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A Social Identity Model for Education 🔓

Dominic Abrams, Diane Houston, Barbara Masser, and Blake McKimmie
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Abstract and Keywords

Much of the research on individual attainment in educational settings has focused on individual differences. This chapter sets out the role of groups and group processes. After reviewing evidence for the role of social comparison in the classroom, and theory and research on ethnic group differences, we consider the impact of category memberships, stereotypes, and threat on educational performance. We introduce social identity theory and explain its relevance to educational outcomes. We then offer an integrative social identity model for education (SIME) that incorporates three elements of education research: social comparison, stereotypes, and identity. The model provides a more comprehensive perspective on the role of intergroup and intragroup relations and indicates how (and which) group memberships can present barriers to, or reveal new horizons for, performance and achievement. We describe how these elements may work together in practice and conclude by considering prospects and approaches for future research.

Keywords: learning, social identity, social comparison, attainment, stereotypes

This handbook focuses largely on learning at the level of the group or the organization. The present chapter has a different focus, namely how individuals' identification with groups, within or beyond the classroom, creates a psychological frame that may facilitate or inhibit their educational achievement and outcomes. We therefore consider the wide set of group memberships that are the context for education, learning, and achievement throughout life. We argue that social identification with groups should be an object of analysis and research in order to achieve a more comprehensive understanding of people's educational performance.

The chapter begins by considering the scope and general conclusions from psychological research on differences in educational outcomes. After briefly discussing individual differences, we review evidence about the role of social comparison in the classroom, which has generally focused on the link between interpersonal comparisons and educational outcomes. We also consider theory and research on ethnic group differences. We then consider the role of category memberships, stereotypes, and threat on educational performance. Next, we introduce social identity theory, explaining its relevance to educational outcomes, and then offer an integrative social identity model (SIME) for understanding the role of group memberships in educational outcomes. This framework offers an integration of the three elements of education research—social comparison, stereotypes, and identity—thereby offering a more comprehensive perspective on how (and which) group memberships can present barriers to, or reveal new horizons for, performance and achievement. Finally, we describe how these elements may work together in practice and conclude by considering prospects and approaches for future research.

The Psychological Context for Educational Performance

There is a considerable literature that focuses on ways that individual differences, social comparison, social cognition and social or cultural background or minority status may explain differences in educational performance.

Individual Differences

Educational performance research, dating as far back as Binet and Simon (1916), was founded upon, and has traditionally emphasized, the role of individual differences in predicting attainment. Yet this approach has also been the root of enormous controversy, such as over whether there are racial, gender, or ethnic differences in intelligence or particular abilities (cf. Lynn, 2011). Much recent research has tried to understand why

such differences might emerge or persist, how they occur, and whether they can be eliminated.

Most explanations for differences in educational attainment have focused either on cultural/subcultural influences or on individual differences in effort or mindset, largely ignoring the role of groups. For example, a recent meta-analysis of predictors of university students' GPA indicates that better performance is associated with higher academic self-efficacy, higher grade goal, better effort regulation, and particularly with performance self-efficacy (Richardson, Abraham, & Bond, 2012). Surprisingly, that review indicated that the relationship with "demographic" and "psycho-social contextual" factors was relatively small. Richardson et al. (2012) operationalized these contextual factors as including a variety of interpersonal and social supports/stressors. Notably, they included only one predictor related to *psychological* group membership, namely institutional aspects of organizational integration. This was measured with items such as "I am confident that I made the right decision in choosing to attend this university."

Although the results of Richardson et al.'s (2012) study showed that female students from higher socioeconomic backgrounds and older students performed better academically, the psychological impact of gender and age as important social categories was not explored. This may appear to be an oversight, as gender and age comprise two of the three chronically accessible identities (Brewer, 1988; Fiske & Neuberg, 1990). Notably Richardson et al.'s review did not consider the role of social identity at all. We found this curious, given evidence that identifying with a group affects the learning of new skills (e.g., Bjerregaard, Haslam, & Morton, 2016), and the presence of other group members affects both learning of new skills and people's ability to perform under test conditions (e.g., Abrams & Manstead, 1981). However, an examination of the literature suggests that, rather than being an oversight, the absence of social identity in the review might reflect the limited extent of direct evidence.

Social Comparison

Social comparison theory holds that when objective information is not available, or is ambiguous, people will compare themselves with others to evaluate their own abilities (Festinger, 1954). The self-evaluative motive arises partly from people's desire to protect or enhance their self-esteem and to self-enhance (Wills, 1981; Wood, 1989), and has been echoed in subsequent theorizing about the role of group membership in phenomena such as prejudice (e.g., Brewer, 2003; Hogg, 2007; Tajfel & Turner, 1979).

There is evidence that social comparison processes within classroom contexts affect performance. Dijkstra, Kuyper, van der Werf, Buunk, and van der Zee's (2008) review identified three relevant aspects of social comparison: motives for social comparison, dimensions of social comparison, and direction of social comparison. Their findings indicated that students prefer to compare upward (i.e., with people whose past performance is higher than their own) and who are otherwise similar to themselves (e.g.,

in age and gender). The affective, cognitive, and behavioral consequences of unfavorable social comparison may include negative affect, evaluative anxiety, and lower academic self-concept. The literature, however, has predominantly taken a perspective based on individual differences, and it appears to have paid relatively little attention to the extent to which social comparisons may be framed and motivated by group memberships and social identity.

Marsh and Parker (1984) suggested a "social frame of reference" model linking academic self-concept to performance. They proposed that students use both internal and external frames of reference for academic self-evaluation. The internal frame of reference involves one's relative ability in different academic domains (or academic versus other domains), while the external frame involves comparisons with the abilities of other students within the relevant classroom or year in school. Marsh and colleagues established through both meta-analytic comparisons and through multiple large-scale studies that there is a clear "big fish, little pond effect [BFLPE]." Specifically, high-ability individuals tend to perform better in academic contexts (schools or classes) in which the achievement level as a whole is moderate, compared to contexts where the achievement level is higher. This even extends to situations where students are put into accelerated learning routes (e.g., moved ahead by one school year). It turns out that those who are accelerated by a year have less positive academic self-concepts than their peers who remain within the typical year group, while those who stay back a year have more positive academic self-concepts (Marsh, 2016). Thus, it seems that downward social comparisons are more motivating than upward social comparisons. For example, children in GAT (gifted and talented student) programs actually experience reduced academic self-concepts in various domains when compared with matched children in nonselective programs (Marsh, Chessor, Craven, & Roche, 1995).

More broadly, both internal and external social comparisons are involved. For example, even though there are high positive correlations between achievement in both verbal and math domains, the self-concepts associated with each of these domains is much less strongly correlated. This suggests that one's academic self-concept in a particular domain is not just a function of internal comparisons with general performance expectations but is also dependent on specific comparisons with distinct external reference points relevant to particular domains. Indeed, positive academic self-concept in one domain may be associated with lower achievement in the other and the BFLPE can arise in one domain but not in another (see Marsh & Craven, 1997), yet the reasons for this specificity seem underexamined in the research literature.

Although the BFLPE highlights the role of social comparisons in academic self-concept and achievement, it does not shed much light on how particular external frames of reference become involved. Nor does it offer obvious explanations for why the BFLPE might affect one group but not another. For example, Preckel, Zeidner, Goetz, and Schleyer (2008) examined the impact of gender ratio in a sample of 769 gifted Israeli students and found that girls', but not boys', academic self-concept was (negatively)

affected by the gender ratio (percentage of boys in the class). This implies that the BFLPE was exacerbated by intergender frames of reference for the girls who were in the numerical minority, but not the boys who were in the numerical majority.

Researchers examining the BFLPE have not paid as much attention to the role of specific intergroup comparisons that are structured by categories other than those of classroom or school membership (cf. Huguet, Dumas, Marsh et al., 2009) or gender (Preckel et al., 2008). Moreover, little attention has been given to whether children identify themselves as belonging to ability subsets within the classroom or school, and how this identity may relate to their school experience or performance. This is curious given the agility with which children as well as adults are able to incorporate social categories into their self-defining comparisons with others.

(Ethnic) Group Identity

A different strand of research focuses on ethnic group identity. Given that racial and ethnic divides are so salient and historically embedded in the context of the United States, it is not surprising that a large volume of research conducted in the United States has dwelled on questions such as why Blacks and Hispanics underattain relative to their White counterparts. A factor that is frequently cited as critical is the degree of ethnic segregation in schools. For example, recent estimates indicate that 40% of Hispanic and Black students attend schools in which enrollment of White students is between 0% and 10% (Orfield & Frankenberg, 2014). For minority group members at school, even after accounting for socioeconomic disadvantage, racial segregation is linked with poorer reading, math, and verbal attainment (Benson & Borman, 2010). Conversely, Black students who have experienced integrated schooling appear to have improved life opportunities and experiences over a period of many years (Johnson, 2011).

Because of such stark evidence, it is unsurprising that research has concentrated on the question of how such disadvantage arises. Implicit in much of the literature is an assumption that demographic group membership and psychological group membership are inevitably linked. For example, Phinney's (1990) developmental model of multiethnic identification has been used to examine how strongly ethnic and racial identification relate to academic outcomes among various ethnic and racial groups. It has been argued that "ethnic identity achievement," assessed using the Multigroup Ethnic Identification Measure, is associated with psychological well-being, which in turn serves as a protective mechanism against poor academic achievement (Costigan, Koryzma, Hua, & Chance, 2010). Helms's (1990) model of racial identity (see also Cross, 1995) holds that while for Black people the meaning of identification with ethnic identity may vary, higher identification should be associated with better academic achievement. Conversely, other perspectives, particularly the work of Fordham and Ogbu (1986), suggest that ethnic and racial identification (ERI) may hinder academic achievement, because Black students may perceive that higher academic performance is an indicator of "acting White," and therefore Black students avoid high performance as a way distancing themselves from

White culture. Others suggest that an individual student's academic outcomes depend on the particular individual's attributes in the context of the particular group with which the individual identifies (Umana-Taylor et al., 2014). Developmental approaches have therefore focused on the contents and processes of ethnic-racial identity (Umana-Taylor et al., 2014) and conceptualize it as "a multidimensional, psychological construct that reflects the beliefs and attitudes that individuals have about their ethnic-racial group memberships, as well as the processes by which these beliefs and attitudes develop over time" (p. 23).

Developmental approaches also place considerable weight on the role of individuals' cognitive abilities and resources. Consider, for example, the argument presented by Umana-Taylor et al. (2014) that ethnic and racial identification only becomes meaningful in adolescence. They argue that "during earlier developmental periods … children typically do not have the social exposure combined with the cognitive capabilities to understand other people's perspectives (Quintana, 1994)" (p. 25). In addition, Umana-Taylor et al. suggest that "it is not until adolescence that individuals possess the abstract and counterfactual thinking skills necessary to consider identity issues (Marcia, 1994) … [so] adolescents have the capacity to merge their personal identity or sense of self with their reference group (Cross & Cross, 2008) and develop an ethnic group consciousness (Quintana, 1998)" (p. 25). Thus, whether the effects of a person's ethnic identity are positive or negative, they are likely to become more powerfully consolidated over time as the identity gains meaning and depth in a person's self-concept.

In summary, educational and developmental psychological perspectives hold that group membership affects educational attainment primarily via its internalization within the self-concept. Contemporary developmental theory recognizes the complexity and diversity of ways in which the "self-concept" is instantiated. Research tends to anchor on demographic memberships as psychological givens, and to concentrate largely on questions such as whether, and at which developmental stages of identity development, ethnic and racial identification predict academic and psychological outcomes. Such approaches tend to focus on one type (or set) of group membership(s) alone, such as ethnic and racial identity, or gender, rather than to conceive of social identity as a very flexible, context-dependent process which may or may not be psychologically linked to these categories at different times and for varying reasons.

Situational Influences of Categories, Stereotypes, and Threat

Research that focuses more on situational factors suggests a different picture. Even very young children can respond to group membership, showing, for example, ingroup bias (Dunham & Emory, 2014). Children as young as 8 are able to understand that groups attach importance to loyalty, and that different groups expect different behavior as

expressions of that loyalty (Abrams, 2011; Abrams, Palmer, Rutland, Cameron, & Van de Vyver, 2014). Even if a deep understanding of ethnic and racial identity takes years to develop, the developing child's recognition that a particular shared group membership and distinctions from other groups are relevant to behavioral differences in a specific situation suggests that these memberships could affect educational performance from quite early childhood.

Given the potential for group identity to be influential in particular situations, it is less surprising that there are actually quite mixed findings on whether ethnic and racial identification are associated with better or worse academic achievement. It is also not so surprising that there are mixed conclusions about the effects of greater or lesser segregation (on this point, we consider salience of group memberships later in the section on stereotype threat). The conclusion seems to be that the impact of ethnic and racial identification depends on other contextual factors that give meaning to the group memberships (Miller-Cotto & Byrnes, 2016). More broadly, we propose that both individual and group performance in educational settings are likely to be gauged and motivated by intragroup and intergroup social comparisons. Therefore, situation-specific psychological reference group(s) must be an important frame for that performance.

Numerical and Status Minorities

Social psychologists have tended to approach the question of why particular groups perform more poorly than others by trying to understand the emotional and cognitive processes that may arise from minority status or minority group size. Here, large differences are evident between different theoretical and research traditions. One tradition emphasizes the nature of intergroup relations, especially intergroup contact (see Brown & Hewstone, 2005). It is argued that intergroup relations are likely to be better if the groups have contact that is institutionally supported, and the groups have equal status and cooperative goals. These benefits are likely to be manifested in forms such as reduced prejudice, greater tolerance, mutual understanding, and friendships across groups, intercultural learning, and so forth (Tropp & Pettigrew, 2005).

Another tradition reveals that there are significant risks for minority group members when their group's lower social status is combined with being in the numerical minority. In particular, solo status (e.g., being the only Black student in a class) leaves people feeling that their group membership is highly salient to others, making them feel apprehensive that any negative stereotypes of their group will be confirmed by their own behavior (Sekaquaptewa et al, 2007).

More generally, Steele (e.g., 1997) has argued that negative stereotypes about minority group members' abilities constitute a "threat in the air," so that when minority students sense they are being judged in the light of these stereotypes it creates a threat that disrupts their performance. This process is thought to account for negative effects of

making minority group membership salient in a comparative context. Such effects can arise very easily merely by asking individuals to record their group membership, or by noting that different groups are participating in the tests.

Over the last couple of decades, the effects of stereotype threat have been revealed in a variety of groups and on a variety of dimensions. Generally, if one's group membership is made salient and a negative stereotype exists about one's group's ability in a key aspect of performance that is being tested or evaluated, one is likely to underperform (see Lamont, Swift, & Abrams, 2015; Schmader et al, 2009; Steele & Aronson, 1995). So, for example, both Black and White males underperform when the relevant negative stereotype about athletic ability is threatened—in relation to "sports intelligence" for Black athletes and "natural athletic ability" for White athletes (Stone, Lynch, Sjomeling, & Darley, 1999). Evidence suggests that several mechanisms are involved. Group salience can simply activate self-stereotyping (the stereotype that one's group has a low level of ability itself primes lower performance). But it is also likely to create anxieties about upcoming performance, to produce intrusive thoughts that disrupt concentration and executive function, and so on (Pennington, Heim, Levy, & Larkin, 2016).

Social psychological research also tends to underline the inescapability of negative group stereotypes. For example, particularly in the North American context, it has been suggested that both White and Black people's tendency to show implicit (unconscious) positive evaluative biases toward White people means that Black people almost inevitably find themselves cognitively depleted through having to suppress or ignore such biases (see Schmader et al., 2008). Stereotype threat seems to affect any group for which negative stereotypes on the key dimension of performance exist. So not just ethnic categories but also women in the context of STEM (science, technology, engineering, math) performance (e.g., Murphy et al., 2007) and older people in terms of memory performance (e.g., Abrams et al., 2006). More generally, stereotype threat can be conceived as a threat to social identity—the threat has greater potency to the extent that one identifies with the test domain and the lower status social category.

In this admittedly depressing vista, groups appear to affect educational outcomes in two general ways, first through the adoption of a group identity for which educational performance has low value, and secondly through the cognitive and affective blitz that affects group members any time that a negative stereotype is linked to a salient group membership in a test context.

In sum, a pessimistic conclusion would be that converging influences of the person and situation seem destined to sentence minority group members to be plunged into an abyss of dismal achievement. However, this is not the full picture. It does not capture what happens to all people, and it does not capture why people's performance levels vary across situations, tasks, and time. Often there are both negative and positive stereotypes about the same group. Therefore, the same evaluative situation can create stereotype threat and stereotype boost simultaneously. For example, Swift, Abrams, and Marques (2013) found that the "threat" comparison with younger people causes a decrement in

older people's performance on a task in which they are stereotypically weak (memory, reflecting fluid intelligence) but boosted it on a task in which they are stereotypically strong (solving crosswords, reflecting crystalized intelligence, knowledge, and experience). Moreover, a different comparison group can produce boost or threat. For example, Asian American women performed better on a math test when their Asian identity was made salient, but worse when their gender identity was made salient (in comparison to when no identity was made salient; Gibson, Losee, & Vitiello, 2014; Shih, Pittinsky, & Ambady, 1999). Finally, we must be careful not to attribute all such context effects to threat. Performance differences due to solo status may create significant challenges that arise from other factors such as social isolation. For example, as ethnic proportions become more equal, such isolation becomes less likely and minority members' educational performance improves (cf. Walton & Cohen, 2011).

Social Identity Theory

Social identity theory was conceived by Henri Tajfel and developed by Tajfel and Turner (1979) and others (Hogg & Abrams, 1988; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) as a general framework to explain intergroup relations with implications for why group memberships influence people to behave in ways that are biased, prejudicial, and sometimes work against their personal interests. The theory started with the premise that it is possible for people's self-concept to derive from psychological bonds with others with whom they have no acquaintance or personal association. This premise became the basis of a more general theory of the psychological processes through which society as a whole is meaningfully connected to the self-concept (see Abrams & Hogg, 2004). Particularly relevant for the role of groups in educational performance is that the social identity approach explained how group membership influences individual behavior in ways that cannot be reduced to individual differences in motivation or contribution. These effects are not derivable from purely statistical models that amalgamate individual inputs to predict group performance.

According to social identity theory, people understand their group's value, and thus their identity as a group member, in terms of their views of the social system in which the group is embedded. The theory has two broad strands, one concerned with the way that social categories become psychological identities (self-categorization) and the other concerned with how groups achieve change in their situation. Linked to both strands is the account of the implications of intergroup comparisons for relations and influence within groups.

Educational researchers invest considerable energy in understanding effects of demographic differences, classroom context, and school differences on educational performance. The underlying assumption is that there are supra-individual-level factors that determine educational outcomes. However, these (often statistical and

methodologically complex) approaches largely provide descriptive rather than explanatory power.

The reason that the social identity approach has so much relevance to education is that educational performance is not just an objective outcome reflecting the performance of individual students but also a subjective outcome with wider social value. It arises in a shared psychological context in which the inputs (e.g., school quality, size, location, student demographics) and outputs (SAT and other exam grades, sports performance, etc.) are judged not in absolute but in comparative terms (versus neighboring schools, local norms, national league tables, and so forth). Performance differences between groups affect whole sets of people in similar ways. Group memberships and identities therefore also frame the interpretation and value placed on individuals' performance inputs (e.g., effort, ability) and outputs (scores).

Social Categorization and Identity Motives

An early insight from social identity research was that merely categorizing people into different groups can be sufficient to create an exaggerated perception of the differences between those in different categories. Studies examined school children's behavior after they had been arbitrarily assigned to membership in quite meaningless "minimal" groups. These were simply category labels, defined by bogus feedback about participants' artistic or musical preferences, or sometimes by more explicitly random means. When given the opportunity to assign money or points between anonymous ingroup and outgroup members, these students favored ingroup members. They also adopted strategies to ensure the ingroup won more than the outgroup, even if this meant an absolute loss for the ingroup (Bourhis, Sachdev, & Gagnon, 1994).

The motivation to achieve ingroup superiority over comparable outgroups was explained in terms of people's desire for positive ingroup distinctiveness. Social identity theory proposed that people gain positive self-esteem by ensuring the ingroup is different from and superior to an outgroup. However, the limitations of this motivational account were soon apparent (Abrams & Hogg, 1988; Houston & Andreopoulou, 2003) and prompted a more comprehensive view that accepted that people might have multiple motives when faced with a comparison between an ingroup and outgroup. These motives could include a desire to understand the situation (gain meaning), to reduce uncertainty (Hogg, 2007; Hogg & Abrams, 1993), and to achieve a sense of belonging (Baumeister & Leary, 1995) and control (see Williams, 2007). Moreover, it has become apparent that it was often dominant or superior group members' greater self-confidence that prompted exploitative discriminatory action, rather than the self-esteem deficits of subordinate group members stimulating retaliatory biases (Abrams & Hogg, 2001). In fact, members of low-status groups can have high self-esteem if they have a strong sense of connection and identification with their group (Hughes, Kiecolt, Keith, & Demo, 2015), and if the group provides a distinct identity (Jetten, Schmitt, Branscombe, & McKimmie, 2005).

Ambition for and assertion of group dominance (especially in sports but also in politics, education, and other realms) is often viewed as normative. Failure to show such commitment is typically regarded as embarrassing, humiliating, or strange (Levine & Moreland, 2002; Travaglino, Abrams, Randsley de Moura, Marques, & Pinto, 2014; Van Vugt & Hart, 2004). Groups with advantages may well use social exclusion by various means (such as membership rules or qualification criteria) in order to ensure that benefits are gained for their members. Conversely, disadvantaged groups are more likely to be motivated by the prospect of gaining parity and equal rights, rather than by the opportunity to dominate (excepting situations where such pathways toward parity are blocked). Yet, in both cases, pride and positive meaning for identity are clearly at stake, and people's belief in what is, and what should be, available to them vis-à-vis others in society is strongly defined by their group memberships.

As to the question of why and how these motivations arise, part of the explanation starts at the very moment that people use and apply social categories to one another. This process is explained extensively in the self-categorization theory part of the social identity approach (Turner et al., 1987). As intergroup comparisons become more salient, they create a stronger frame for perception so that both self and others are viewed more as prototypical members of their group rather than as unique individuals. These are not fixed cognitive representations. They are the features, in a particular context, that seem best to define the similarities within the ingroup in contrast to the differences between the ingroup and outgroup (or non-ingroups). This psychological mechanism, defined formally as the metacontrast principle, means that the ingroup stereotype becomes a self-stereotype, and the most prototypical ingroup characteristics become the reference point for defining the self. An example is the anguish on football fans' faces when their team loses a big match. This is not personal anguish, but a reflection of a crushed social identity—a team loss that is shared with thousands of others, but felt no less strongly than a personal defeat would be (see Mackie and Smith's 2017 account of group-based emotions).

The situational flexibility of stereotyping and its link to self-evaluation is illustrated by a study using the "matched guise" paradigm (Abrams & Hogg, 1987). Scottish teenagers from Dundee (a city on the east coast of Scotland) listened to excerpts of speech from pairs of differently accented speakers and then judged those speakers' warmth and competence. In reality, all the speakers were the same person. When the students heard either an English accented speaker or a Glasgow (west of Scotland) accented speaker paired with the Dundee accented speaker, ratings of the English and the Glaswegian speakers' warmth plummeted, showing that both were regarded as outgroup members. However, when they heard a Glaswegian speaker paired with the English accented speaker, they rated the Glaswegian as substantially warmer. Thus, the change was the inclusion of the Glaswegian speaker as an ingroup member. A change in the social comparative context led to a change in the category used to define the self-concept from "Dundonian" to "Scottish."

Status and Social Change

Any status system can have varying degrees of legitimacy and stability. According to social identity theory, when systems are perceived as legitimate and stable, status differences within the system are termed "secure." This means that people whose groups are higher status will behave as if their status is deserved, and those whose groups are lower status will likely accept the situation—a meritocracy. But meritocracy leaves some groups with lower status, and they are likely to be motivated to deal with this in various ways. For example, in some English regions children are able to enter a selective examination system at the age of 11. The minority who "pass" the exam are entitled to attend academically selective grammar schools. This creates a clear category-based status hierarchy in which the nonselective schools, and parents whose children did not sit or who failed the exam, face a number of choices. Given that quite a large proportion of children score around the pass mark for the test, there is obviously a degree of arbitrariness and overlap in the potential performance of children at the lower end of the selected group and upper end of the nonselected group. Yet the options for the nonselected group are limited.

First, the schools and parents can pursue a "social competition" strategy—work hard to raise their school's status (e.g., compete harder in terms of achievements). However, this possibility is highly constrained by the fact that their new school has to cater to the needs of a large number of less academically inclined pupils.

Second, they may adopt a "social creativity" strategy by finding new ways to achieve status through focusing on other distinctive characteristics. Nonselective schools may, for example, decide to become centers of excellence in nonacademic subjects such as the sports or arts.

Third, the students or their parents might opt for a mobility strategy. They could opt out of the intergroup context completely (individual mobility), one example of which is to have home schooling, and another would be to play truant and avoid education altogether. A social identity–based strategy is social mobility, which is to try to join the higher status group. This could be achieved at a later time (e.g., resitting an entrance exam a year later) or simply by spending resources to join a different high-status group (e.g., paying for education at a private school with the ultimate aim of achieving higher grades).

Greater illegitimacy in the system, such as unfair testing or unfair distribution of resources for schools, is likely to provoke a fourth reaction—the emergence of a "social change belief structure"—a view that things for one's group can only improve if the system itself is changed. Such beliefs are most clearly evident during political change. For example, social change beliefs are a powerful predictor of Scottish people's decisions

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to support the Scottish National Party over the last 20 years (Abrams & Grant, 2012; Grant, Bennett, & Abrams, 2017).

In the education system, social change beliefs are likely to be expressed through groups that lobby for changes in policies affecting residential segregation, criteria and design for assessment tests, and sometimes the content of the curriculum. In the United Kingdom, they are also expressed through parent or community groups that set up their own "free school" to provide an alternative to state education. In the United States, the continuing legal and academic debates over the legitimacy of affirmative action, or active inclusion strategies for minorities, reflect similar struggles (see the US Supreme Court case #579, *Abigail Noel Fisher v the University of Texas* at Austin et al., 2016).

Just as social identity theory would predict, members of majority groups are inclined to argue that a purely meritocratic system is legitimate and stable, and they want to protect their secure position by arguing that performance should be the sole criterion for advancement or entry to high-status colleges and universities. This argument implies that minority individuals can move ahead using a social mobility strategy via personal effort. Thus, to the extent that inequalities exist, the ideology of meritocracy may be one that the more advantaged groups will wish to preserve (cf. McCoy & Major, 2007; Newman, Johnston, & Lown, 2015).

However, social identity theory suggests other routes. Those who identify either as minority group members or on behalf of social movements to promote equality, are more likely to point to the illegitimacy and unfairness of such criteria given the social structural and psychological hurdles that distinctively confront the minority group. In short, they advocate a social change strategy.

Identity-Based Motivation

Differences in individuals' level of identification with particular groups has been shown to reliably predict a range of aspects of commitment to the group (Abrams, Hogg, Hinkle, & Otten, 2005; Randsley de Moura, Abrams, Retter, Gunnarsdottir, & Ando, 2009). Identification with school—the extent to which a student attaches importance to her membership in the school—is generally positively related to educational achievement (Goodenow, 1993; Liska & Reed, 1985). Oyserman (2009, 2013; Oyserman & Lewis, 2017) offers a more detailed identity-based motivation theory of the educational performance of African American, Latino, and Native American school students.

Although Oyserman and Lewis (2017) barely mention social identity, and do not discuss social identity theory, some of social identity theory's principles are incorporated into their identity-based motivation account. For example, it is assumed that identities and their associated motivations mediate between social-structural and contextual factors, on the one hand, and academic outcomes, on the other. It is also assumed that social category memberships can vary in importance—"people can be schematic or aschematic for social category memberships including race-ethnicity, age, gender, body mass and social class" (p. 162), and race identity may include both the notion of ingroup membership and the awareness of the barriers to inclusion in wider society arising from that membership. Identities are then defined as "traits and characteristics, social relationships, roles and group memberships people use to define who they are or might become, the combination of which defines their sense of self" (p. 162). In this approach, identity is a social-cognitive construct—part of a stable and structured self-concept yet responsive to the social context. Thus, racial identity can include a sense of connection to other ingroup members, awareness and rejection of racism against the ingroup, and embedded achievement—belief that the group can demonstrate academic achievement and aspiration to do likewise. The theory holds that "dynamic construction," "action-readiness," and "procedural readiness" are linked through associative knowledge networks. Stated more simply, how individuals construe their identity in a particular context will relate to their motivation and pursuit of goals that may elevate or depress their academic achievement.

This perspective starts from the position that there are social-structural factors that affect the academic performance of different groups. An example is relative segregation and clustering of residence in areas of high income inequality (Diamond, 2016). Minorities also tend to have lower socioeconomic status, which also contributes to poorer educational outcomes. Surrounded by, and sharing schools with, other low-performing peers, the more able minority students may then underestimate what they need to do to achieve their full potential and therefore not invest sufficient effort or use the best strategies for success (Antecol et al., 2016). Oyserman and Lewis (2017) note that, despite the similarity in aspirations shared by students from different ethnic groups (e.g., Fortin, Oreopoulos, & Phipps,, 2015), and despite a trend of increasing proportions of members of lower status groups actually attending college and attaining 4-year degrees

(NCES, 2016), they do not attain high performance in those degrees (Davis-Kean & Jager, 2014) and are less likely to graduate, particularly in STEM majors (Chang, Sharkness, Hurtado, & Newman, 2014). Moreover, while minority group members do not show less engagement with school, their degree of engagement is not closely related to their grades (Shernoff & Schmidt, 2008).

Oyserman and Lewis (2017) argue that multiple macrosocial socioeconomic disadvantages—such as having few or no family members that attended college, or low income—combine with minority group membership to contribute to the overall stigmatization of minority members. It is the stigmatization that is responsible for performance, not just racial identity. Once the influence of these other sociodemographic factors is accounted for, race itself may account for rather small amounts of variance in educational performance. More important, the impact of racial identity on performance will depend on how students construe their racial identity.

Identity-motivation theory holds that when people are reminded of their lower place in a social hierarchy, the reality and the stigma combine to activate a lowered sense of control. This in turn promotes more situational (less abstract and large scale) reasoning (Fiske, Dupree, Nicolas, & Swencionis, 2016). Lower status is also linked with a greater likelihood of regarding task difficulty as implying lower importance of the task—a finding that is more acute among minorities (Aelenei, Lewis, & Oyserman, 2016). These factors undermine or reduce students' possible identities for the future, limit their perceptions that their choices and efforts matter, and inhibit their pursuit of strategies for success (Bi & Oyserman, 2015). Thus, it is not the students' aspirations that are critical, but the effort to attain them. However, these construals are subject to situational influences. Effort and attainment are likely to depend on whether a situationally salient identity is congruent with school achievement, and at the same time, they are linked to strategies and interpretation of difficulties as indicators of the importance of the challenge ahead (Oyserman & Destin, 2010).

Identity-motivation theory provides an elegant account of the mechanisms affecting motivation for academic performance and achievement. However, it does not focus on the role of either intergroup or intragroup relations, and thus directs its attention to the individual's formulation of identity rather than the influences within the context itself. We would suggest that these influences are an equally important part of the picture.

Intragroup Influence and Relationships

As the social identity approach developed, it also turned to the question of relations *within* groups. People are attracted to others purely on the basis that they share a category membership because they assume there will be similarities of perspective, values, or interests. Thus, social cohesion can be quickly generated by a shared sense of common group membership (Hogg, 1993). Importantly, people are more readily influenced by those with whom they believe they share a social identity. For example,

when physical judgment is difficult or ambiguous, people are likely to use the judgments of ingroup members more than outgroup members as the frame of reference for their own judgments, they are likely to comply more with pressure from ingroup members than outgroup members (Abrams, Wetherell, Cochrane, Hogg, & Turner, 1990; Turner, 1991), and they are more likely to use the attitudes and behaviors of ingroup members to make sense of their own attitudes and behaviors (McKimmie et al., 2003; McKimmie, Terry, & Hogg, 2009; McKimmie, 2015).

To protect their social identity, and indeed their shared sense of social reality, people are more concerned to assure the veracity of ingroup norms and actions than they are those of outgroup members (Marques, Abrams, & Serôdio, 2001). It is therefore understandable that when viewing someone who deviates from general social norms, people are likely to react with greater disparagement and criticism of, and stronger efforts to influence, a deviant who is a member of their own group that one who is a member of an outgroup (the "black sheep effect"—Marques & Paez, 1994). The flip side of this phenomenon is that, as a member of a group, nonconformity creates risks that one may be excluded by other group members. Research on ostracism has consistently shown that people react very strongly to both the prospect and reality of being left out of salient social relationships (Williams, 2007). Indeed, the four needs of belonging, meaning, esteem, and control are powerfully activated by quite brief periods of ostracism even during an online game of "cyberball," and these effects arise in middle childhood, adolescence, and adulthood (Abrams, Weick et al., 2011). Therefore, it is easy to comprehend why social categorizations provide not only stereotypical content for the self-concept but also a normative framework through which self and others evaluate one's actions.

The Group as a Framework for Educational Performance

A great deal of the literature on adults' group performance focuses on specific tasks (cf. Kerr, 2017). However, educational performance is assessed both repeatedly in different situations and cumulatively over time from early in childhood. Consequently, to make sense of how groups are involved in educational performance, it is necessary to consider both the potential fluidity of group memberships and relationships and the possible influence of group members' social cognitive development. It seems fair to assume that a student's response to pressure to work hard and perform well is likely to be conditional on the extent to which (a) he or she views the influencers as ingroup members, (b) regards achieving the educational goal as contributing positively to social identity, and (c) is concerned about the relationship implications for the self of not pursuing that goal (such as continued acceptance by the group).

Much work on children's social relationships in school has focused on who they are willing to include and exclude, and how they explain these decisions (Killen, 2007; Killen & Rutland, 2011). From at least the age of 5, children are sensitive to social atypicality (e.g., nonconformity) in intergroup settings, and this ability reflects their emerging ability

to consider counterfactual evidence and to engage in second-order perspective taking (Abrams, et al., 2014). Through middle childhood, their more empathetic perspective taking and their growing experience of different group memberships enable them to anticipate peers' intergroup biases and to anticipate which forms of nonconformity will invite disapproval from ingroup peers (Abrams, 2011; Abrams, Rutland, Pelletier, & Ferrell, 2009). By adolescence, they are easily able to distinguish types of deviance or nonconformity that represent challenges to the overall social standing of their group (e.g., its embodiment of generically desirable behavior) and types that challenge its intergroup superiority (e.g., loyalty and willingness to gain advantage for the ingroup) (Abrams et al., 2014).

The progression from childhood to adolescence is characterized by greater flexibility, better anticipation of group expectations, and greater awareness and skill in identifying normative expectations relevant to one's social identity in particular situations. It seems a particularly critical progression for educational outcomes because social group memberships don't just affect who is liked or disliked but also what young people care about, what they want to learn, who they want to learn with and from, and whether they value educational attainment at all (Harris, 1995). Therefore, we contend, the way that any school, college, or university establishes a *social* environment is likely to be critical for the educational outcomes that follow for different groups of students.

A Social Identity Model for Education

At the heart of social identity theory, and, we would argue, central to people's educational prospects, is the psychological necessity of being a valued member of a social system. We have proposed that social identity is the psychological context that frames much of people's learning. It frames who they learn with, who they learn from, what they learn about, and how learning and achievement contribute to their personal and collective self-concept. This idea can be developed into a general social identity model for education (SIME). The model is outlined schematically in Figure 1.
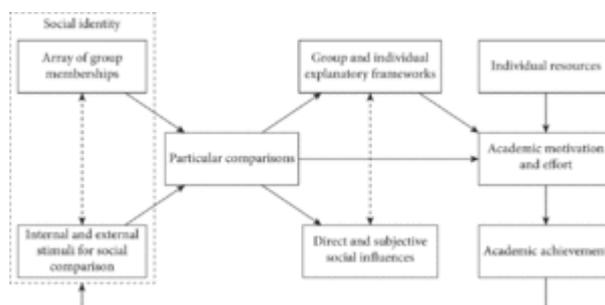
Click to view larger

Figure 1 Social identity model for education. Bidirectional arrows indicate mutual influence; single-headed arrows indicate predominance of causal direction. The model is shown as a snapshot in time. Over time, however, the model is nonrecursive because changes in individual resources and academic achievement can provide new group memberships and new bases for social comparison.

Research on educational performance has sometimes placed achievement as an input and self-concept as an output (e.g., Marsh, 2016), but other times the emphasis is reversed (e.g., Richardson et al., 2012). This makes sense, and likewise we conceive of social identity as being part of the social psychological framework or net within which education happens. Rather than assuming that social identity is the input and educational outcome an output, the SIME assumes that there is a continuous feed-forward process whereby academic attainment becomes judged and provides a motivational and self-categorical reference point for identity over time and changing circumstances.

We begin with the premise that any individual has various social identity connections that are available, or can be created, in a learning context. These include a wide *array of group memberships*, most obviously, gender, social class, religion, ethnicity, and less obviously, year group, school class group, sports and other club memberships, cliques and gangs, and memberships external to school (e.g., cultural community, musical groups, etc.) Sometimes these memberships will be hierarchically organized (such as a clique within a class within a school within a state, for example), but other times they might be orthogonal to one another (such as a club that draws members from different classes, schools, states). In any case, it is known that when people have multiple group memberships, they are likely to be more creative (Crisp & Turner, 2011). Therefore, the number, variety, and complexity of these group memberships serve as a potential stimulus for higher educational achievement.

Over time and within situations, there are also both *internal and external stimuli for social comparison*. These are factors that make various comparisons chronically accessible, acutely salient, or both. External stimuli are beyond the individual or group's control. They might take the form of routine class tests, publication of performance tables, or GPA and SATS classifications which serve as markers either for groups or individuals within groups. There are also individual differences in the propensity to engage in social comparisons (Buunk & Gibbons, 2006).

The array of group memberships and potential volume of stimuli for comparison are likely to be mutually influential. A context that offers multiple group memberships and categories will provide students who have a greater propensity to engage in social comparison more opportunities to make favorable (and possibly unfavorable) comparisons, more opportunities to find identity-congruent comparisons, and offer more ways to reach creative routes for achievement. This is similar to the idea in research investigating self-concept complexity. For example, Linville (1987) found that self-complexity was related to affective responses to situations, with more extreme response to ups and down shown by people with less complex self-concepts. People with more

complex self-concepts are better able to buffer themselves against negative aspects of the self by focusing on positive aspects. Likewise, if a person is particularly motivated to engage in social comparison for self-evaluation, or if additional external requirements to make such comparisons appear, this may stimulate awareness of a wider array of group memberships.

A third component of the system emerges from the combined context of the array of memberships and stimuli to compare. This is the *particular comparisons* and connections between groups that are routinely salient within the educational context. In one school or institution, gender might be particularly salient, and in another it might be subsection of a school, determined by age, uniform, badge, or "house" (in the case of Harry Potter, the Gryffindor, Hufflepuff, Ravenclaw, and Slytherin). At university, salient memberships may involve fraternities, sororities, or subject majors or sports team affiliations. Because each of these provides different opportunities for comparison and different self-stereotypes, it seems likely that students in more diverse environments are likely to have more opportunities to find favorable (or unfavorable) comparisons, and to find social identities with which academic achievement is congruent. They are also less likely to be vulnerable to any one form of stereotype threat. Consequently, the possibility of multiple comparisons is likely to offer students opportunities for identity-based motivation and to allow them to benefit from the cognitive advantages of multiply categorized social structures, as outlined earlier.

A fourth component involves the *explanatory frameworks* that are used by students to make sense of their personal and group-based situation. These will combine with the student's own skills, abilities, and resources to affect both the desire and motivation to achieve in particular academic domains.

An individual difference variable that has been linked with academic attainment is attributional style (Nolen-Hoeksema, Girgus, & Seligman, 1986; Weiner, 1985), which has led to the establishment of attributional retraining techniques to improve achievement (e.g., encouraging students to attribute failure to external and unstable causes, see Chodkiewicz & Boyle, 2014). However, the link between particular types of attributional style and performance varies according to context. (Gibb, Zhu, Alloy, & Abramson, 2002; Houston, 1994).

Academic context appears to impact upon the consequences of particular types of attribution. For example, Houston (2015) examined the role of specific attributional dimensions in predicting the subsequent academic performance of nearly 1,000 students from both high- and low-achieving high schools. This study revealed distinctive effects of attributional styles for positive versus negative events for the two types of school. Students who had internal (to the self), stable (persisting across time), and global (persisting across situations) attributional styles for *positive events* achieved higher levels of academic performance. However, this effect was stronger in low-achieving schools than in high-achieving schools. Put differently, individual differences in explaining success mattered less when students were already in a successful group. When it came to

attributional style for *negative events*, students from both types of school who made global attributions subsequently showed lower academic performance. However, in the high-achieving schools, students who made stable attributions for negative events went on to perform more highly, whereas stable attributions were unrelated to performance in low-achieving schools. Houston (2015) suggested that, in high-achieving contexts, stable attributions for failure can be motivating because the high-achieving group context enables students to take personal responsibility for outcomes and enables action for improvement.

Independent of a student's attributional or explanatory schemas, most education systems provide explicit or implicit accounts of what determines students' performance. In a cascading fundamental attribution error, governments may hold states or regions responsible for their levels of achievement, states may hold counties responsible, counties may hold schools responsible, schools may hold individual teachers responsible, and teachers tend to hold individual students responsible. The student is potentially the focal point of the trajectory of this attributional stiletto. Therefore, it is likely to matter very much whether there is an implicit or explicit assumption that all performance is entirely driven by individual effort or ability (cf. Dweck, 2000), or whether students see scope to use group and category differences to explain or describe performance. This might occur, for example, if the school's average performance is constantly compared with that of other schools. Groups of students may engage in attributional redirection by reaching consensus about which class teachers are "good" and "bad." For example, in some cases the whole class may collude to attribute its better or poorer performance to the particular teacher.

Social identity theory suggests that whether students adopt social mobility, social creativity, social competition, or social change strategies in relation to their academic efforts is likely to reflect the institutional or subgroup narratives that frame aspiration and achievement. For example, Ahmavaara and Houston (2007) found that school students' lay theories of intelligence (fixed versus malleable) were related to their aspiration levels within highly selective schools, but not in nonselective schools. This suggests that the school context itself frames the relevance of these lay theories. In a high-achieving setting, the belief that intelligence can increase is likely to be highly motivating. In a setting that has already defined students as having (fixed) low ability, students' beliefs about social mobility may be irrelevant. Aspirations may then depend either on rejecting the classification (social change beliefs) or, more likely, on social creativity to find alternative, nonacademic bases to value their school membership. Therefore, important questions for research and intervention include discovering which group-based social comparisons are encouraged or discouraged, what is the framing of comparisons involving competition and cooperation, and how group differences in achievement are addressed at an institutional level.

A fifth component of the model involves the *direct and subjective social influences* bearing on the student. This part of the model refers both to processes of small group socialization (Levine & Moreland, 1994) and wider societal socialization and social

representations about different groups. It also refers to the subjective group dynamics that provide a psychological context. These forms of socialization can therefore include direct pressures from family members, teachers, and peers, and indirect pressures from media messages, marketing, and societal stereotypes. They can also include subjective pressures arising from the students' own expectations of which behaviors may put them at risk of rejection or may enhance their likely acceptance by psychological ingroups. Students may aspire to join the clique of "cool kids," for example, whose status may give them influence over peer norms (Allen, Schad, Oudekerk, & Chango, 2014).

Category and group-based social identity can also converge to be congruent or incongruent with school identity. For example, girls typically report higher levels of school identification and school satisfaction than boys (Finn & Frone, 2004). Boys are likely to find it "uncool" to be successful at school and to view school more negatively than girls (Williams & Best, 1986), and boys may feel more concerned that being seen to aspire might make them a social pariah among male peers (Whitelaw, Milosevic, & Daniels, 2000).

Schools also differ in their relational and behavioral culture, which provides a normative framework for influence that can affect academic performance (Lynch, Lerner, & Leventhal, 2013). Of course, engagement with these same social influence pressures is likely to inform the explanatory frameworks that the students deploy to give meaning and value to their academic performance. To the extent that members of a group share an explanatory framework, they are likely to be similarly motivated and to have more similar outcomes.

A sixth component of the model involves important *individual differences* that the individual brings to the educational setting. In addition to their chronically salient identities based in family characteristics or traditions, and as well as any stigmatizing characteristics, or a particular ability or strength that places them in a category apart from others, students also differ in the repertoire of skills they bring. These skills are not just intellectual or practical. They may also include social-cognitive skills such as emotional intelligence and group nous (the ability to understand and anticipate which group-based comparisons are consequential in a given context). These skills and abilities are likely to better equip them to navigate peer pressure or make productive attributions about success and failure. Moreover, these skills, abilities, and characteristics can change over the life course, meaning that social identity changes and the value attached to educational and other attainments also changes. All of these factors can moderate how individuals manage their social reputation (Emler & Reicher, 1995) and how social identity will bear on their attainment.

These six components work together to influence two further components—motivation to pursue academic goals, and achievement. But as we have seen, academic motivation and effort are only part of the story in determining academic achievement. The sources of social influence that may proffer different explanations for achievement and may stimulate different social comparisons may also directly influence achievement. For

example, economic deprivation has multiple effects that lead similarly deprived students to cluster together, deny them the essential tools and resources to learn, and weaken them through poor nutrition, ill health, and multiple material disadvantages.

Within a classroom, a set of ingroup peers who do not value academic attainment may actively disrupt the class or prevent a fellow student from working. Conversely, a set of highly academically motivated peers may stimulate one another to work creatively and to be able to focus on more advanced challenges. In addition, merely being routinely included in a peer group network appears to smooth the path to higher achievement (Wentzel & Caldwell, 1997), perhaps because students face a lesser cognitive and affective burden of finding belongingness, meaning, esteem, and control. Moreover, the comparisons between groups themselves may create stereotype-based threats (or facilitation) that affect performance directly through implicit cognition and affect. However, it is important to recognize that the same group membership can therefore have different effects depending on a student's perception of the intergroup context. A study by Baysu, Phalet, and Brown (2011) examined school performance and identity strategies among Turkish Belgian young adults. Those with either separationist (social change belief system) or assimilationist (social mobility belief system) orientations were less likely to disengage from school when perceived threat (discrimination) was high, whereas dual identifiers were most successful when perceived threat was low. Underlining the role of intergroup dynamics, a key insight from Baysu et al.'s research was that "the success of minorities depends crucially on the acceptance of their social identities and cultural engagements by the powerful majority groups and institutions" (p. 139).

Finally, we assume that social identity itself will be influenced by achievement. The possibilities of acquiring new identities, or the power of available identities to constrain and focus the direction of a student's future, may themselves be a consequence of prior educational achievements and the group processes that were involved. Students who gain straight A grades may come to recognize that they have greater similarities with other high-achieving students and to recategorize themselves to be a part of that group. Such a group might be defined by social categories such as gender or ethnicity, but they might also be defined as an interest group (programmers, musicians, writers). Students who find academic achievement challenging, or that the routes to it are blocked, seem likely to identify with other groups whose norms and values embody other types of goals that are more attainable within the context. That is, unlike theories and models of education performance that begin and end with the individual's ability, attainment, and personal self-concept, the SIME holds that educational performance is always framed by group processes, and these in turn are contextualized in intergroup comparisons. This is why there are group-related differences in attainment—not because whole groups differ in ability levels, but because they share a common social environment and identity which provides the frame of reference for the academic motivation and achievements (cf. Oyserman & Lewis, 2017).

The many processes identified in previous research, such as internal and external frames of comparison, or identity motivation, or implicit theories can also be understood as working at the group level. One way to detect the operation of group-level effects is through multilevel analysis, but this relies on the researcher being able to define the relevant upper level categories (e.g., classes within schools). This approach will certainly capture some of the group-level variance, but only a part. Similarly, demographic differences, residential segregation, and other types of structural effects all point to the effects of differences in the material environment as having significant influences on the educational outcomes for different groups. What they do not explain is why some members of the categories perform differently from others. We would argue that the answer does not lie only in their differences as individuals but also in the different social identities that inform their academic motivation. For one individual, group influence may take the form of a particular gang or clique within their school or neighborhood. For another it may be a large social category membership such as gender or ethnicity (or a specific combination of these). For another, it may be a whole school, and so on. A challenge for researchers is to discover how these different social identities are involved in educational performance and to detect how these are shared, and whether those who share an identity also tend to have common educational outcomes.

Identities in Practice—Ethnic, Gender, and Academic Identification

A Social Identity Model for Education

Ogbu's research and cultural-ecological theory (e.g., Fordham & Ogbu, 1986) indicates that Black students' school success requires them to deal with the burden of peer pressure not to be seen to "act White." Thus, they must extricate themselves from the constraints of traditional stereotypes linked to ethnic identity and must resist peer norms to avoid characteristics that are more like those of outgroup members. This seems consistent with evidence that there are advantages in redefining ethnic identity as embodying the aspiration for educational achievement as one of its norms (Oyserman & Lewis, 2017) or identifying with the educational institution (Richardson et al., 2012). In a study exploring predictors of intention to leave at the end of their first year of university study, McKimmie, Butler, Duck, and Masser (2012) surveyed 262 first-year students enrolled in courses at a large Australian university during their first semester. In a statistical model, accounting for 48% of the variance in students' intentions, consistent with a perceived lack of belonging accounting for intentions to leave, the most powerful background factor was whether students were the first in their family to attend university. However, the strongest overall predictor of intentions was identity. Those who felt they belonged and were part of the study body of the university had lower intentions to leave. This type of evidence is in line with the conclusion that, for members of some groups, an identity transition may be necessary to motivate educational success. It is interesting to note a further gap in research, namely a focus on disparities in performance *within* the majority or higher status groups. For example, the potential burden of "acting White" for White students rarely features in discussions, even though the pressures to perform well might feel particularly acute among some less able students.

Intriguingly, this task of identity realignment in order to pursue academic achievement is quite often depicted as a challenge for *individuals*: They must escape their ingroup shackles to move ahead. However, the key to these shackles may more often be in the hands of external groups and organizations that set parameters for defining intergroup status differences. What is valued societally is reflected by decisions about what to measure, and what is recorded about different groups. Auditors of educational standards and performance focus intensively on particular areas of intellectual performance. This has consequences for the way different groups respond because group members attune to these signals about what counts.

Despite societal dominance of males in senior positions in business, education, and industry (Hausmann, Tyson, & Zahidi, 2010), females are outperforming males at school and university (EACEA/Eurydice, 2010), so an important question is why early educational performance advantages for females do not persist through adulthood. We should first consider why males' and females' educational outcomes and attainments should be in any way different in the first place. Given the ubiquity of gender differentiation in so many aspects of life, gender-based intergroup comparisons are inevitable. However, their meaning changes as different types of attributes gain or lose value. Girls and boys often apply stereotypes (neat, tidy, hard-working girls; messy, noisy, dirty boys), but whereas in previous generations boys were always expected to achieve academically, or in some trade or profession, the increasingly nonmanual labor market

now suits the communication skills and work ethic that is more (stereo)typical of girls. Thus, the same other-stereotypes and self-stereotypes generated by intergroup comparisons now have very different implications for school and workplace success.

Social identity continues to shape the ingroup norms, educational aspirations, and intentions that affect boys' and girls' educational outcomes, but with different consequences from before. For example, a recent set of studies by Hartley and Sutton (2013) revealed that, among (predominantly White) elementary school children aged 4 to 10, both girls and boys perceived that adults believe girls to be academically superior. In terms of the SIME, this means that both genders regarded intergroup differences in performance status expectations to be stable and legitimate. What are the effects of affirming or countering beliefs about this social structure? Boys' but not girls' performance in reading, writing, and math became significantly worse when these beliefs were reinforced by providing authoritative stereotype-consistent information about the ability levels of the two genders. But when authoritative counterstereotype information was provided, it led to significant improvements in boys' performance.

We do not suggest that gender biases in education have tilted wholly to favor women, simply that intergroup differentiation is likely to be responsible for the persistence of differences in outcomes, even though these are new differences. Leaper (2015) argues that peer group pressure among girls and women reinforces values that are in conflict with those they associate with achievement in STEM subjects and careers. Moreover, negative comments made by boys regarding girls' abilities in STEM reinforce these pressures (Leaper & Brown, 2008, 2014). Yet it appears to be wider societal stereotypes rather than the immediate presence of outgroup members that are at work here—research does not suggest that girls' educational performance is enhanced if they are in gender-segregated schools (Pahlke, Hyde, & Allison, 2014). However, researchers' efforts to find solutions to the problem of girls disengaging from STEM generally do not seem to involve the participation of men or boys. Instead, they tend to focus on ways of linking girls' more communal values to STEM subjects (Diekman, Clark, Johnston, Brown, & Steinberg, 2011) or highlighting ingroup (female) rather than outgroup (male) guides or role models (Stout, Dasgupta, Hunsinger, & McManus, 2011). Effective as they may be, these approaches do not resolve the problem of the intergroup relationship. More promising approaches focus more directly on creating a shared identity that bridges gender differences through a common interest in STEM (e.g., Stake & Nickens, 2005). More broadly, potential threats or advantages associated with gender are likely to be moderated by those arising from other group memberships such as race and socioeconomic background. These other memberships might have different implications among males than among females (Chavous, Rivas-Drake, Smalls, Griffin, & Cogburn, 2008).

Competition, Hierarchies, and League Tables

We are beset by comparative tables. Nations strive to be top G5, G7, or G20 countries, teams strive to be top of their leagues, athletes strive to beat all comers, schools and universities strive to be among the best, and even among the best there is fierce rivalry surrounding which is really the very best. Although this may be an inevitable consequence of social comparison processes, it is by no means clear that it is a sensible or productive way to enhance educational performance or outcomes. The obsession with league tables and with ever greater differentiation within those tables may even be a serious distraction from actually educating anyone. The cost of administering status-producing systems is enormous. What are the benefits? For the faculty, staff, and students, rankings provide significant markers of social identity esteem—so they really do matter, psychologically and materially. For the more powerful and prestigious institutions (usually the oldest, largest, or richest schools and universities), sustaining their position at the top of the pecking order ensures that they continue to benefit from all kinds of investment that further validates their supremacy. For the majority of institutions lower down the pecking order, the situation is almost perpetually disappointing: They are like hopeful but impoverished poker players at a high-stakes game. Their ability and effort alone can never enable them to challenge the wealthiest players.

Team performance, for example in sports competition, is boosted by the cohesion and motivation furnished by a successfully competitive social identity (e.g., David & Wilson, 2015). Many professional sports teams employ psychologists specifically to harness this potential. Indeed, meta-analytic evidence shows that educational performance is higher when students learn through interpersonal cooperation or also cooperative team work while competing against another group than through interpersonal competition (Johnson & Johnson, 2002; Johnson, Maruyama, Johnson, Nelson, & Skon, 1981; see also Slavin, 2014). The mechanisms are also quite well established. Cooperative groups, ideally with mixed ability, and where interaction is required and there is interdependence for outcomes, generally outperform individuals who compete with one another (Lou, Bernard, & Abrami, 2006).

Curiously, the large body of research in this area has neglected a potentially vital question. Does the performance of *groups* also improve if the groups are cooperating rather than competing with one another? And even if the "winning" groups do better in a competitive climate, is it necessarily the case that intragroup cooperation coupled with intergroup competition improves performance of all groups in the system as a whole? Do *all* teams, overall, produce a higher standard of performance and better productivity when they are focusing on competing with one another?

Aside from the voluminous literature showing that intergroup competition over resources tends to deplete the pool of resources (implying a net loss at the superordinate level), there is evidence that intergroup competition might undermine achievement (Balliet, Wu, & De Dreu, 2014). However, there is less evidence that intergroup cooperation can enhance performance. One rare example in an educational context is a study by Brown and Abrams (1986), who arranged a situation in which two schools were either in a competitive or a cooperative intergroup relationship and tested their performance on a

test of general ability—rewards would either go to the winning school, or both schools would get a level of reward based on the overall performance. Surprisingly, performance was actually better in the cooperative condition. However, there is sparse evidence whether this effect generalizes to other settings, such as organizational performance (Brown, Sprinkle, & Way, 2017).

How can social identity be harnessed to promote collaborative and cooperative learning within a group? Although social identity theory originally assumed that intergroup competition was the inevitable outcome of categorization, it was soon recognized that identity gains its meaning and validity through ingroup consensus about the importance of ingroup-defining values. Where those values are ones of cooperation (Jetten et al., 1996; Vickers et al., 1988), and perhaps school norms of fairness (Nesdale, Maass, Durkin, & Griffiths, 2005), then it should be more feasible to mobilize students to work cooperatively to support one another's learning.

Prospects and Approaches

Despite plenty of evidence for differences in educational outcomes associated with gender, ethnicity, socioeconomic status, and other demographic variables, the primary assumption within institutions and classrooms is that (if harnessed properly by a suitably skilled teacher) a student's performance is essentially based on the ability and effort of the individual student. Consequently, a great deal of attention is paid to constructs such as individual learning styles, promoting a healthy attributional style, the right lay theory of intelligence, a growth mindset, sufficient self-efficacy, or a productive self-regulatory approach (promotion or prevention). Yet these approaches inherently assume that performance and the social comparative processes associated with them are largely individual and interindividual phenomena (e.g., Davis, Burnette, Allison, & Stone, 2011). Our position is that more attention needs to focus on the substantial intergroup components because the nature and consequences of these social identity–related features are relatively underresearched.

One reading of this review might be that social identity is essentially bad for education (after all, it creates stereotype threat, stereotypic treatment, dysfunctional competitiveness, and vulnerability to countereducational social pressures). However, we believe there are also plenty of upsides (e.g., social identity provides meaning, belonging, esteem) and so there should be ways of using social identity constructively to promote educational progress and achievement. Here we offer a few approaches that we believe should be helpful.

First, we want to highlight that group differences can be bridged in two ways. One way is by creating a superordinate overarching shared identity. This is what often happens in times of national crisis (e.g., a natural disaster), but it can also be achieved by shared celebration and unifying events, cultural processes, or devices (Van de Vyver & Abrams,

2017). At a more local level, perhaps within a school or university, the approach calls for creating situations in which group differences are bridged through approaches to teaching or learning that create a new common identity. Much of the research on mixed group cooperative learning emphasizes that these approaches help to promote intergroup contact and positive intergroup attitudes (see Slavin, 2014). Less attention has been paid to the direct outcomes for educational performance, which we envisage should also be positive. Developmentalists and educationalists have often focused on linking students with different skills or abilities, but now more work needs to examine how different strategies that link students across *intergroup* differences might create or eliminate stereotype-based barriers to learning.

A further challenge is how to encourage educational aspirations when these seem to be in conflict with group memberships. In some countries, universities now engage in outreach programs to high schools where the numbers of students progressing to higher education has, historically, been low. These programs typically involve current university students working within structured programs to nurture and develop the educational aspirations of the high school students within the program. An important component of these programs is activities that build the high school students' identity as a future university student. In an evaluation of one of these programs at a large University in Australia involving 204 Grade 10, 11, and 12 high school students, identification as a potential university student and identification as a member of the program were both significant predictors of intentions to attend university (Butler, McKimmie, Masser, & Roe, 2013). However, such approaches need to address the question of whether and when the goal should be that these new identities replace prior group membership identities, or that somehow the prior identities require reformulation to accommodate the new ones (cf. Oyserman & Lewis 2017).

Another approach is to create more complex, multigroup settings in which it becomes difficult to discern simple categorical divisions and which therefore promote more creative and diverse thinking (Turner & Cameron, 2016). The aim here is not to hide or remove important social identities, but to make them irrelevant for the educational tasks at hand.

Finally, *not* to recognize the power and impact of social identity in educational settings seems to us to be a serious oversight. We strongly advocate that educational strategists should explicitly build consideration of the relevant social identifications and their potential impact into their planning and analysis of how to improve educational outcomes. In some schools, this means attending very closely to ethnic or gender or religious categories; in others, it means attending to the emergence and influence of cliques and subgroups of students (rather than just individuals) who may or may not buy into the educational ethos of the school. In any event, we hope that this review will stimulate greater interest in exploring the contribution of social identity to educational outcomes.

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Dominic Abrams

Dominic Abrams, University of Kent

A Social Identity Model for Education

Diane Houston

Diane Houston, Birkbeck, University of London

Barbara Masser

Barbara Masser, University of Queensland

Blake McKimmie

Blake McKimmie, University of Queensland