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# Unequal Selves in the Classroom: Nature, Origins, and Consequences of Socioeconomic Disparities in Children's Self-Views

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Children from low socioeconomic status (SES) backgrounds often have more negative self-views than their peers. How are these self-views shaped by teacher-student interactions in the classroom, and what are the consequences of these self-views for achievement inequality? We present a developmental framework addressing these questions by bridging insights from the psychological, educational, and sociological literatures. We show that children from low-SES backgrounds perceive themselves as less intelligent, less able to grow their intelligence, less deserving, and less worthy, independent of their actual abilities and achievements. We demonstrate how negative intellectual stereotypes—expressed through daily interactions with teachers in classrooms, such as teachers' expectations, feedback, and attention-undercut the self-views of children from low-SES backgrounds. We also show how this process can be exacerbated by institutional and cultural values reflecting a belief in meritocracy (e.g., schools that encourage competition, emphasize raw ability, and attribute achievement inequality to intrinsic factors), which are common in countries with high income inequality and rigid between-school tracking. The ensuing more negative self-views introduce psychological barriers that undermine the academic achievement of children from low-SES backgrounds, thereby reinforcing achievement inequality. This represents an enormous loss of potential and perpetuates harm into adulthood. Socioeconomic disparities in self-views can emerge early in life and widen with age, underlining the need for developmental research and timely intervention. We discuss implications for studying the nature, origins, and consequences of socioeconomic disparities in self-views, and for designing interventions to reduce achievement inequality.

#### Public Significance Statement

Children from low socioeconomic status (SES) backgrounds often have more negative self-views than their peers. How are these self-views shaped by teacher–student interactions, and how do these selfviews affect academic achievement? We show that these self-views emerge, in part, because children from low-SES backgrounds are exposed to denigrating messages about their ability, even when their achievements and abilities are equal to those of their peers. Their self-views, in turn, undermine academic achievement, reinforcing achievement inequality.

Keywords: self-views, achievement inequality, motivation

Achievement inequality is a defining challenge of our time (United Nations, 2020). Around the world, children from low socioeconomic status (SES) backgrounds have lower academic achievement than children from high-SES backgrounds (OECD, 2019a), even when their ability is the same (Croizet & Claire, 1998; Désert et al., 2009; Goudeau & Croizet, 2017). At 15, the gap is so large that children from low-SES backgrounds are seven times

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more likely to underperform in school—a gap that equals 3 years of schooling (OECD, 2016, 2018). This consequence represents an enormous loss of potential and perpetuates harm into adulthood.

In this article, we introduce a developmental framework to explicate the role of children's *self-views* in achievement inequality. We theorize that children's SES-related experiences in the classroom shape their self-views, which in turn reinforce achievement inequality. We

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focus on teacher-student interactions in the classroom, as educational institutions are the central space where "children learn whether they *are* smart, motivated, meritorious and deserving ... or not" (Croizet et al., 2017, p. 105).

We build on earlier proposals (see below) that children's selfviews can be mechanisms of achievement inequality. Extending those proposals, we bridge theoretical perspectives and empirical research from the psychological, educational, and sociological literatures to formulate an overarching framework that illuminates the nature, origins, and consequences of socioeconomic disparities in children's self-views. Our framework makes three scholarly contributions. First, it documents that children from low-SES backgrounds perceive themselves as less intelligent, less able to grow their intelligence, less deserving, and less worthy, independent of their actual abilities and achievements. These self-views can undermine children's academic achievement. Second, it establishes that the selfviews of children from low-SES backgrounds originate, in part, from negative intellectual stereotypes, which are expressed through interactions with teachers in the classroom (e.g., low expectations, low track recommendations, subtle low-ability feedback). Third, it demonstrates that classrooms, schools, and countries embracing a belief in meritocracy can exacerbate socioeconomic disparities in children's self-views and achievement. Thus, our framework identifies multiple leverage points for intervention-from the individual to the system level-to reduce achievement inequality.

Our aim was not to consider every possible mechanism of achievement inequality. Rather, our aim was to consider self-views as one key mechanism. We conducted a narrative review to critically appraise the evidence for this mechanism. We adopted a developmental lens, focusing on children from preschool through primary and secondary school, while discussing which socioeconomic disparities are evident when (i.e., developmental timing). We did not include research on adults (e.g., university students), unless research in children was scarce or lacking. Including sporadically such research allowed us to provide preliminary evidence for our theoretical propositions and identify gaps in the literature. We noticed that research on self-views and achievement inequality has been conducted predominantly in high-income countries, whereas achievement inequality is a pressing issue worldwide (won Kim et al., 2019). We therefore highlighted potential cross-country differences.

## Definitions

## SES

We define SES as a family's position within a social and economic hierarchy (Diemer et al., 2013). We opted for this term rather than social class, because some sociologists define social class more narrowly in terms of labor relations (Chan & Goldthorpe, 2007; Wright, 2005). Parental income, education, and occupation are seen as key indicators of SES (Diemer et al., 2013; Kraus & Stephens, 2012; Lareau & Conley, 2008). Given that we focus on children, we define SES in terms of their parents' income, education, and occupation.

Historically, terms such as "low SES" have been used as implicit descriptors for individuals from racial, ethnic, or immigrant minority groups (American Psychological Association, 2022). We avoid this practice by focusing specifically on SES. Compared to race, ethnicity, and immigration status, SES is less institutionalized (e.g., not categorized by the U.S. census), less visible outwardly, and more malleable (Kraus & Stephens, 2012). In many countries, individuals from racial, ethnic, or immigrant minority groups have lower SES (Duncan & Magnuson, 2005). Unfortunately, research has rarely examined to what extent SES disparities in children's self-views or teacher practices intersect with race, ethnicity, and immigration status.

#### Achievement Inequality

We define *achievement inequality* as disparities in academic achievement (e.g., differences in school grades and standardized test scores) by SES. A meta-analysis (Sirin, 2005), focusing on kindergarten through grade 12, found a correlation of r = .29 between SES and academic achievement. When analyzed separately, parental income (r = .29), education (r = .30), and occupation (r = .28) had almost identical correlations with academic achievement. The SES–academic achievement correlation increased to r = .47 when SES was measured at the family rather than neighborhood level.

The SES-academic achievement correlation is found globally. The 2018 Programme for International Student Assessment (PISA), which involved some 600,000 15-year-olds in 79 countries, reported a strong positive association between SES and performance in reading, mathematics, and science (OECD, 2019a). The association might be even stronger today: Achievement inequality has increased over the past 50 years in most (but not all) countries, especially in those with rapidly rising school enrollments (Chmielewski, 2019). Rising enrollments "reveal inequality that was previously hidden outside the school system" (Chmielewski, 2019, p. 538). The increase in achievement inequality has accelerated since the outbreak of the COVID-19 pandemic (Betthäuser et al., 2023; Goudeau et al., 2021). For example, in the Netherlands, after undergoing a brief 8-week lockdown, all children (ages 8-11) experienced substantial learning losses, but these were up to 60% larger among children from low-SES backgrounds (Engzell et al., 2021).

#### Self-Views

We define *self-views* as children's mental representations and evaluations of themselves (Brummelman & Thomaes, 2017). They are dynamic cognitive constructions, much like scientific theories. Children form theories, generate hypotheses, collect data, weigh the evidence, and update their theories accordingly (Gopnik, 2012). Just like children form theories of the outside world, they form theories of themselves (Epstein, 1973). Similar to scientific theories, self-views structure experiences, infuse them with meaning, and offer ways of navigating them. Unsurprisingly, then, selfviews influence children's motivation and achievement (Bandura, 1978; Markus & Wurf, 1987).

Self-views comprise beliefs about own abilities, malleability of abilities, deservingness, and overall worth as a person. Accordingly, we focus on four types of self-views: self-perceived ability, mindsets, narcissism (and its core component of entitlement), and self-esteem. Although conceptually distinct, they are positively correlated. The correlation of self-perceived ability with self-esteem is large (Scherrer et al., 2022). The correlations of self-perceived ability with growth mindset and narcissism are modest (Cho et al., 2021; Grijalva & Zhang, 2016). The correlation of self-esteem with growth mindset is small (Robins & Pals, 2002). Finally, the correlations of

narcissism with self-esteem and growth mindset are small and often nonsignificant (Brummelman & Sedikides, 2020; Brummelman, Thomaes, & Sedikides, 2016). To date, it is unknown whether some of these self-views are more fundamental than others (e.g., arising at an earlier age or being more consequential). Thus, we discuss these self-views on an equal plane with one another.

Scholars have debated whether these self-views can be measured validly in young children. A longstanding view is that children younger than 8 are unable to evaluate their abstract traits (e.g., ability) and overall worth, and that their self-views are unrealistically positive (e.g., insensitive to external feedback, such as criticism; Harter, 2012). Challenging this view, growing evidence indicates that even preschoolers can evaluate their abstract traits and overall worth, and can adjust these evaluations to external feedback (Cimpian et al., 2017; Muradoglu & Cimpian, 2020). Self-perceived ability, mindsets, and self-esteem can be measured reliably (i.e., manifesting acceptable or good internal consistency and test-retest stability) and predict motivation (e.g., challenge seeking) in children as young as age 4 (Davis-Kean & Sandler, 2001; Marsh et al., 2002; Muradoglu et al., 2022). Although systematic research on the assessment of narcissism in preschoolers is missing, preliminary evidence suggests that narcissism can already be measured reliably in 5-year-olds (Harris et al., 2018). Thus, we reviewed evidence from children aged 4 and older.

### Socioeconomic Disparities in Children's Self-Views

Our framework holds that children's SES-related experiences in the classroom shape their self-views, which in turn reinforce achievement inequality. This thesis is rooted in the tradition of social–cognitive development (Olson & Dweck, 2008), which studies the relations among social contexts (e.g., SES), mental representations (e.g., self-views), and child outcomes (e.g., academic achievement). Given that self-views are relatively stable over time (Trzesniewski et al., 2003), early acquired self-views can influence academic achievement long after the causes of these self-views have subsided (e.g., long after children received low-ability feedback from their teachers based on their SES). As such, self-views are considered "means through which children package their experiences and carry them forward" (Dweck & London, 2004, p. 428).

Our framework complements, but does not challenge, research on how structural factors-stable, interconnected societal forces that systematically advantage some social groups and disadvantage others-contribute to achievement inequality (Amemiya et al., 2023). Examples of structural factors are low-SES families' reduced access to high-quality schooling, housing, food, health care, and educational materials (Brooks-Gunn & Duncan, 1997). Our framework advocates that some structural factors (e.g., stereotypes) can become ingrained in children's self-views and, consequently, undermine academic achievement. Yet, simply teaching children to adopt certain self-views-without addressing the structural factors that give rise to them-is insufficient and potentially harmful (Sheehy-Skeffington, 2022). Doing so could convey to children that they are themselves to blame for their predicament, and to policy makers that achievement inequality can be tackled through psychological intervention alone, reducing political support for systemlevel change (Brummelman & Ziemer, 2023). Accordingly, we theorize that self-view interventions can be effective only if they consider the structural factors contributing to these self-views.

Based on the psychological, educational, and sociological literatures, we illustrate that children from low-SES backgrounds perceive themselves as less intelligent, less able to grow their intelligence, less deserving, and less worthy than do their peers from high-SES backgrounds (Figure 1). We show that these self-views are neither realistic (as they exist independent of children's actual abilities and achievements) nor epiphenomenal (as they undercut academic achievement over time). We do not claim that the self-views of children from low-SES backgrounds are downright negative; even if their self-views are more negative than those of their peers from high-SES backgrounds, they may still be positive overall. Indeed, most children's self-views are positive (Thomaes et al., 2017).

#### Self-Perceived Ability

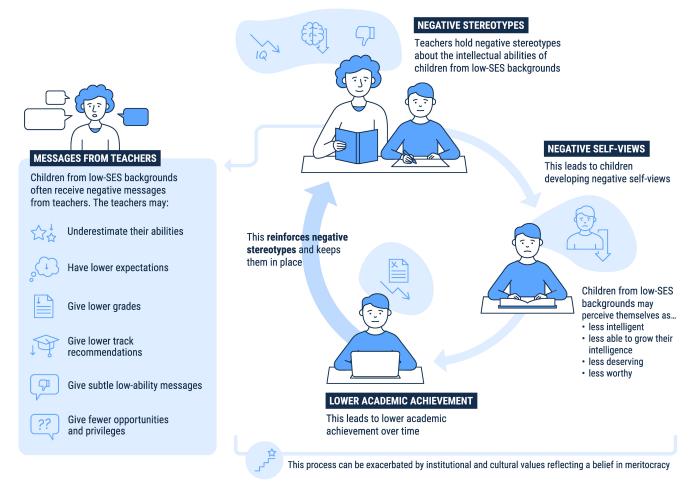
Self-perceived ability refers to children's subjective evaluations of their ability, often operationalized as self-efficacy or academic self-concept (Marsh et al., 2017). Self-efficacy is a prospective evaluation of what one thinks one will be able to accomplish, often relative to one's goals (e.g., "How well will I do on this mathematics exam?"). Academic self-concept is a retrospective evaluation of one's ability, typically based on one's past accomplishments and relative to others (e.g., "How good am I at mathematics?"). Given that both constructs emphasize perceived competence (Marsh et al., 2017), we refer to them as self-perceived ability. Individual differences in self-perceived ability emerge in early childhood, around the age of 4, when children can evaluate their abstract traits (Marsh et al., 2002).

Self-perceived ability benefits academic achievement. Children high on self-perceived ability regard themselves as competent and believe they will accomplish the tasks they undertake, so they eagerly engage in tasks and persist in the face of difficulty (Bandura, 1997). Self-perceived ability and academic achievement are associated. Although most research has focused on primary and secondary school students, emerging research in various countries (e.g., Australia, Germany, the United States) shows that self-perceived ability and academic achievement are associated from preschool onward (Arens et al., 2016; Herbert & Stipek, 2005; Marsh et al., 2002). According to a meta-analysis of longitudinal studies, self-perceived ability and academic achievement influence each other bidirectionally over time, both in childhood and in adolescence (Wu et al., 2021; also see Marsh & Craven, 2006). Crucially, self-perceived ability predicts achievement over time, even when controlling for prior achievement (Valentine et al., 2004; Wu et al., 2021). This effect is more pronounced in adolescence, suggesting that self-perceived ability becomes more predictive of achievement with age (Cvencek et al., 2021; Wu et al., 2021).

Children from low-SES backgrounds have lower self-perceived ability, even when they perform well academically. For example, PISA 2015 measured 15-year-olds' self-efficacy and achievement in 72 countries. In each of the participating countries (except for the Dominican Republic and Thailand), lower SES was associated with lower self-efficacy, even after controlling for academic achievement (OECD, 2018). Thus, even when comparing children with identical achievement, those from lower SES backgrounds manifested lower self-perceived ability. This might harm their academic achievement. In a cross-sectional study among middle-school children (ages 11–14) from a residential community near Rome (Bandura et al., 1996), children from lower SES backgrounds had

## Figure 1

Framework Describing How Teacher–Student Interactions Can Perpetuate Achievement Inequality via Self-Views



lower self-perceived ability. Lower self-perceived ability, in turn, was related to lower academic achievement. In a longitudinal study among 11th graders in Germany (Steinmayr et al., 2012), children from lower SES backgrounds had lower self-perceived ability. Lower self-perceived ability, in turn, predicted lower grades 4 months later, controlling for prior grades. In three cross-sectional studies involving middle-school, high-school, and university students in China and France, students from lower SES backgrounds had lower self-perceived ability and academic achievement; and lower self-perceived ability mediated the association between SES and achievement (Li et al., 2020; Wiederkehr, Darnon, et al., 2015). To date, no research has systematically examined SES effects on self-perceived ability and achievement in preschoolers. Thus, at least from primary school onward, children from lower SES backgrounds have lower self-perceived ability, which in turn predicts lower academic achievement.

## Mindsets

Mindsets refer to children's beliefs about the capacity to grow their abilities (Dweck, 2006; Dweck & Leggett, 1988). Children with a growth mindset believe that they can nurture their abilities by working hard, trying new strategies, and seeking help when appropriate. By contrast, children with a fixed mindset believe that they have a finite amount of ability and cannot do much to cultivate it. Mindsets represent a continuum, ranging from growth to fixed. Individual differences in mindsets emerge in early childhood, around age 4, when children can reason about the malleability of ability (Muradoglu et al., 2022).

Children's mindsets create patterns of motivation and learning (Blackwell et al., 2007; Dweck & Yeager, 2019). Children with a growth mindset seek out and embrace challenges, because they see failures as opportunities for learning. When they fail, they do not question their ability, but instead identify new strategies to succeed. Consequently, they persist in the face of setbacks. By contrast, children with a fixed mindset avoid challenges, because they see failures as evidence of low ability. When they fail, they denigrate their ability and withdraw. Holding more of a growth (vs. fixed) mindset is related to learning goals, mastery-oriented responses to failure, better grades, and higher test scores (Burnette et al., 2013). These effects of mindsets are observed in children as young as 4 (Muradoglu et al., 2022).

Children from lower SES backgrounds hold more of a fixed mindset, which can undermine academic achievement. In a longitudinal study involving a nationally representative sample of 4,828 ninth-grade students in U.S. public schools, children from lower SES backgrounds had more of a fixed mindset and lower academic achievement (Destin et al., 2019). Fixed mindset mediated the association between SES and achievement, even after controlling for prior achievement. In a large-scale cross-sectional study, involving all 10th-grade public school students in Chile, children from lower SES backgrounds had more of a fixed mindset, and fixed mindset predicted worse mathematics and language standardized test scores across all SES groups (Claro et al., 2016). These findings are robust cross-culturally. PISA 2018 measured 15-year-old children's mindsets and achievement in mathematics, reading, and science. In almost every country, children from lower SES backgrounds held more of a fixed mindset, and those who held more of a fixed mindset performed worse academically (OECD, 2021). Critically, mindsets mediated the SES-academic achievement association (Hofer et al., 2023). To date, no research has examined whether mindsets mediate this association in preschool or primary school. Thus, at least from secondary school onward, children from lower SES backgrounds hold more of a fixed mindset, which in turn predicts lower academic achievement.

## Entitlement

Narcissism involves a sense of superiority and entitlement (Krizan & Herlache, 2018; Sedikides, 2021b). Narcissism is an everyday, subclinical personality trait (Thomaes & Brummelman, 2016) that is normally distributed in childhood (Thomaes et al., 2018; Thomaes, Stegge, et al., 2008). In its extreme form, narcissism can develop into a narcissistic personality disorder in adulthood (American Psychiatric Association, 2013). One of narcissism's key features is entitlement—a sense that one deserves more than others (Campbell et al., 2004; Golann & Darling-Aduana, 2020). Individual differences in narcissism and entitlement emerge in middle childhood, around age 7, when children can assess their superiority over others (Thomaes & Brummelman, 2016; Thomaes et al., 2018).

Narcissism (and its core feature of entitlement) can predispose children to anxiety, depression, aggression, and bullying (Nelemans et al., 2017; Reijntjes et al., 2016; Thomaes, Bushman, et al., 2008). Yet, narcissism and entitlement may benefit academic achievement. Individuals high on narcissism and entitlement work hard when they can outperform others publicly (Morf et al., 2000; Wallace & Baumeister, 2002), and they can convince others they are competent, even if they are not (Brummelman et al., 2021). Hence, narcissism and entitlement may benefit academic achievement directly by inspiring effort and indirectly by eliciting favorable teacher evaluations.

Children from lower SES backgrounds exhibit lower narcissism and entitlement. Among alumni from the U.S. Military Academy at West Point, those from lower SES backgrounds had lower narcissism (Martin et al., 2016). Among high-school students (ages 14–21) from France, those from lower SES backgrounds (especially girls) had lower narcissism (Chabrol et al., 2009). Ethnographic research among third-to-fifth graders in the United States also suggests that those from lower SES backgrounds display less entitlement: Whereas children from high-SES backgrounds negotiate relentlessly with teachers for assistance, those from low-SES backgrounds display constraint and respect the teacher's authority by not seeking help (Calarco, 2014; Lareau, 2002). Among 4,163 adults in the United States, entitlement was especially high among those with entrenched socioeconomic privilege—a combination of high childhood SES and high current SES (Côté et al., 2021). Upwardly or downwardly mobile individuals, or those who had not experienced high SES, expressed lower entitlement. Children from low-SES backgrounds, then, are unlikely to feel entitled, even if they attain high SES later in life.

Low narcissism and entitlement may harm the academic achievement of children from low-SES backgrounds. Narcissism is linked to better grades. Among university students in the United States, those higher on narcissism had better academic achievement (McManus et al., 2022). Among high-school students (ages 14-21) in Italy, those higher on narcissism were more inclined to persist in the face of difficulty and to see challenges as opportunities, which predicted higher academic achievement 3 months later (Papageorgiou et al., 2018). Additionally, children high on narcissism and entitlement give off favorable impressions. Among primary and secondary school students in the Netherlands, children high on narcissism were popular and well-liked by classmates (Poorthuis et al., 2021), secured leadership positions in the classroom (Brummelman et al., 2021), and controlled resources within the classroom, including the teacher's attention and help (Reijntjes et al., 2016). Children high on entitlement challenge rules, take the floor, interrupt the teacher, and request assistance, accommodations, or attention in excess of what is necessary or appropriate (Calarco, 2014; Streib, 2011). Teachers may give in to these requests, because they misperceive these children's overconfidence for competence. Indeed, overconfidence affords individuals from high-SES backgrounds with a veneer of competence, helping them attain higher social rank (Belmi et al., 2020). To date, no research has examined whether narcissism and entitlement mediate effects of SES on academic achievement. In all, children from lower SES backgrounds have lower narcissism and entitlement, and there is tentative evidence that, at least from secondary school onward, these characteristics undermine their academic achievement.

#### Self-Esteem

Self-esteem refers to children's sense of worth as a person (Donnellan et al., 2011). It is distinct from narcissism. Children high on narcissism have unrealistically positive self-views, strive for superiority, and are fragile in the face of setbacks. Children with high self-esteem have positive but realistic self-views, strive for self-improvement, and feel intrinsically worthy even when encountering setbacks (Brummelman & Sedikides, 2020; Brummelman, Thomaes, & Sedikides, 2016). Individual differences in self-esteem emerge in early childhood, around age 4, when children can form global self-evaluations (Cimpian et al., 2017; Harris et al., 2018).

Self-esteem may benefit academic achievement, because it serves the pursuit of self-integrity (Spencer et al., 1993). Individuals high on self-esteem have more resources (i.e., positive self-aspects) to affirm self-integrity, rendering them less wary of setbacks and less discouraged by them (Sedikides, 2021a; Sedikides & Gregg, 2008). Consequently, children high on self-esteem are more likely to solicit and endorse challenges, and to persevere despite struggles (Di Paula & Campbell, 2002).

Whether self-esteem benefits academic achievement has been a topic of controversy. An early review concluded that "self-esteem is not a major predictor or cause of almost anything" (Baumeister et al., 2003, p. 37; also see Baumeister & Vohs, 2018). Since

then, large-scale and high-quality longitudinal studies demonstrated that self-esteem has widespread, albeit modest, benefits (Orth & Robins, 2022). These benefits extend to the academic domain. For example, in a longitudinal study following Mexican-origin youth in the United States from age 10 to 16, those with higher self-esteem showed stronger improvements in grades over time (Zheng et al., 2020). A meta-analysis indicated that, from age 6 onward, selfesteem predicts improved academic achievement over time, controlling for prior achievement (Valentine et al., 2004). Also, self-esteem in adolescence is linked to educational attainment in adulthood (Marsh & O'Mara, 2008; Trzesniewski et al., 2006; von Soest et al., 2016), suggesting that self-esteem creates upward academic trajectories. Although research has focused predominantly on explicit self-esteem, a cross-sectional study in the Tulalip Indian Reservation in Washington State shows that implicit self-esteemwhich is more automatic and less accessible to conscious awareness-also predicts academic achievement, particularly in younger children (i.e., kindergartners, first graders, and second graders; Cvencek et al., 2018).

A meta-analysis documented that, from ages 5 to 10 onward, children from lower SES backgrounds have lower self-esteem (Twenge & Campbell, 2002). This has consequences for academic achievement. In a study involving 1,952 children from the United States, those from lower SES backgrounds manifested lower self-esteem, which predicted a reduced likelihood of university enrollment or degree completion 9 years later (James & Amato, 2013). Approximately 18% of the association between SES and educational attainment was explained by self-esteem. To date, no research has examined whether self-esteem mediates effects of SES on academic achievement during compulsory education. Thus, from early-to-middle childhood onward, children from lower SES backgrounds have lower selfesteem, and this lowered self-esteem is related to lower academic achievement.

## **Summary and Discussion**

There are socioeconomic disparities in children's self-views (i.e., unequal selves; Figure 1). Children from low-SES backgrounds perceive themselves as less intelligent, less able to grow their intelligence, less deserving, and less worthy, even when their abilities and achievements are on par with those of their peers. Their selfviews, in turn, predict lower academic achievement, contributing to achievement inequality.

What is evident when? There is substantial evidence for socioeconomic disparities in self-views in primary- and secondary-school students. Despite evidence that some of these disparities can emerge earlier in development, research in young children is scarce. This is unfortunate because self-views can predict motivation and achievement from preschool onward, so even young children's self-views could serve as mechanisms of achievement inequality.

## Origins of Socioeconomic Disparities in Children's Self-Views

How are socioeconomic disparities in children's self-views created or reinforced by teacher-student interactions in the classroom? We focus on teacher-student interactions, because they shape children's understanding of themselves as students (Croizet et al., 2017; Stephens et al., 2014) and may reinforce achievement inequality (Turetsky et al., 2021). We show how teachers may, often unknowingly and unintentionally, contribute to socioeconomic disparities in children's self-views. Rather than putting the blame on teachers, we show that teachers' practices are shaped by forces outside of their control (e.g., pervasive institutional and cultural ideas and values). Understanding this process requires a view of teachers and children as ongoing participants in a sociocultural system. We adopt a sociocultural perspective (Fiske & Markus, 2012; Heck et al., 2021) that organizes levels of analysis along a continuum of abstraction, from abstract societal ideas and values to individual children's self-views. We theorize that children's self-views are shaped by societal ideas (e.g., stereotypes) and values (e.g., meritocracy), which are transmitted through everyday interactions (e.g., with teachers) in a broader system of institutions (e.g., schools) and cultures (Figure 1).

## Stereotypes About Individuals From Low-SES Backgrounds

Stereotypes about individuals from low-SES backgrounds are prevalent. Individuals from low-SES backgrounds are often perceived as incompetent-as being "stupid," "uneducated," "lazy," "unmotivated," and "weak" (Cozzarelli et al., 2001). In some cases, these individuals are seen as primitive, bestial, and incompletely human (Loughnan et al., 2014). Despite their pejorative nature, these stereotypes are endorsed widely. For example, in 1998, there was consensus among members of the U.S. Georgia General Assembly that "the poor do exhibit behaviors that, if not directly attributable to their poverty, perpetuate their poverty," which "include a lack of effort, ambition, thrift, talent and morals" (Beck et al., 1999, p. 98). Such stereotypes can be found globally. In a 27-nation survey-including mostly high-income countries, but also low- and middle-income countries such as Bolivia, Egypt, India, Pakistan, and Uganda-individuals from low-SES backgrounds were perceived as less competent (but warmer) than individuals from high-SES backgrounds (Durante et al., 2017). The tendency to denigrate the competence of individuals from low-SES backgrounds increases as a nation's income inequality rises (Durante et al., 2017), but it is observed even in nations with low income inequality (e.g., Sweden; Lindqvist et al., 2017).

These stereotypes are acquired early in life. Children as young as 5 years have formed beliefs about the different possessions, appearances, residences, thoughts, and traits of individuals from highand low-SES backgrounds (Leahy, 1981). As children grow older, especially between the ages of 11 and 17, they become more inclined to describe differences between individuals from high- and low-SES backgrounds in psychological terms, reflecting thoughts and traits (Leahy, 1981). For example, fifth and sixth graders from the United States perceive individuals from low-SES backgrounds as having fewer positive attributes (e.g., less smart, hardworking, clean, good, honest, polite) than individuals from high-SES backgrounds (Mistry et al., 2015). Like adults, children denigrate the ability of individuals from low-SES backgrounds. For example, 6-, 10-, and 14-year-old children from the United States regard adults from low-SES backgrounds as less competent (e.g., more lazy, dumb, wasteful, messy, and dirty) than those from high-SES backgrounds (Sigelman, 2012). This extends to children's perceptions of other children. Children, like adults, spontaneously notice and remember cues of wealth (Legaspi et al., 2022). In fact, in the United States, children as young as 4 years perceive peers who are associated with wealth cues (e.g., wearing a branded backpack) as more competent (Shutts et al., 2016). Accordingly, 6–9-year-olds from France consider children from low-SES backgrounds as less competent than those from high-SES backgrounds (Désert et al., 2009). Children (Grades 4, 6, and 8) from the United States see children from low-SES backgrounds as less competent than those from high-SES backgrounds in the academic domain—mathematics, science, reading, writing, school grades, and general smartness (Woods et al., 2005). Although younger children (Grade 4) also favored children from high-SES backgrounds in sports, older children (Grades 6 and 8) favored those from low-SES backgrounds in sports, suggesting that negative stereotypes about children from low-SES backgrounds are specific to the academic domain.

Stereotypes may denigrate the ability of children from low-SES backgrounds, without denigrating-or even praising-their work ethic. When U.S. adolescents (ages 11-16) were told about a sameage stranger from a low- or high-SES background, they regarded the stranger from a low-SES background as less intelligent and making worse grades but also as more hardworking (Skafte, 1989). So, negative stereotypes about individuals from low-SES backgrounds may imply a lack of ability rather than effort. Indeed, from age 9 to 12, U.S. children perceive children from low-SES backgrounds as more hardworking (but not smarter) than those from high-SES backgrounds (Yang & Dunham, 2022). Further, among Dutch children (ages 8-13) and adults (ages 29-59), children from low-SES backgrounds are considered more hardworking than smart, whereas children from high-SES backgrounds are considered more smart than hardworking (Brummelman & Cimpian, 2022). The findings reveal an early emerging stereotype that portrays children from low-SES backgrounds as less smart.

Compared to their peers from high-SES backgrounds, children from low-SES backgrounds might be more aware of structural causes of inequality, such as discrimination (Weinger, 2000a, 2000b). Yet, in some cases, they may endorse negative stereotypes about their own group. People are motivated to rationalize, defend, or bolster the prevailing social order, sometimes at the expense of self-interest (Jost, 2019). Members of disadvantaged groups might want to believe that the prevailing social order is legitimate and defensible. Consequently, they may accept negative stereotypes about their group. Preliminary evidence suggests that, compared to children from high-SES backgrounds, those from low-SES backgrounds are almost as likely (Désert et al., 2009), and sometimes more likely (Mistry et al., 2015), to embrace negative stereotypes about individuals from low-SES backgrounds.

These stereotypes exist within a broader network of societal values. A pervasive societal value is meritocracy, namely, that status in society is based on merit (Mijs, 2016a). Merit is typically defined as ability and effort: M = I + E, where *M* is merit, *I* is IQ, and *E* is effort (Young, 1958). Children as young as 4 understand the contribution of ability and effort to achievement (Muradoglu & Cimpian, 2020). This belief system justifies existing inequalities by locating their causes in the ability and effort of group members (McCoy & Major, 2007; Son Hing et al., 2011). This is reflected in the *inherence heuristic*—an intuitive tendency to explain patterns in terms of the inherent properties of their constituents (e.g., "Why do some kids do poorly in school? Because they're not smart enough"; Cimpian & Salomon, 2014). Even 4-year-olds who offer inherent explanations of inequalities support the status quo (Hussak & Cimpian, 2015). Echoing these findings, a review concluded:

Both [adults and children] view economic privation as a self-inflicted condition, emanating more from personal factors (e.g., effort, ability) than external-structural ones (e.g., an unfavorable labor market, racism). Poverty is seen as inevitable, necessary, and just; and beliefs about ways to remedy it are generally consistent with the views espoused. (Chafel, 1997, p. 434)

In all, negative stereotypes about the academic abilities of children from low-SES backgrounds are perpetuated by broader societal values that arise from basic and early emerging psychological tendencies.

## **Daily Interactions in the Classroom**

How do the stereotypes about children from low-SES backgrounds manifest in the classroom? They can manifest, in part, through teacher's differential treatment of children from low- versus high-SES backgrounds. Teachers readily detect a child's SES. Compared to gender and race, SES seems concealable. Yet, people can rapidly and accurately discern a person's SES from bits of information. SES influences the clothes people wear, the facial affect and attractiveness they display, the linguistic patterns they use, the leisure activities in which they engage, the food they eat, and the way they assert themselves; so, observers can correctly assess a person's SES based on these cues (Kraus et al., 2017). Teachers may have an even more accurate insight into children's SES than an uninformed stranger, because they often have direct knowledge of their parents' educational level, occupations, and income. Additionally, children from low-SES backgrounds might stand out to teachers, because these children's behaviors, attitudes, and values may clash with the predominantly middle-class norms that most teachers endorse (Fryberg et al., 2013; Stephens et al., 2014).

We theorize that teachers express their negative stereotypes through multiple channels. We consider channels at three levels. At the first level, teachers form private evaluations of children's abilities and expected future accomplishments (e.g., considering children from low-SES backgrounds as less intelligent). Although private, these evaluations influence teachers' everyday interactions with children (e.g., asking children from low-SES backgrounds lower-level questions). At the second level, teachers express their evaluations through formal feedback, such as grading and track recommendations (e.g., giving children from low-SES backgrounds lower track recommendations). At the third level, teachers express their evaluation through informal feedback, such as ability feedback and preferential treatment (e.g., giving children from low-SES fewer opportunities to participate in whole-class discussions). These channels are complementary, and so teachers may express stereotypes through some or all of them. Through these channels, teachers' stereotypes permeate children's everyday experiences in the classroom, providing a foundation for children's views of their abilities, worth, and deservingness. Empirical verification of these levels is needed.

## **Teacher Ability Estimates**

Children from low-SES backgrounds may be seen by teachers as less intellectually able. In one study involving 70 U.S. undergraduate students (Darley & Gross, 1983), participants learned that a fourth-grade child was from a high- or low-SES background and then watched a video of the child taking an academic test. Participants who believed that the child came from a high-SES background rated the child's abilities in liberal arts, reading, and mathematics *above* grade level, whereas those who believed that the child came from a low-SES background rated the same abilities *below* grade level. Knowledge of a child's SES shapes ability estimates mostly when information on the child's performance is absent or ambiguous (e.g., when the child performs inconsistently), so that stereotypes can be applied readily (Baron et al., 1995).

This also occurs in classrooms. In an experiment involving public primary schools in Metropolitan Lima, Peru (Farfan Bertran et al., 2021), teachers watched a video of a 9-year-old child from a high-or low-SES background responding to questions posed by a teacher. When the child performed inconsistently, teachers rated the child from a low-SES (vs. high-SES) background as performing at a lower level, having lower cognitive ability, needing additional support, and being less likely to complete college. Similarly, in a study across 1,822 U.S. kindergarten classrooms, teachers rated the literacy ability of children from low-SES backgrounds as lower than that of children from high-SES backgrounds, even after controlling for their actual literacy ability (Ready & Wright, 2011).

Teachers can express ability estimates through subtle ability grouping within the classroom. Primary school teachers often set up different table groups and demarcate them by number, color, and a variety of animal or object names. Although these names seem trivial, children pick up on their meaning. Illustrating this, in a qualitative study involving two primary schools in England (Marks, 2013, p. 35), one girl said: "Green means that you're clever and that you know a lot of maths and you get the hardest maths. … Blue is bottom for children who aren't so confident at maths and they need easier work than the other people." A classmate added: "The blue table means you don't have a clue."

Teachers may endorse the belief that children from low-SES backgrounds are unable to grow and develop their abilities (i.e., fixed-mindset beliefs). A cross-sectional study examined this among 20,079 primary and lower secondary public-school teachers in Afghanistan, Argentina, Indonesia, Myanmar, Nigeria, Nepal, Pakistan, Senegal, Tajikistan, and Tanzania (Sabarwal et al., 2022). Across all teachers, almost half believed that "there is little they can do to help a student learn" if the student's parents are uneducated (43% of teachers) or have too many personal or financial problems (47% of teachers). These messages can convey to children from low-SES backgrounds that they lack ability, and that their lack of ability is immutable.

Teachers' fixed-mindset beliefs can influence children's academic achievement via self-views. In third-to-10th-grade classrooms in low-SES and remote rural areas across the United States and Canada, when teachers held more of a fixed mindset, their students developed more of a fixed mindset (Mesler et al., 2021). Although evidence in children is lacking, university students who perceive that their professors endorse more of a fixed mindset hold more of a fixed mindset themselves and experience increased psychological vulnerability, which predicts greater dropout intentions, lower class attendance, less class engagement, reduced interest, and worse grades (Muenks et al., 2020). Such effects might be most pronounced for students from disadvantaged groups (Canning et al., 2019).

## **Teacher Expectations**

Stereotypes about children from low-SES backgrounds can also be expressed through teachers' expectations, that is, "inferences that teachers make about the future behavior or academic achievement of their students" (Good, 1987, p. 32). Correlational findings indicate that teachers hold lower expectations for children from lower SES backgrounds (Dusek & Joseph, 1983; Wang et al., 2018). Experimental evidence concurs. In one experiment-conducted in Norway, the Netherlands, and the United States-teachers read about fifth-grade students who were from either high- or low-SES backgrounds, and then indicated the students' likelihood of completing a Bachelor's degree (Geven et al., 2021). Across countries, teachers held lower expectations for students from low-SES backgrounds than equally performing students from high-SES backgrounds. This finding has been replicated in other countries, including Chile (Mizala et al., 2015). Follow-up experiments in the United States and Germany revealed that teachers hold lower expectations for children from low-SES backgrounds, even when the childrenthose from high- as well as those from low-SES backgroundswere described as misbehaving (Tobisch & Dresel, 2017) or underperforming (Auwarter & Aruguete, 2008).

Low teacher expectations can give rise to the *Pygmalion effect*, causing low student achievement (Good et al., 2018; Rosenthal & Jacobson, 1968). Once teacher expectations are established, teachers interact with children in ways that align with their expectations. They accept poor performance from low-expectations children, provide less scaffolding for their learning, offer less feedback on their work, ask them lower-level questions, rarely place them in advanced groups, and fall short from creating positive, caring environment for them (Brophy & Good, 1970; Ready & Chu, 2015; Rubie-Davies, 2007). Over time, these practices harm children's academic achievement (S. Wang et al., 2018). Although such self-fulfilling prophecies are generally small (in terms of effect size), they are substantial for children from low-SES backgrounds, especially those who underperform (Jussim & Harber, 2005).

These effects on achievement operate partly through children's self-views. In a longitudinal study involving 1,289 fifth graders (ages 10–14) in Germany, teachers' lower expectations predicted lower mathematics achievement over time, mediated by children's self-perceived ability (Friedrich et al., 2015). In a cross-sectional study testing an ethnically diverse sample of 522 low-income, urban 9–16-year-olds in the United States, teachers' lower expectations were related to poorer achievement in reading and mathematics, mediated by children's self-perceived ability (Benner & Mistry, 2007). In several cross-sectional studies across primary, middle, and high schools in the United States and France, self-perceived ability mediated the effect of teacher expectations on achievement (Gilbert et al., 2014; Kuklinski & Weinstein, 2001; Trouilloud et al., 2002).

## **Teacher Grading**

Negative stereotypes about children from low-SES backgrounds can also be expressed through teachers' grading practices. In an experiment with teachers from England and Wales (Doyle et al., 2023), teachers read the student record of a 10–11-year-old child, who allegedly was from a high- or a low-SES background. Teachers then evaluated the child's work. Even though the work was identical across SES groups, teachers who believed they were evaluating the work of a child from a low-SES background assigned worse grades, allocated the child to lower ability groups, and perceived the child to perform at a subpar level. When evaluating children's work, some teachers focus on *learn-ing*—helping all students learn and grow—whereas others focus on *selection*—identifying and rewarding the most deserving students. Across several experiments with university students in France and Switzerland, participants imagined being a secondary school language teacher. Those who were instructed to focus on selection, compared to learning, detected more mistakes in essays ostensibly written by children from low-SES backgrounds than the same essays ostensibly written by children from high-SES backgrounds (Autin et al., 2019).

Harsh grading of children from low-SES backgrounds might reflect system justification. When these children are successful in school, they threaten the status quo, and teachers may engage in restorative action that hinders their success. In an experiment with preservice teachers in Switzerland (Batruch et al., 2017, Experiment 2), teachers evaluated a test produced by a seventh-grade child from a high- or a low-SES family, who either excelled academically (assigned to a high, academic educational track) or not (assigned to a low, vocational educational track). When the child excelled (vs. not), teachers gave lower grades to the child from a low-SES (vs. high-SES) family. They also downgraded the quality of the test, thus attributing the child's success to external factors.

Grades influence children's self-views. When children consistently receive low grades, they often develop lower self-perceived ability and self-esteem (Crocker et al., 2003; Lapan & Boseovski, 2017). This phenomenon can explain why children who receive low grades disengage behaviorally and emotionally from their schoolwork (Poorthuis et al., 2015). Thus, by assigning worse grades to children from low-SES (vs. high-SES) backgrounds for work of equal quality, teachers undermine these children's selfviews and achievement.

## **Teacher Track Recommendations**

Negative stereotypes about children from low-SES backgrounds can be expressed through teachers' track recommendations. Tracking is the process of sorting students into hierarchically ordered tracks based on their presumed academic ability. Tracking is often based on teachers' recommendations. Its objective is to increase teaching efficiency by enabling teachers to tailor the curriculum to children's ability level. Yet, tracking contributes to achievement inequality (Van de Werfhorst & Mijs, 2010).

Teachers are inclined to assign children from low-SES backgrounds to lower, vocational tracks rather than higher, academic tracks (Maaz et al., 2008). Given that these children, on average, perform worse in school than their peers, these tracking decisions seem legitimate. Instead, they are biased. Correlational studies in Belgium, France, Germany, the Netherlands, and Switzerland demonstrate that teachers give lower recommendations for children from low-SES backgrounds than equally performing children from high-SES backgrounds (Batruch, Geven, et al., 2023). For example, in the Netherlands, children are tracked at the end of primary school (around age 12), and the odds of receiving the highest possible track recommendation are over 13 times greater for children whose parents completed tertiary education than for those whose parents completed only primary education (Dronkers & Korthals, 2016). The effect remains significant when controlling for children's achievement (i.e., test scores). In experiments manipulating hypothetical children's SES background (thus testing causality), teachers judged the vocational track more suitable for children from low-SES (vs. high-SES) backgrounds, and the academic track more suitable for children from high-SES (vs. low-SES) backgrounds—even though the children's achievement was identical (Batruch et al., 2019; Channouf et al., 2005). These biases are most pronounced when teachers are reminded of the selection function of education (Batruch et al., 2019).

Low track recommendations can damage children's self-views. As teachers base their recommendations on children's presumed ability, children may infer that low recommendation reflects an upper limit of what they are capable of. Consequently, they may conclude that they lack ability—low self-perceived ability—and there is little they can do to develop it—a fixed mindset. Accordingly, immediately after the tracking takes place (around age 13), children in lower tracks have decreased self-perceived ability (Liu et al., 2005; for long-term effects of track separation, see Chmielewski et al., 2013). Even when children eventually progress from the vocational to the academic track, they may continue to question their abilities.

## **Teacher Ability Feedback**

Stereotypes about children from low-SES backgrounds may be expressed via teachers' subtle low-ability feedback. When explaining achievement outcomes, teachers evaluate children's ability and effort. In some cases, they provide explicit attributions. For example, they might attribute success to high ability (e.g., "You're such a smart kid") and failure to low effort (e.g., "You didn't work hard enough"). Teachers, though, rarely tell children explicitly that they have low ability. Rather, they convey this feedback unknowingly and unintentionally through seemingly well-intentioned messages: unsolicited help when children struggle, pity when they fail, and praise when they succeed (Graham, 1990). These messages can communicate low ability, as people are more likely to offer unsolicited help and show pity to others when believing others' struggles and failures stem from uncontrollable factors like low ability (vs. controllable ones like low effort), and they are more likely to offer praise to others when believing others' successes stem from controllable factors like high effort (vs. uncontrollable ones like high ability; Graham, 2020; Weiner, 1979).

Unsolicited Help. Adults, and even children (Sierksma & Shutts, 2020; Sierksma et al., 2018), offer more unsolicited help to those with low ability. For example, teachers offer unsolicited help when they believe children's struggles stem from uncontrollable factors, such as low ability (Brophy & Rohrkemper, 1981; also see Tõeväli & Kikas, 2016). Receiving unsolicited help may shape children's self-views. In a series of experiments in the United States (Sierksma & Shutts, 2020), a large majority of children (ages 4-6) perceived groups who received unsolicited help as less smart-but not less nice-than groups who did not receive such help. These findings extend to perceptions of individuals. In two experiments in a U.S. primary school (Graham & Barker, 1990), children (ages 5-12) watched two students solving mathematics problems. With one student, the teacher casually looked over the student's shoulder and moved on without making a comment. With the other student, the teacher also casually looked over the student's shoulder and offered unsolicited help (e.g., "Don't forget to carry your tens"). Children inferred that the student who received unsolicited help had lower ability than the student who did not. Although no studies have examined the effects of help on the self-views and achievement of children from low-SES backgrounds, there is suggestive evidence. First, Black university students who receive unsolicited help from White students on an intelligence test experience low self-esteem and depressed affect (Schneider et al., 1996). Second, children (ages 4–8) who receive unsolicited help on a task are less likely to persist on a subsequent task (Leonard et al., 2021).

Pity. Teachers feel more pity for children with low ability (Clark & Artiles, 2000; Georgiou et al., 2002). Being the recipient of pity can undermine the self-perceived ability of children from low-SES backgrounds. In two experiments in the United States, children and adults (ranging from age 5 to university age) were informed of the affective reactions of a teacher toward a failing student (Weiner et al., 1982). From age 9, participants inferred that the teacher who showed pity believed the student to have low ability, but they inferred that the teacher who showed anger believed the student to show low effort. Other research examined how pity influences recipients' self-views (Taxer & Frenzel, 2020). For example, in one experiment in the United States (Graham, 1984), Black and White sixth graders from middle- or low-SES backgrounds failed a test, and the experimenter showed pity, anger, or no affect. Unlike children exposed to anger, those exposed to pity inferred they lacked ability, saw themselves as less competent, lowered their expectations for future success, and persisted less on a subsequent task. These results were consistent across SES and race.

When teachers pity children, they may comfort them for low ability. Teachers with a fixed mindset are especially inclined to use such comfort-oriented messaging. A series of studies involved U.S. university students who imagined themselves as a seventh-grade math teacher or were actual graduate student instructors (Rattan, Good, & Dweck, 2012). When seeing a student fail, those with a fixed mindset readily concluded that the student is not smart enough. Moreover, they often consoled the student—"Don't worry, not everyone can be good at math"—and used demotivating teaching strategies, such as assigning less homework. Students (around age 20) picked up on such messages. Those who received comfort-oriented feedback not only inferred that their teacher held a fixed mindset, but also formed lower expectations for their future success and felt less motivated.

Comfort-oriented feedback has not been investigated in children. Research in children does show that providing (rather than withholding) critical feedback can be motivating, if done wisely. For example, in experiments among U.S. seventh graders, when critical feedback from teachers on an essay was (vs. was not) accompanied by a note emphasizing the teacher's high standards and belief that the child could meet those standards (i.e., wise feedback), children were more likely to submit a revision of their essay and improve the quality of their final drafts (Yeager et al., 2014). These effects were more pronounced for Black than White children. Future work should examine whether the effects depend on children's SES.

**Praise.** People deem effort worthy of reward (Celniker et al., 2023). Unsurprisingly, then, teachers give more rewards (e.g., gold stars) to students with low ability who try hard and perform well, and give more punishments (e.g., red stars) to students with high ability who do not try hard and perform poorly (Weiner & Kukla, 1970). They reward low-ability students, because they assume that these students had to work hard to compensate for their lack of ability—and such effort is praiseworthy (Rest et al., 1973). Building on these findings, a series of experiments in

Canada, Germany, and the United States demonstrated the *positive feedback bias*, with White majority teachers giving more positive feedback to ethnic minority (vs. majority) students (Croft & Schmader, 2012; Harber, 1998, 2004; Harber et al., 2010, 2012, 2019; Nishen & Kessels, 2022; Zeeb et al., 2022). Research in the Netherlands extended these ideas to SES, examining teachers' feedback to 11-year-olds. Teachers gave more inflated praise—"You did *incredibly* well!"—to children from low-SES backgrounds than to those from high-SES backgrounds, even though the children's achievement was identical (Schoneveld & Brunmelman, 2022). Teachers might give children from low-SES backgrounds more inflated praise, because they consider them more hardworking. Indeed, teachers disproportionately attributed the success of children from low-SES (vs. high-SES) backgrounds to hard work.

Receiving praise-especially inflated praise-can make children appear less smart. In several experiments in Germany and the United States (Barker & Graham, 1987; Meyer et al., 1979; Miller & Hom, 1996), children watched two students succeeding at the same task. One student was praised by the teacher, whereas the other received neutral feedback. Although young children (ages 4-5) regarded the praised student smarter and more hardworking, older children (ages 11-12) regarded the praised student more hardworking but less smart. Older children understand that effort can compensate for low ability. They thus infer that, when one student receives praise and the other does not, even for identical performance, the praised student must have worked harder, presumably to compensate for low ability (Graham & Chen, 2020). This finding has been replicated in university students in Germany (Meyer et al., 1986). Experimental evidence in children (ages 10-13) from the Netherlands indicates that those who receive inflated praise from the teacher-often children from low-SES backgrounds-are seen by peers as more hardworking but less smart (Schoneveld & Brummelman, 2022).

Inflated praise can harm children's self-views (Brummelman & Dweck, 2020; Brummelman, Crocker, & Bushman, 2016). When children with low self-esteem (ages 8–12) receive inflated praise, they avoid challenges and limit their exploration, presumably because they are afraid of not being able to live up to the praiser's expectations of them (Brummelman et al., 2014, 2022). In a lon-gitudinal study of 120 children (ages 7–11) in the Netherlands, children who received more inflated praise developed lower self-esteem. In a cross-sectional study of 337 children (ages 8–11) in Korea (Lee et al., 2017), children who were overpraised experienced more depression symptoms and had lower academic achievement.

Another, more insidious consequence of indiscriminate praise is that it erodes children's trust in the teacher (Asaba & Gweon, 2020). In several experiments in the United States (Asaba et al., 2018), teachers provided praise on six tracings made by children. Three tracings were good, three bad. Teacher Jane selectively praised the good tracings, whereas teacher Susan indiscriminately praised all tracings. Children (ages 4–5) considered the praise by teacher Jane (who praised selectively) more informative than the praise by teacher Susan (who praised indiscriminately). When children subsequently received praise from teacher Susan, they were more likely to dismiss it. This suggests that, by providing indiscriminate praise to children from low-SES backgrounds, teachers may not only diminish these children's self-views, but also render the self-views less sensitive to future feedback, even if it is positive.

#### **Teacher Preferential Treatment**

Who deserves my attention? When answering this question, teachers may be guided, unintentionally and unknowingly, by negative stereotypes about children from low-SES backgrounds. Observations in a classroom of 16 preschoolers in the United States (Streib, 2011) show that children from high-SES (vs. low-SES) backgrounds were more inclined to speak, interrupt, ask for help, argue, talk to teachers as conversational equals, take the floor, and take a stand. Teachers rewarded these behaviors, seeing them as signs of interest, engagement, and intelligence, and so allocated more attention to children from high-SES backgrounds. By contrast, children from low-SES backgrounds, "who are sitting quietly and listening or raising their hands to answer a question, are neglected by the teacher" (p. 342). Relatedly, ethnographic research in the United States (Nelson & Schutz, 2007) compared two day-care centers, one serving primarily children from high-SES backgrounds, another serving primarily children from low-SES backgrounds. Children at the high-SES center learned that adults are interested, available, and responsive, forming a sense of entitlement. "This ongoing pattern," the authors stated, "might lead children to believe ultimately that they are entitled to have adult attention and to have their needs and desires met by adults" (p. 311). By contrast, children at the low-SES center "are not treated as if they are so 'precious' as to be constantly observed, constantly treated with care, or constantly worthy of an immediate response" (p. 312).

Research on 56 primary school children in the United States (Calarco, 2011), spanning third-to-fifth grade, documented a similar pattern. Compared to children from low-SES backgrounds, those from high-SES backgrounds were more likely to ask for the teacher's help. In fifth grade, for example, children from high-SES backgrounds made seven times as many requests as did children from low-SES backgrounds (e.g., "Ms. Dunham! I need help! Ms. Dunham!"). Teachers responded positively to these requests, giving children from high-SES backgrounds more attention and solicited help, while neglecting children from low-SES backgrounds. One example illustrates this: When the class was working in pairs, the teacher allocated all their attention to the students from high-SES backgrounds, while two students from low-SES backgrounds-Sadie and Carter-were struggling. Sadie and Carter fell behind, and the teacher remarked (Calarco, 2011, p. 869): "You guys! Time's up. You were the only group that didn't finish. You guys need to work better together." Sadie and Carter appeared upset but did not respond. "Hanging their heads, they get up silently and go back to their seats" (Calarco, 2011, p. 869), suggesting low selfperceived ability and low self-esteem.

Preschool teachers also offer fewer opportunities to children from low-SES backgrounds (Goudeau et al., 2023). In observations of whole-class discussions involving 98 preschoolers in France, children from low-SES backgrounds were less likely to be called on by the teacher or to speak without being asked. Even when they spoke, they spoke less. These effects were not explained by children's language ability. A follow-up experiment in France revealed that children who showed low engagement made an unfavorable impression on their preschool peers (e.g., were seen as less intelligent; also see Renoux et al., 2023). Hence, by offering children from low-SES backgrounds fewer opportunities, teachers make them appear less intelligent to others. Although there are no large-scale empirical studies on how teachers' preferential treatment impacts achievement inequality, our review suggests that children from low-SES backgrounds are less likely to actively participate in classrooms—as they typically do not take the floor or are not given the floor by the teacher—and less likely to secure the teachers' preferential treatment. This may harm these children's sense of entitlement, self-esteem, and selfperceived ability, which can undermine academic achievement.

## Summary and Discussion

Teachers hold biases against children from low-SES backgrounds (Figure 1): They perceive these children as less intelligent, believe they are less able to develop their intelligence, hold lower expectations for their future educational success, disproportionally assign them to vocational educational tracks, frequently give them subtle low-ability feedback, and refrain from granting them preferential treatment—even when these children perform as well as their classmates from high-SES backgrounds. These practices may convey to children from low-SES backgrounds that they are less intelligent, less able to nurture their intelligence, less entitled, and less worthy than their peers, independent of their actual abilities and achievements.

What do the findings say about developmental timing? Substantial evidence shows that teachers' SES biases exist in primary school, and emerging evidence suggests that they exist already in preschool. In addition, substantial evidence shows that teachers' biases practices shape children's self-views from middle or late primary school years onward (e.g., children feeling less competent when pitied by the teacher). Yet, emerging evidence suggests that, in some cases, even preschoolers can pick up on the meaning of teachers' practices (e.g., preschoolers interpreting teachers' indiscriminate praise as uninformative).

Also, the findings provide insight into the nature of stereotypes. Some scholars suggest that stereotypes contain a kernel of accuracy (Jussim, 2017; Jussim & Eccles, 1995; but see Bian & Cimpian, 2017). Our review demonstrates that, on average, teachers hold biases against children from low-SES backgrounds—even when these children have the exact same level of ability and achievement as their peers. Thus, teachers apply group stereotypes to individual children even when this is not justified.

## **Institutions and Cultures**

Daily interactions between teachers and children occur in educational institutions. Although schools are often seen as neutral spaces, they prepare students to accept the dominant ideology, beliefs, and practices within their society (Deutsch, 1979), thereby creating advantages for some students over others (Stephens et al., 2014). Most schools, at least in the west, embrace the ideal of meritocracy, defined as "a social system in which merit or talent is the basis for sorting people into positions and distributing rewards, such that the positions of highest authority are occupied by those of greatest merit" (Scully, 2015, p. 1). Meritocracies are seen as fair, because they seemingly provide everyone with an opportunity to advance and distribute awards proportionally to contributions. Even the Universal Declaration of Human Rights embraces meritocracy, stating that "higher education shall be equally accessible to all on the basis of merit" (United Nations, 1948, article 26). Schools express a meritocratic ideology by seemingly creating equal opportunities for competition within the classroom: all students have the same desk, receive instruction from the same teacher, and take the same tests (Croizet et al., 2017). By creating an illusion of equal opportunity, schools encourage essentialist thinking: the inference that any difference in achievement between children is due to children's own efforts and abilities (Goudeau & Cimpian, 2021).

#### **Competition and Social Comparison**

Schools that endorse meritocracy may encourage between-student competition. For example, schools often artificially create a shortage of high grades and other proofs of excellence (e.g., high grades are typically limited by grading curves, so that only a few students can obtain them). By competing for scarce goods, children "learn that there are winners and losers in such competitions and that, although it is possible for them to win, they are more likely to lose" (Deutsch, 1979, p. 394). This impacts their self-views. In U.S. kindergarten classrooms that emphasize normative evaluation (e.g., where children are frequently and publicly compared to one another, with wellperforming children receiving stars and happy faces), children (around age 5) have lower self-perceived ability than in classrooms that deemphasize normative evaluation (Stipek & Daniels, 1988). From early primary school grades, children in contexts that emphasize normative evaluation learn that social comparison is useful primarily for assessing-rather than improving-their ability (Butler & Ruzany, 1993).

Competition has repercussions, especially for children from low-SES backgrounds. Given that these children are generally less familiar with academic material (Bourdieu & Passeron, 1990), they may be prone to making upward social comparisons in schoolseeing themselves as less competent than others-which lowers selfesteem and induces shame (Gürel et al., 2020, 2022). This process influences achievement. In an experiment in French middle schools (Goudeau & Croizet, 2017), sixth graders (around age 11) took a standardized test by answering questions displayed in front of the class. In one condition, performance differences between children were made visible: Children were asked to raise their hand when they knew the answer. In another condition, performance differences were made invisible: Children were told not to signal whether they knew the answer. Overall, children from high-SES backgrounds performed better, and they performed equally well in the two conditions. Yet, children from low-SES backgrounds performed worse when performance differences were visible (vs. invisible). They probably attributed not knowing the answer as fast as their peers to inherent factors (e.g., "I'm just not smart enough"), undermining their achievement (Goudeau & Cimpian, 2021).

Even the mere perception of competition can harm the self-views and achievement of children from low-SES backgrounds. Although this idea has not been tested in children, research in university students provides supportive evidence. In an experiment in France (Jury et al., 2015), first-generation university students (who tend to be from lower SES backgrounds) performed worse on a mathematics test compared to continuing-generation university students when they learned that universities are competitive (e.g., teachers aim to identify the top 5%–10% students). However, when they learned that universities are not competitive (e.g., teachers help all students succeed), this achievement gap was eliminated. In a longitudinal study in the United States (Canning et al., 2020), when first-generation university students perceived their classrooms to be rife with competition, they experienced more impostor feelings—that they did not earn their success, success had been gained through luck, and one day they might be exposed as fraud—unlike continuing-generation university students. These impostor feelings, in turn, predicted lower course engagement, attendance, and course grades, as well as stronger dropout intentions, especially among first-generation students.

Competition is more pronounced in countries with higher income inequality. As the gap between the rich and poor widens, so does the pressure on children to obtain high grades and beat the academic competition to reach top-earning positions. As schools are social sorting machines that provide access to such top-earning positions (Domina et al., 2017), income inequality can make school environments more competitive. Analyses of the PISA 2000, 2003, and 2018 data show that 15-year-olds from countries with high income inequality perceive their classmates as more competitive and are more competitive themselves (Sommet et al., 2023). Although the PISA studies focused mainly on high-income countries, they also included low- and middle-income countries such as Kazakhstan, Morocco, and the Philippines. Hence, income inequality creates a fertile soil for between-student competition, which might be most detrimental to children from low-SES backgrounds.

## Ability-Focused Environments

If the goal is to evaluate children's merit, schools that endorse meritocracy may use standardized testing and emphasize its diagnostic value. This emphasis can induce stereotype threat in children from low-SES backgrounds (Heberle & Carter, 2015). Stereotype threat arises when children face the prospect of being evaluated in light of a negative stereotype about their group (Steele & Aronson, 1995). When children from low-SES backgrounds take an intelligence test, for example, they may worry that, if they perform poorly, others could view their performance as confirming a negative stereotype about their group. This prospect occupies working memory space and, consequently, impedes academic achievement (Schmader & Johns, 2003). Although the replicability of stereotype threat effects based on gender and race has been questioned (Agnoli et al., 2021), the replicability of stereotype threat based on SES has not.

A good deal of research among university students in France and the United States has demonstrated stereotype threat in the context of SES. Students carried out cognitive tasks that were presented as diagnostic or nondiagnostic of intellectual ability (Croizet & Claire, 1998; Croizet & Dutrévis, 2004; Spencer & Castano, 2007; also see Harrison et al., 2006). Overall, students from low-SES backgrounds performed worse than those from high-SES backgrounds, but stereotype threat amplified this achievement gap. When students from low-SES backgrounds believed the tasks were diagnostic (vs. nondiagnostic), they performed worse and reported lower self-perceived ability. The stereotype threat effect is present even among first and third graders (Désert et al., 2009). Consistent with this work, a largescale intervention involving 10,807 children (ages 14-16) in England showed that efforts to mitigate stereotype threat can improve the academic achievement of children from low-SES-but not high-SESbackgrounds (See et al., 2022). Thus, by presenting tests as diagnostic of ability, teachers undermine the self-views and achievement of children from low-SES backgrounds.

Children may see achievement as more diagnostic when they are in ability-tracked classrooms. Vocational and academic tracks, more so than mixed-ability tracks, are homogeneous in terms of children's academic abilities and SES (Chmielewski, 2014). Due to this homogeneity, children may not be exposed to between-student differences in structural factors that influence achievement (e.g., family income). Consequently, they may infer that achievement is driven primarily by effort and ability. Findings based on PISA 2012 data, including 128,110 15-year-olds in 24 countries (Mijs, 2016b), were consistent with this idea. Compared to children in a mixed-ability track, children in a vocational or academic track were more likely to blame their failure on their low ability rather than external factors. This effect was most pronounced in countries with rigid between-school tracking (e.g., Belgium, Hungary, Slovakia), where children are sorted from a young age into hierarchically ordered schools or classrooms for their full curriculum. As children from low-SES backgrounds are more likely to be sorted into vocational tracks and to underperform relative to their classmates, they may be especially prone to seeing failure as diagnostic of low ability. This could make them susceptible to stereotype threat and more negative self-views.

## Inequality-Justifying Beliefs

Schools that endorse meritocracy may inspire inequalityjustifying beliefs in both teachers and children. If teachers believe that schools are meritocratic, they may perceive achievement inequality as a fair outcome of a meritocratic process. Indeed, individuals who believe that schools are meritocratic perceive socioeconomic inequalities as fair, oppose affirmative action, and reject policies aimed at reducing achievement inequality (Batruch, Jetten, et al., 2023; Darnon, Smeding, & Redersdorff, 2018). Also, if teachers see schools as meritocratic, they may believe that some students are more meritorious (e.g., intelligent) than others. Individuals who believe that only some (vs. all) students have the potential to become highly intelligent oppose policies that distribute resources equitably across advantaged and disadvantaged groups (Rattan, Savani, et al., 2012; Savani et al., 2017). Similarly, believing in school meritocracy can make children from low-SES backgrounds perceive their disadvantaged position as just. For example, in a cross-sectional study among secondary-school students (around age 15) in France, those from low-SES-but not high-SES-backgrounds who believed in school meritocracy perceived society as more just (Wiederkehr, Bonnot, et al., 2015).

Additionally, believing in school meritocracy can undermine the achievement of children from low-SES backgrounds. In an experiment among 149 French fifth-grade children (Darnon, Wiederkehr, et al., 2018), children read a text stating that schools are meritocratic (e.g., one needs ability and effort to succeed) or a neutral text and then completed a reading and mathematics test. Overall, children from high-SES backgrounds outperformed children from low-SES backgrounds. Exposure to a meritocratic message exacerbated this gap by worsening the achievement of children from low-SES-but not high-SES-backgrounds. Meritocratic environments may encourage these children to attribute struggles to intrinsic factors, such as a lack of ability, which can diminish self-perceived ability and undermine achievement. In fact, teachers explicitly favor students who make such internal attributions (Beauvois & Dubois, 1988; Pansu et al., 2008). Over time, as children in meritocratic environments come to see themselves as less able, they infer that they are also less worthy (Trautwein et al., 2006).

Inequality-justifying beliefs are common in unequal countries. Drawing on 25 years of International Social Survey Program data, including 49,383 adults from 23 countries, research shows that in countries with higher income inequality, citizens hold stronger meritocratic beliefs: They believe that getting ahead in life is explained by hard work rather than structural factors (e.g., coming from a wealthy family, knowing the right people; Mijs, 2021). A belief in meritocracy, in turn, predicts reduced concern with inequality. One explanation is that more unequal countries are more segregated, reducing interactions between individuals from high- and low-SES backgrounds (Owens, 2016). As a result, individuals are unable to discern the structural forces that constitute inequality, leading them to infer that success simply reflects merit.

#### Summary and Discussion

Institutional and cultural values reflecting a belief in meritocracy can exacerbate achievement inequality by inspiring competition, social comparison, and a focus on raw ability, which undermine the self-views and achievement of children from low-SES backgrounds. These effects can already be observed from early primary school years onward (e.g., with first graders showing evidence of stereotype threat). In addition, these meritocratic values make existing inequalities seem fair, thereby inhibiting teachers' efforts to reduce inequality and leading children from low-SES backgrounds to regard their underperformance as evidence of lack of merit. Such beliefs and practices are most prevalent in countries with high income inequality and rigid between-school tracking. Thus, children from lower SES backgrounds may be affected more strongly by growing inequality (Odgers & Adler, 2018). Despite this emerging body of work, research has yet to pin down the exact psychological mechanisms through which broader institutional and cultural values come to shape teachers' practices in the classroom. Such researchlinking macro- to microlevel processes-is critical for theory development.

## **Theoretical Implications**

Our review identifies one developmental-psychological mechanism of achievement inequality: self-views. From preschool onward, children from low-SES backgrounds are structurally exposed to harsh messages about their intellectual ability, even when their abilities and achievements are equal to those of their peers. These messages convey to children from low-SES backgrounds that they are less intelligent, less able to nurture their intelligence, less entitled, and less worthy, independent of their actual abilities and achievements. These self-views, in turn, harm academic achievement. Such consequences are exacerbated by institutional and cultural values that reflect a belief in meritocracy.

Over time, the self-views of children from low-SES backgrounds can encourage the type of behaviors that reinforce teachers' negative beliefs about them, setting in motion a self-sustaining downward spiral that contributes to growing disparities in self-views and achievement (Figure 1). Such self-fulfilling prophecies are strong among children from low-SES backgrounds (Jussim & Harber, 2005). This perspective aligns with transactional models of development (Bugental et al., 1984; Crocker & Brummelman, 2018; Sameroff & Mackenzie, 2003), provides a novel explanation of why socioeconomic achievement gaps widen with age (Sirin, 2005), and locates the blame outside of individual teachers and children. To be sure, our claim is *not* that self-views are the only or most significant mechanism of achievement inequality. Indeed, self-views only partly explain achievement inequality (Hofer et al., 2023). Rather, our claim is that self-views are one plausible (and often overlooked) mechanism. We suggest that, by studying the nature, origins, and consequences of socioeconomic disparities in self-views, scholars will be able to build more informed theories and more effective interventions to reduce achievement inequality.

## **Extending Existing Theoretical Perspectives**

Our review bridges psychological, educational, and sociological perspectives. According to the sociological theory of social reproduction (Bourdieu & Passeron, 1990), educational instructions reproduce inequality by concealing the arbitrariness of educational materials and practices that favor some groups of students over others and by construing the ensuing achievement inequality as a result of merit (e.g., convincing students from low-SES backgrounds that they lack intellectual ability). Linking this idea to psychological and educational findings, our review shows that, through classroom interactions, children from lower SES backgrounds develop more negative self-views-even when their actual academic abilities and achievements are on par with those of their peers from higher SES backgrounds. In the words of Bourdieu (1966/1974), educational institutions play a "confidence trick" (p. 27) by leading underprivileged groups to question their academic abilities. These more negative self-views, in turn, undermine academic achievement.

Our conclusions concur with classic theories predicting that members of stigmatized groups develop low self-esteem. A longstanding view holds that self-views are influenced by individuals' perceptions of how others view them (Wallace & Tice, 2012). Member of stigmatized groups may develop low self-esteem, because individuals with whom they interact (e.g., teachers) hold unfavorable attitudes about them or because they are generally devalued in society. However, certain stigmatized groups-such as Black students in the United States-have higher rather than lower self-esteem (Gray-Little & Hafdahl, 2000; Twenge & Crocker, 2002). These students may engage in self-protective tactics: selectively comparing their achievement with that of other disadvantaged groups, attributing failure to teacher's prejudice, and devaluing academic domains in which their group is stigmatized (Crocker & Major, 1989; Sedikides, 2012). Despite the strong association between race and SES, especially in the United States (Duncan & Magnuson, 2005), findings demonstrate that children from low-SES backgrounds have lower self-esteem, suggesting that they do not employ the same self-protective tactics. Why not? Children might see SES as more concealable and less salient than race. Consequently, children from low-SES backgrounds might erroneously think that they are evaluated harshly purely because of their own merit.

At what age do socioeconomic disparities in self-views first emerge? Although self-views can already be measured in preschoolers, research on socioeconomic disparities has focused predominantly on secondary-school students. This research shows that, at least from secondary school onward, (a) children from lower SES backgrounds display lower self-perceived ability, more of a fixed mindset, lower self-esteem, and lower narcissism; and (b) these selfviews predict lower academic achievement. A challenge for future work is to identify the precise age at which these disparities take root and take effect. Such work will benefit from a developmental perspective, examining self-view trajectories across developmental transitions. Do children from low-SES backgrounds start out with lower self-perceived ability in preschool? Do they show a steeper decline in self-perceived ability as they transition into secondary school, more so than the average child (Nagy et al., 2010), given that secondary schools place a strong emphasis on social comparison and competition (Eccles & Roeser, 2009)? If so, does this steep decline make them more likely to underperform in secondary school compared to primary school? Addressing such questions will reveal how unequal selves develop in interaction with developmental demands.

Our review has revealed systematic biases of teachers against children from low-SES backgrounds. Such biases may not subside without intervention. One reason is that teachers often do not realize that they hold biases or act on those biases. Indeed, most teachers are motivated to reduce achievement inequality (Jungert et al., 2014) and would rarely, if ever, knowingly express biases against children from low-SES backgrounds. Another reason is that teachers may attribute the outstanding achievements of a child from a low-SES background to something other than ability, maintaining the belief that the child has low ability. People are inclined to attribute the successes of children from low-SES backgrounds more to being hardworking than being smart and to attribute the successes of children from high-SES backgrounds more to being smart than being hardworking (Brummelman & Cimpian, 2022; also see Iatridis & Fousiani, 2009). Consider the case of Ta'Von, a Black boy from a low-SES family (Dyson, 2021). Already in kindergarten, he wrote imaginative stories, easily inventing phonologically based spelling. His teacher, who was very fond of him, said that his writing was even better than that of the "bright kids." That is, despite Ta'Von's academic excellence, his teacher did not consider him one of the intellectually gifted students.

## **Emerging Questions**

Are some self-views more primary or fundamental than others? For example, do socioeconomic disparities in some self-views emerge at an earlier age than do disparities in others? Do socioeconomic disparities in some self-views give rise to disparities in others? Although direct evidence is lacking, children from low-SES backgrounds who develop a fixed mindset in early childhood may be prone to developing low self-perceived ability and low-self-esteem, as they denigrate their ability and worth in the face of setbacks (Burhans & Dweck, 1995; Haimovitz & Dweck, 2017). We call for longitudinal research to address these questions.

When do children from low-SES backgrounds realize the structural disadvantages that they face, and how does this affect their selfviews? Our review suggests that classroom experiences can undercut the self-views of children from low-SES backgrounds, even if these children are unaware of their structural disadvantages. Yet, with age, they often do develop such awareness (Amemiya et al., 2023; Heberle & Carter, 2015). From age 9 to 10, they form more realistic assessments of their family's SES (Peretz-Lange et al., 2022), understand that lowerSES families have fewer possessions (Peretz-Lange et al., 2022), and become more inclined to explain such intergroup differences in structural terms (Peretz-Lange et al., 2021). Some children from low-SES backgrounds might perceive their disadvantages as merited (e.g., regard stereotypes about their group as accurate), accelerating the development of negative self-views. Others, however, might perceive their disadvantages as unmerited (e.g., recognize that it is not lack of ability but rather unjust social ideas and structures that hold them back), blocking the development of negative self-views. We call for research that examines how awareness of structural disadvantages shapes unequal selves.

Can teachers' own SES backgrounds influence their biases and, consequently, children's self-views? Providing indirect evidence, in the United States, Black teachers have higher expectations for Black students than do White teachers (Gershenson et al., 2016). This can have long-term benefits: Unlike White students, Black students randomly assigned to at least one Black teacher in grades K-3 are more likely to graduate from high school and to enroll in college (Gershenson et al., 2022). Extending this insight to SES, teachers with lower subjective social status are less likely to provide biased feedback to children from lower SES backgrounds (Schoneveld & Brunmelman, 2022). Possibly, teachers from low-SES backgrounds are more aware of structural disadvantages. Thus, they may not attribute failure of children from low-SES backgrounds to intrinsic factors (e.g., lack of ability), preventing these children from denigrating their ability.

What are the sequelae of academic success for children from low-SES backgrounds? Academically successful children from low-SES backgrounds have been called resilient (OECD, 2019b), but perhaps their resilience is only "skin deep." If these children have negative self-views, they may perceive their successes as accidental or fleeting, inducing chronic stress. For example, low-SES Black Americans who persist with effortful active coping under difficult conditions are at risk for chronic nervous system arousal and health problems such as hypertension (S. A. James et al., 1983, 1987), even in adolescence (Brody et al., 2013). This coping style is demanded by a culture of pervasive racialized stress (Brownlow, 2022). In addition, individuals from low-SES backgrounds develop at a faster biological rate (McDermott et al., 2021), particularly when they face early life adversity (Colich et al., 2020). Research should explore such signs of skin-deep resilience in children from low-SES backgrounds (Destin, 2019).

Are there conditions under which the self-views of children from low-SES backgrounds can facilitate (rather than impede) academic success? Children from low-SES backgrounds have lower narcissism levels, which might contribute to an interdependent orientation (viewing the self as fundamentally connected to others; Markus & Kitayama, 1991) and intellectual humility (recognizing the limitations of one's beliefs and knowledge; Porter, Elnakouri, et al., 2022), thereby facilitating collaboration. Accordingly, research with U.S. university students documents that groups with higher proportions of students from low-SES backgrounds perform better, that working together improves the performance of students from low-SES backgrounds, and that students from low-SES backgrounds more frequently engage in effective group processes (Dittmann et al., 2020). Research should create collaborative learning environments to unleash these "hidden talents" (Frankenhuis et al., 2020).

By focusing on the classroom context, we did not address the role of parents in creating unequal selves (Brummelman & Sedikides, 2020; Stephens et al., 2014). Low-SES parents often embrace the accomplishment of natural growth (Lareau, 2011) and teach their children to develop resilient selves in a world of scarcity (Kusserow, 1999). By contrast, high-SES parents actively foster children's unique abilities (Lareau, 2011) and teach them to express their unique selves in a world of abundance (Kusserow, 1999). These socioeconomic disparities in parenting might be more pronounced in societies with higher income inequality (Doepke et al., 2019). Accordingly, high-SES parents are more actively involved in children's education and have higher expectations for their children's educational success (Kohl et al., 2000; Y. Wang et al., 2016). For example, high-SES parents of a low-achieving child are *more* likely to expect their child to earn at least a Bachelor's degree than are low-SES parents of a high-achieving child (Stull, 2013). Such inflated expectations may reflect parental overvaluation—seeing one's own child as more special and entitled than others—which can breed narcissism (Brummelman, Thomaes, Nelemans, Orobio de Castro, & Bushman, 2015; Brummelman, Thomaes, Nelemans, Orobio de Castro, Overbeek, et al., 2015). These socioeconomic disparities in parenting can exacerbate unequal selves in children.

#### **Implications for Intervention**

Our review identifies multiple leverage points for interventions to reduce achievement inequality. First, achievement inequality can be curtailed by addressing teachers' SES-based beliefs and practices. A meta-analysis of 19 interventions, focusing primarily on low-SES or ethnic minority students, concluded that raising teacher expectations can lift student achievement (de Boer et al., 2018). These interventions instruct teachers to communicate high expectations, make teachers aware of biased expectations, or address beliefs that underlie biased expectations. The interventions might be most relevant to schools serving low-SES communities. Indeed, high-performing teachers are best at lifting students' academic achievement in low-SES schools (Torres, 2018).

Second, achievement inequality can be curtailed by addressing children's self-views. For example, growth mindset interventions—which guide students to see that their abilities are not set in stone but can be developed—are especially beneficial to students with more negative self-views (Thomaes et al., 2020) and students from disadvantaged backgrounds, thus reducing achievement inequality (Yeager et al., 2016). A meta-analysis established that growth mindset interventions improve academic achievement among students from low-SES (but not high-SES) backgrounds (Sisk et al., 2018; also see Luthar et al., 2020).

How can self-view interventions be effective when children are embedded in socioeconomically disadvantaged environments? They can be effective if they address two challenges. First, self-view interventions offer children a new way of looking at themselves in school. If these self-views are not supported by children's educational environments, they may not crystallize (Walton & Yeager, 2020). For example, after a growth mindset intervention, children in classrooms with fixed-mindset teachers did not show meaningful gains in achievement, but those in classrooms with growth-mindset teachers did so (Yeager et al., 2022). Second, self-view interventions help children take advantage of learning opportunities available in their educational environment (Dweck et al., 2014). In the absence of such opportunities-with poor educational materials, ineffective teachers, and weak curricula-self-view interventions are unlikely to be effective and may even backfire. For example, if children from low-SES backgrounds are taught to adopt a growth mindset, but they are embedded in an educational environment that does not support this mindset or lacks learning opportunities, they may not be able to put their growth mindset into practice; in some cases, they may even blame themselves for lack of improvement. Therefore, interventions should not simply teach children from low-SES backgrounds to hold particular self-views; they should target or create environments in which those self-views can take root and take effect.

Our framework suggests that teachers and children influence one another, potentially contributing to self-sustaining spirals, which calls for interventions that target teachers and children simultaneously. One approach is to create growth mindset cultures. A growth mindset is not just a belief held by a child; it can also be a meaning system that is embedded in the classroom culture (Murphy et al., 2021). Research showcases the promise of teacher-delivered growth mindset interventions, which not only foster growth mindset beliefs in children but also create a classroom culture that embraces those beliefs (Porter, Catalán Molina, et al., 2022).

Interventions at the student, teacher, or classroom level are promising, but they fail to tackle the entrenched institutional and cultural values that aggravate socioeconomic disparities in self-views and achievement. How can developmental psychologists contribute to system-level change (Chater & Loewenstein, 2022)? One step in this direction will involve combining student-, teacher-, or classroomlevel interventions with system-level interventions. System-level interventions can involve, for example, challenging cultural narratives that perpetuate a belief in meritocracy (e.g., by rendering inequality more visible to citizens; McCall et al., 2017; Sands & de Kadt, 2020), moving away from between-school tracking (Van de Werfhorst, 2018), and promoting socioeconomic desegregation in education (Rumberger & Palardy, 2005) while improving the social integration of children from low-SES backgrounds (Crosnoe, 2009).

#### Methodological Implications

Our review has methodological implications. First, researchers will do well to adopt a developmental lens to uncover the origins and consequences of socioeconomic disparities in children's self-views. Young children have traditionally been seen as irrational optimists who are unable to construct abstract self-views (Cimpian, 2017). Consequently, most research has focused on late childhood and adolescence. Yet, young children, even 3-year-olds, experience pride and shame when they succeed or fail (Lewis et al., 1992), suggesting that they can evaluate their abilities and worth based on external contingencies (Burhans & Dweck, 1995). Indeed, 4-year-olds can construct abstract views of their abilities and worth (Cimpian et al., 2017) and adjust those self-views based on feedback from others (Cimpian et al., 2007; Kamins & Dweck, 1999). By adopting a developmental lens, researchers will be able to uncover the early roots of unequal selves.

Second, researchers should expand their methodological repertoire. A good deal of the research that we reviewed is cross-sectional. Cross-sectional designs do not allow causal inferences and do not inform transactional approaches, that is, how children and teachers shape one another mutually over time. Transactional processes can be detected in laboratory experiments that involve multiple assessments or causal-chain designs (Spencer et al., 2005) and in intensive longitudinal studies that involve repeated measurements within weeks or even days (Bolger & Laurenceau, 2013). Some investigators might be reluctant to sacrifice the experimental control afforded by the laboratory or the ecological validity afforded by intensive longitudinal designs. Field experiments with intensive longitudinal follow-ups combine the best of both worlds, allowing investigators to causally

test psychological mechanisms and examine how these mechanisms unfold over time and transact with the environment (Brummelman & Walton, 2015; Walton & Wilson, 2018). For example, would raising teacher expectations promote self-perceived ability in children from low-SES backgrounds? If so, would self-perceived ability inspire these children to embrace academic challenges? Would this, in turn, consolidate teachers' high expectations, creating upward spirals that close achievement gaps over time?

Third, researchers must expand their scope to include low- and middle-income countries. Research has focused predominantly on high-income countries, especially the United States, while the majority of the world's children live in low- and middle-income countries such as Brazil, China, India, and South Africa. Already at preschool age, one in every three children living in these countries fails to meet basic milestones in their cognitive or socioemotional development (McCoy et al., 2016). Recognizing the need to study these children, Schools2030 develops holistic learning solutions for marginalized communities in 10 countries around the globe, such as Kyrgyzstan, Pakistan, and Uganda (Schools2030, 2022). Similarly, psychologists have begun testing growth mindset interventions in marginalized communities in low- and middle-income countries, such as South African townships, showing promising effects on achievement (Porter et al., 2020). A global perspective is critical for identifying cross-cultural differences. For example, growth mindset predicts academic achievement more strongly in countries with higher upward educational mobility (Jia et al., 2021). In such countries, individuals observe that active learning behaviors (e.g., effort, challenge seeking) are instrumental in academic success, so they recruit their growth mindsets to determine how much to engage in active learning. Such research requires a global partnership between scholars and educators as well as a shared research infrastructure.

Fourth, researchers could examine intersectionality-the meaning and consequences of intersecting social identities (Cole, 2009; Lei & Rhodes, 2021). Given the strong association of SES with race, ethnicity, and immigration status in many countries (Duncan & Magnuson, 2005), it is surprising that research has rarely examined how socioeconomic disparities in self-views intersect with these other social identities. Children from low-SES backgrounds with multiple negatively stereotyped identities may be at increased risk of developing more negative self-views, because they are negatively stereotyped in multiple ways. In some cases, however, having multiple negatively stereotyped identities may render children "invisible." Intersectional invisibility exists when someone is not seen as a prototypical member of their social group (Lei et al., 2020; Purdie-Vaughns & Eibach, 2008). If children from low-SES backgrounds with multiple negatively stereotyped identities are seen as less prototypical, they may not receive the same harmful messages as their prototypical low-SES peers. We urge researchers to study race, ethnicity, and immigration status alongside SES.

#### Conclusion

Our review identifies children's self-views as critical mechanisms of achievement inequality. Children from low-SES backgrounds are structurally exposed to denigrating messages about their intellectual ability, even when their abilities and achievements are equal to those of their peers. These messages lead children from low-SES backgrounds to develop more negative views of their abilities, deservingness, and worth, which undermine their academic achievement. We call for research on the development of socioeconomic disparities in children's self-views, as well as for interventions that reduce achievement inequality by addressing these disparities.

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