Social Psychology*, 53, 1178-1191. doi:10.1037/0022-3514.53.6.1178
- Caprariello, P. A., Cuddy, A. J., & Fiske, S. T. (2009). Social structure shapes cultural stereotypes and emotions: A causal test of the stereotype content model. *Group Processes & Intergroup Relations*, 12, 147-155. doi:10.1177/1368430208101053
- Cohen, G. L., & Garcia, J. (2008). Identity, belonging, and achievement a model, interventions, implications. *Current Directions in Psychological Science*, 17, 365-369. doi:10.1111/j.1467-8721.2008.00607.x
- Cole, D. A., & Maxwell, S. E. (2003). Testing mediational models with longitudinal data: Questions and tips in the use of structural equation modeling. *Journal of Abnormal Psychology*, 112, 558-577. doi:10.1037/0022-3514.112.6.1173
- Crocker, J., Luhtanen, R., Blaine, B., & Broadnax, S. (1994). Collective self-esteem and psychological well-being among White, Black, and Asian college students. *Personality and Social Psychology Bulletin*, 20, 503-513. doi:10.1177/0146167294205007
- Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review*, 96, 608-630. doi:10.1037/0033-295X.96.4.608
- Croizet, J. C., & Claire, T. (1998). Extending the concept of stereotype threat to social class: The intellectual underperformance of students from low socioeconomic backgrounds. *Personality and Social Psychology Bulletin*, 24, 588-594. doi:10.1177/0146167298246003
- Deaux, K., Bikmen, N., Gilkes, A., Ventuneac, A., Joseph, Y., Payne, Y. A., & Steele, C. M. (2007). Becoming American: Stereotype threat effects in Afro-Caribbean immigrant groups. *Social Psychology Quarterly*, 70, 384-404. doi:10.1177/019027250707000408
- Debrosse, R., Rossignac-Milon, M., & Taylor, D. M. (2018). When 'who we are' and 'who I desire to be' seem disconnected: Introducing collective/personal self-discrepancies and investigating their relations with minority students' psychological health. *European Journal of Social Psychology*, 48, 255-268. doi: 10.1002/ejsp.2320
- Diekmann, A. B., Weisgram, E. S., & Belanger, A. L. (2015). New routes to recruiting and retaining women in STEM: Policy implications of a communal goal congruity perspective. *Social Issues and Policy Review*, 9, 52-88. doi:10.1111/sipr.12010
- Eccles, J. (2009). Who am I and what am I going to do with my life? Personal and collective identities as motivators of action. *Educational Psychologist*, 44, 78-89. doi:10.1080/00461520902832368
- Ellemers, N., Spears, R., & Doosje, B. (2002). Self and social identity. *Annual Review of Psychology*, 53, 161-186. doi:10.1146/annurev.psych.53.100901.135228
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G* Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149-1160. doi:10.3758/BRM.41.4.1149
- Fazio, R. H., Zanna, M. P., & Cooper, J. (1977). Dissonance and self-perception: An integrative view of each theory's proper domain of application. *Journal of Experimental Social Psychology*, 13, 464-479. doi:10.1016/0022-1031(77)90031-2
- Ferguson, G. M., Hafen, C. A., & Laursen, B. (2010). Adolescent psychological and academic adjustment as a function of discrepancies between actual and ideal self-perceptions. *Journal of Youth and Adolescence*, 39, 1485-1497. doi:10.1007/s10964-009-9461-5
- Fiske, S. T., Cuddy, A. J., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82, 878-902. doi:10.1037/0022-3514.82.6.878
- Fuligni, A. J. (1997). The academic achievement of adolescents from immigrant families: The role of family background, attitudes, and behavior. *Child Development*, 68, 351-363. doi:10.1111/j.1467-8624.1997.tb01944.x
- Gonzales, P. M., Blanton, H., & Williams, K. J. (2002). The effects of stereotype threat and double-minority status on the test performance of Latino women. *Personality and Social Psychology Bulletin*, 28, 659-670. doi:10.1177/0146167202288010
- Harackiewicz, J. M., Canning, E. A., Tibbetts, Y., Giffen, C. J., Blair, S. S., Rouse, D. I., & Hyde, J. S. (2014). Closing the social class achievement gap for first-generation students in undergraduate biology. *Journal of Educational Psychology*, 106, 375-389. doi:10.1037/a0034679
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: The Guildford Press.
- Hernandez, P. R., Schultz, P., Estrada, M., Woodcock, A., & Chance, R. C. (2013). Sustaining optimal motivation: A longitudinal analysis of interventions to broaden participation of underrepresented students in STEM. *Journal of Educational Psychology*, 105, 89-107. doi:10.1037/a0029691
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Bulletin*, 92, 319-340. doi:10.1037/0033-295X.94.3.319
- Higgins, E. T., Roney, C. J., Crowe, E., & Hymes, C. (1994). Ideal versus ought predilections for approach and avoidance distinct self-regulatory systems. *Journal of Personality and Social Psychology*, 66, 276-286. doi:10.1037/0022-3514.66.2.276
- Higgins, E. T., Shah, J., & Friedman, R. (1997). Emotional responses to goal attainment: Strength of regulatory focus as moderator. *Journal of Personality and Social Psychology*, 72, 515-525. doi:10.1037/0022-3514.72.3.515
- Hogg, M. A., & Turner, J. C. (1987). Intergroup behaviour, self-stereotyping and the salience of social categories. *British Journal of Social Psychology*, 26, 325-340. doi:10.1111/j.2044-8309.1987.tb00795.x
- Huynh, V. W., & Fuligni, A. J. (2010). Discrimination hurts: The academic, psychological, and physical well-being of adolescents. *Journal of Research on Adolescence*, 20, 916-941. doi:10.1111/j.1532-7795.2010.00670.x
- Krahn, H., & Taylor, A. (2005). Resilient teenagers: Explaining the high educational aspirations of visible-minority youth in Canada. *Journal of International Migration and Integration*, 6, 405-434. doi:10.1007/s12134-005-1020-7
- Latrofa, M., Vaes, J., Cadinu, M., & Carnaghi, A. (2010). The cognitive representation of self-stereotyping. *Personality and Social Psychology Bulletin*, 36, 911-922. doi:10.1177/0146167210373907

- Leyens, J. P., Désert, M., Croizet, J. C., & Darcis, C. (2000). Stereotype threat: Are lower status and history of stigmatization preconditions of stereotype threat? *Personality and Social Psychology Bulletin*, *26*, 1189-1199. doi:10.1177/0146167200262002
- Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin*, *18*, 302-318. doi:10.1177/0146167292183006
- MacPhee, D., Farro, S., & Canetto, S. S. (2013). Academic self-efficacy and performance of underrepresented STEM majors: Gender, ethnic, and social class patterns. *Analyses of Social Issues and Public Policy*, *13*, 347-369. doi:10.1111/asap.12033
- Mau, W. C., & Bikos, L. H. (2000). Educational and vocational aspirations of minority and female students: A longitudinal study. *Journal of Counseling & Development*, *78*, 186-194. doi:10.1002/j.1556-6676.2000.tb02577.x
- Maxwell, S. E., & Cole, D. A. (2007). Bias in cross-sectional analyses of longitudinal mediation. *Psychological Methods*, *12*, 23-44. doi:10.1037/1082-989X.12.1.23
- Mendoza-Denton, R., Pietrzak, J., & Downey, G. (2008). Distinguishing institutional identification from academic goal pursuit: Interactive effects of ethnic identification and race-based rejection sensitivity. *Journal of Personality and Social Psychology*, *95*, 338-351. doi:10.1037/0022-3514.95.2.338
- Miller-Cotto, D., & Byrnes, J. P. (2016). Ethnic/racial identity and academic achievement: A meta-analytic review. *Developmental Review*, *41*, 51-70. doi:10.1016/j.dr.2016.06.003
- Mussweiler, T., Rüter, K., & Epstude, K. (2004). The ups and downs of social comparison: Mechanisms of assimilation and contrast. *Journal of Personality and Social Psychology*, *87*, 832-844. doi:10.1037/0022-3514.87.6.832
- Neblett, E. W., Philip, C. L., Cogburn, C. D., & Sellers, R. M. (2006). African American adolescents' discrimination experiences and academic achievement: Racial socialization as a cultural compensatory and protective factor. *Journal of Black Psychology*, *32*, 199-218. doi:10.1177/0095798406287072
- Nussbaum, A. D., & Steele, C. M. (2007). Situational disengagement and persistence in the face of adversity. *Journal of Experimental Social Psychology*, *43*, 127-134. doi:10.1016/j.jesp.2005.12.007
- Osborne, J. W. (1995). Academics, self-esteem, and race: A look at the underlying assumptions of the disidentification hypothesis. *Personality and Social Psychology Bulletin*, *21*, 449-455. doi:10.1177/0146167295215003
- Oyserman, D., & Destin, M. (2010). Identity-based motivation: Implications for intervention. *The Counseling Psychologist*, *38*, 1001-1043. doi:10.1177/0011000010374775
- Phinney, J. S. (1996). When we talk about American ethnic groups, what do we mean? *American Psychologist*, *51*, 918-927. doi:10.1037/0003-066X.51.9.918
- Pickett, C. L., Bonner, B. L., & Coleman, J. M. (2002). Motivated self-stereotyping: Heightened assimilation and differentiation needs result in increased levels of positive and negative self-stereotyping. *Journal of Personality and Social Psychology*, *82*, 543-562. doi:10.1037/0022-3514.82.4.543
- Pinquart, M., Silbereisen, R. K., & Wiesner, M. (2004). Changes in discrepancies between desired and present states of developmental tasks in adolescence: A four-process model. *Journal of Youth and Adolescence*, *33*, 467-477. doi:10.1023/b:joyo.0000048062.81471.5b
- Rheinschmidt, M. L., & Mendoza-Denton, R. (2014). Social class and academic achievement in college: The interplay of rejection sensitivity and entity beliefs. *Journal of Personality and Social Psychology*, *107*, 101-121. doi:10.1037/a003655
- Russell, M. L. (2005). Untapped talent and unlimited potential: African American students and the science pipeline. *Negro Educational Review*, *56*, 167-182.
- Salancik, J. R. (1974). Inference of one's attitude from behavior recalled under linguistically manipulated cognitive sets. *Journal of Experimental Social Psychology*, *10*, 415-427. doi:10.1016/0022-1031(74)90010-9
- Schmader, T., & Major, B. (1999). The impact of ingroup vs outgroup performance on personal values. *Journal of Experimental Social Psychology*, *35*, 47-67. doi:10.1006/jesp.1998.1372
- Schmader, T., Major, B., & Gramzow, R. H. (2001). Coping with ethnic stereotypes in the academic domain: Perceived injustice and psychological disengagement. *Journal of Social Issues*, *57*, 93-111. doi:10.1111/0022-4537.00203
- Sekerdeji, M., & Roccas, S. (2016). Love versus loving criticism: Disentangling conventional and constructive patriotism. *British Journal of Social Psychology*, *3*, 499-521. doi:10.1111/bjso.12142
- Shah, J., & Higgins, E. T. (2001). Regulatory concerns and appraisal efficiency: The general impact of promotion and prevention. *Journal of Personality and Social Psychology*, *80*, 693-705. doi:10.1037/0022-3514.80.5.693
- Shih, M., Pittinsky, T. L., & Ambady, N. (1999). Stereotype susceptibility: Identity salience and shifts in quantitative performance. *Psychological Science*, *10*, 80-83. doi:10.1111/1467-9280.00111
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, *7*, 422-445. doi:10.1037/1082-989X.7.4.422
- Simon, B., & Hamilton, D. L. (1994). Self-stereotyping and social context: The effects of relative in-group size and in-group status. *Journal of Personality and Social Psychology*, *66*, 699-711. doi:10.1037/0022-3514.66.4.699
- Sinclair, S., Hardin, C. D., & Lowery, B. S. (2006). Self-stereotyping in the context of multiple social identities. *Journal of Personality and Social Psychology*, *90*, 529-542. doi:10.1037/0022-3514.90.4.529
- Smalls, C., White, R., Chavous, T., & Sellers, R. (2007). Racial ideological beliefs and racial discrimination experiences as predictors of academic engagement among African American adolescents. *Journal of Black Psychology*, *33*, 299-330. doi:10.1177/0095798407302541
- Spears, R., Doosje, B., & Ellemers, N. (1997). Self-stereotyping in the face of threats to group status and distinctiveness: The role of group identification. *Personality and Social Psychology Bulletin*, *23*, 538-553. doi:10.1177/0146167297235009
- Srull, T. K., & Wyer, R. S. (1980). Category accessibility and social perception: Some implications for the study of person memory and interpersonal judgments. *Journal of Personality and Social Psychology*, *38*, 841-856. doi:10.1037/0022-3514.38.6.841
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, *69*, 797-811. doi:10.1037/0022-3514.69.5.797
- Steele, C. M., Spencer, S. J., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. *Advances in Experimental Social Psychology*, *34*, 379-440. doi:10.1016/S0065-2601(02)80009-0

- Stephens, N. M., Fryberg, S. A., Markus, H. R., Johnson, C. S., & Covarrubias, R. (2012). Unseen disadvantage: How American universities' focus on independence undermines the academic performance of first-generation college students. *Journal of Personality and Social Psychology, 102*, 1178-1197. doi:10.1037/a0027143
- Stephens, N. M., Hamedani, M. G., & Destin, M. (2014). Closing the social-class achievement gap: A difference-education intervention improves first-generation students' academic performance and all students' college transition. *Psychological Science, 25*, 943-953. doi:10.1177/0956797613518349
- Strauman, T. J., & Higgins, E. T. (1987). Automatic activation of self-discrepancies and emotional syndromes: When cognitive structures influence affect. *Journal of Personality and Social Psychology, 53*, 1004-1014. doi:10.1037/0022-3514.53.6.1004
- Syed, M., Azmitia, M., & Cooper, C. R. (2011). Identity and academic success among underrepresented ethnic minorities: An interdisciplinary review and integration. *Journal of Social Issues, 67*, 442-468. doi:10.1111/j.1540-4560.2011.01709.x
- Tangney, J. P., Niedenthal, P. M., Covert, M. V., & Barlow, D. H. (1998). Are shame and guilt related to distinct self-discrepancies? A test of Higgins's (1987) hypotheses. *Journal of Personality and Social Psychology, 75*, 256-268. doi:10.1037/0022-3514.75.1.256
- Taylor, D. M. (2002). *The quest for identity: From minority groups to generation Xers*. Westport, CT: Praeger.
- Usborne, E., & Taylor, D. M. (2010). The role of cultural identity clarity for self-concept clarity, self-esteem, and subjective well-being. *Personality and Social Psychology Bulletin, 36*, 883-897. doi:10.1177/0146167210372215
- Van Hook, E., & Higgins, E. T. (1988). Self-related problems beyond the self-concept: Motivational consequences of discrepant self-guides. *Journal of Personality and Social Psychology, 55*, 625-633. doi:10.1037/0022-3514.55.4.625
- van Veelen, R., Otten, S., Cadinu, M., & Hansen, N. (2016). An integrative model of social identification: Self-stereotyping and self-anchoring as two cognitive pathways. *Personality and Social Psychology Review, 20*, 3-26. doi:10.1177/1088868315576642
- Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology, 92*, 82-96. doi:10.1037/0022-3514.92.1.82
- Wrosch, C., Scheier, M. F., Miller, G. E., Schulz, R., & Carver, C. S. (2003). Adaptive self-regulation of unattainable goals: Goal disengagement, goal reengagement, and subjective well-being. *Personality and Social Psychology Bulletin, 29*, 1494-1508. doi:10.1177/0146167203256921
- Yeager, D. S., Purdie-Vaughns, V., Garcia, J., Apfel, N., Brzustoski, P., Master, A., . . . Cohen, G. L. (2014). Breaking the cycle of mistrust: Wise interventions to provide critical feedback across the racial divide. *Journal of Experimental Psychology: General, 143*, 804-824. doi:10.1037/a0033906