

Research Report

From Assets to School Outcomes

How Finances Shape Children's Perceived Possibilities and Intentions

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ABSTRACT—*People do not always take action to attain their desired possible selves—after all, whether consciously or nonconsciously, taking current action makes sense if there is an open path toward attaining the desired self, but not if paths are closed. Following this logic, children from families with fewer assets may lower their expectations for school success and plan to engage in less effort in school. To test this hypothesis, we examined the impact of experimentally manipulating mind-set about college as either “closed” (expensive) or “open” (can be paid for with need-based financial aid) among low-income early adolescents. Adolescents assigned to an open-path condition expected higher grades than those assigned to a closed-path condition (Study 1, $n = 48$, predominantly Hispanic and Latino seventh graders) and planned to spend more time on homework than those assigned to a no-prime control condition (Study 2, $n = 48$, predominantly African American seventh graders).*

And now . . . it's kind of like they're raising the price up higher so we can't get in . . . cus most of our people don't have that much money, to succeed.

—11-year-old in a focus group of African American students run by the authors; youth were asked about college

Teachers routinely offer students noneducational activities (parties, movies, or class trips) as rewards and threaten educational activities (extra homework, pop quizzes, or more reading) as punishments. An unintended consequence is reinforcement of the idea that schoolwork is a bitter pill, not fun. To motivate school-focused effort, teachers describe current school effort as mattering for the future, not as fun now (Husman & Lens, 1999).

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Given this framing, when it seems unlikely that school will matter for the future, students should begin to show signs of academic disengagement. We investigated the effects of two different mind-sets: a mind-set that current effort in school matters for the future and a mind-set that current effort in school does not matter for the future. We focused on low-income and minority youth and the latter mind-set, as expressed in the opening quote about college being too expensive for people like oneself. When college is too expensive, the path to a college future feels closed. Following this line of reasoning, a lack of financial assets can undermine aspirations and school-focused effort. Like the youth in the opening quote, youth from families with few assets are likely to see college as too expensive for people like them, making current aspirations and effort meaningless. The probable result of this mind-set over time is the kind of school underattainment noted in the literature on income- and race-based achievement gaps (Orfield, Losen, Wald, & Swanson, 2004).

Of course, even though college is expensive, a path toward a college future or possible self *is* open—low-income and minority students with few family assets can receive need-based financial aid. However, information about need-based financial aid for college is typically provided toward the end of high school, well after significant performance decrements occur. Because current action takes on meaning in light of future goals, believing that the path to college is closed should make planning to engage in school-focused activities less likely, even for early adolescents. Indeed, in the current studies, we documented that thinking of the path to college as closed (college is expensive) versus open (affordable with need-based financial aid) influences the achievement goals and action plans of children as young as 11 years of age.

ACADEMIC GOALS AND FINANCIAL RESOURCES

We used modern goal theories, which highlight that goals can be nonconsciously activated or inhibited by features of the context

(for a review, Fishbach & Ferguson, 2007), as a framework for this study. We applied this work to the achievement gap, focusing on the negative effect of a lack of resources on young students' goals and intentions—their aspired-for grades and plans to work on homework. We argue that a lack of financial assets in an adolescent's everyday context can undermine current achievement goals and planned effort in school.

It should be noted that there is no evidence that the achievement gap is due to a lack of high academic aspirations. Available evidence suggests that low-income and minority students experience a larger gap between their aspirations and their actual attainments than do White and middle-income students (Alexander, Entwisle, & Bedinger, 1994; Pizzolato, 2006). Thus, students may often wish to attain school success, but current actions do not always follow these wishes (Roderick, 2005). Why might this be? In the current studies, we focused on features of the context that cue one of two mind-sets: a mind-set suggesting that the path to college is open in spite of low family assets and a mind-set suggesting that the path to college is blocked because of low family assets. As the opening quote indicates, even seventh-grade students can have a sense that the path to college is closed, due to a lack of economic assets. We propose that perceiving that college is financially out of reach will undercut expectations that current effort will matter, inhibiting planned effort and aspirations, even if the explicit desire for college may remain. Following modern goal theories, there is no reason to assume that these processes are necessarily explicit; they can be cued automatically by salient features of the context.

POSSIBLE-SELVES THEORY AND SOCIAL STRUCTURAL BARRIERS

A possible self is a self one might become in the future, including hoped for, feared, and expected versions of oneself (Markus & Nurius, 1986). Possible selves are assumed to motivate current goal-directed action (Oyserman & James, 2008). Field-based research with low-income and minority youth has demonstrated that possible selves are malleable and that they influence important school outcomes. In two experiments, middle-school students increased school-focused effort (e.g., time spent on homework) when their possible selves were cued—by choosing images of themselves in the future, drawing timelines into the future, and mapping out paths between proximal (this year) and distal (as an adult) possible selves (Oyserman, Bybee, & Terry, 2006; Oyserman, Terry, & Bybee, 2002). Effects persisted over follow-up times of up to 2 years. These studies demonstrate positive effects of an open-path mind-set: Activities that cued an open-path mind-set resulted in significantly improved effort in school and significantly improved grades.

Research to date has not yet demonstrated the posited parallel negative effects of a closed-path mind-set: that when students

see the path to college as blocked, their school-focused aspirations and planned effort will be undermined, even if they retain a hoped-for college possible self. In the current studies, we addressed this gap, asking what happens to current expectations and planned effort in school when the path to college feels closed because of the lack of financial assets. Understanding the likely underlying psychological process is important in its own right, but also has clear policy implications given the evidence that a lack of assets and other structural barriers is predictive of worse school outcomes (e.g., Conley, 1999; Taylor, Repetti, & Seeman, 1997). We propose that, compared to a closed-path mind-set (e.g., college costs make college out of financial reach), an open-path mind-set (e.g., need-based financial aid is available) will increase aspirations and planned effort toward academic success as early as middle school. In Study 1, we directly manipulated salient mind-set (open-path, closed-path). In Study 2, we followed up by comparing open-path to a no-mind-set prime control condition and by including controls for current academic attainment.

STUDY 1

We hypothesized that compared to a closed-path mind-set (thinking about college costs), an open-path mind-set (thinking about financial aid) would enhance academic aspirations and planned effort.

Method

Sample

Two seventh-grade homeroom classes in a predominantly low-income Chicago middle school (95% free or reduced lunch) were randomly selected to participate ($n = 48$ students; 22 female, 26 male; 43 self-identified Hispanics and Latinos, 5 students of other ethnicities). Students were sampled in homeroom (not track-related). The school was low performing—the percentage of students who were attaining state standards (reading: 51%, math: 59%) was lower than the state average (reading: 73%, math: 79%; GreatSchools, 2008).

Procedure

Parents received consent forms explaining the study, its anonymous nature, and its educational goal; no student or parent opted out of the study. Each classroom was randomly assigned to a condition (closed-path $n = 29$, open-path $n = 19$). The mind-set prime was a text that the experimenter distributed and read out loud. The closed-path text indicated that average college tuition costs \$31,160 to \$126,792. The open-path text described only need-based financial aid opportunities (e.g., the Free Application for Federal Student Aid). Students then completed a brief questionnaire. As an indicator of academic goals, they were asked to circle the grade they thought they would get in two classes, math and English; responses were scored on a 13-point

scale (1 = F, 13 = A+). The mean expected grade was a B– (8.25, $SD = 2.43$, $\alpha = .71$). As an indicator of planned effort, they were asked to estimate on an 8-point response scale (0 = *less than an hour*, 7 = *all night long*) how much of their time at home that night they planned to spend in two critical activities (reading or studying and doing homework, $M = 1.08$, $SD = 1.23$, $\alpha = .84$), which were embedded in four filler activities (e.g., watching television, playing video games). Finally, students were debriefed, and those in the closed-path condition were also provided the financial-aid information.

Results and Discussion

As expected, mind-set mattered. Students predicted that they would get better grades in the open-path condition (about a B average, $M = 9.39$, $SD = 1.92$) than in the closed-path condition (about a C+ average, $M = 7.53$, $SD = 2.47$), $F(1, 43) = 7.80$, $p < .01$. When induced to perceive the path to college as open (via financial aid), even young students aspired to better grades. The mind-set manipulation also influenced planned effort, $F(1, 44) = 5.81$, $p < .05$, which was higher in the open-

path condition ($M = 1.42$, $SD = 1.47$) than in the closed-path condition ($M = 0.86$, $SD = 0.99$).

No main effect of gender was found for either aspired-for grades, $F(1, 43) = 1.04$, $p = .31$, or planned effort, $F(1, 44) = 1.30$, $p = .32$. No Gender \times Condition interaction was found for aspired-for grades, $F(1, 43) = .06$, $p = .81$, but a significant effect was found for planned effort, $F(1, 44) = 9.16$, $p < .01$. Girls' planned effort increased in the open-path condition ($M = 2.29$, $SD = 1.7$) as compared to the closed-path condition ($M = 0.53$, $SD = 0.64$), $t(44) = 3.41$, $p = .001$. Boys' planned effort was not influenced by condition (overall: $M = 1.08$, $SD = 1.15$; open-path condition: $M = 0.92$, $SD = 1.10$; closed-path condition: $M = 1.21$, $SD = 1.20$), $t(44) = -0.67$, $p = .50$ (see Fig. 1).

We suspected that the lack of an effect for boys on planned effort was related to their generally lower achievement level (e.g., Orfield et al., 2004). Even if the path to college is financially open, a history of low achievement may, itself, be the stumbling block. To test whether current low achievement undermines planned effort, school-recorded current grade point average was added as a control in Study 2. Study 2 addressed another possible limitation of Study 1, which was the assumption

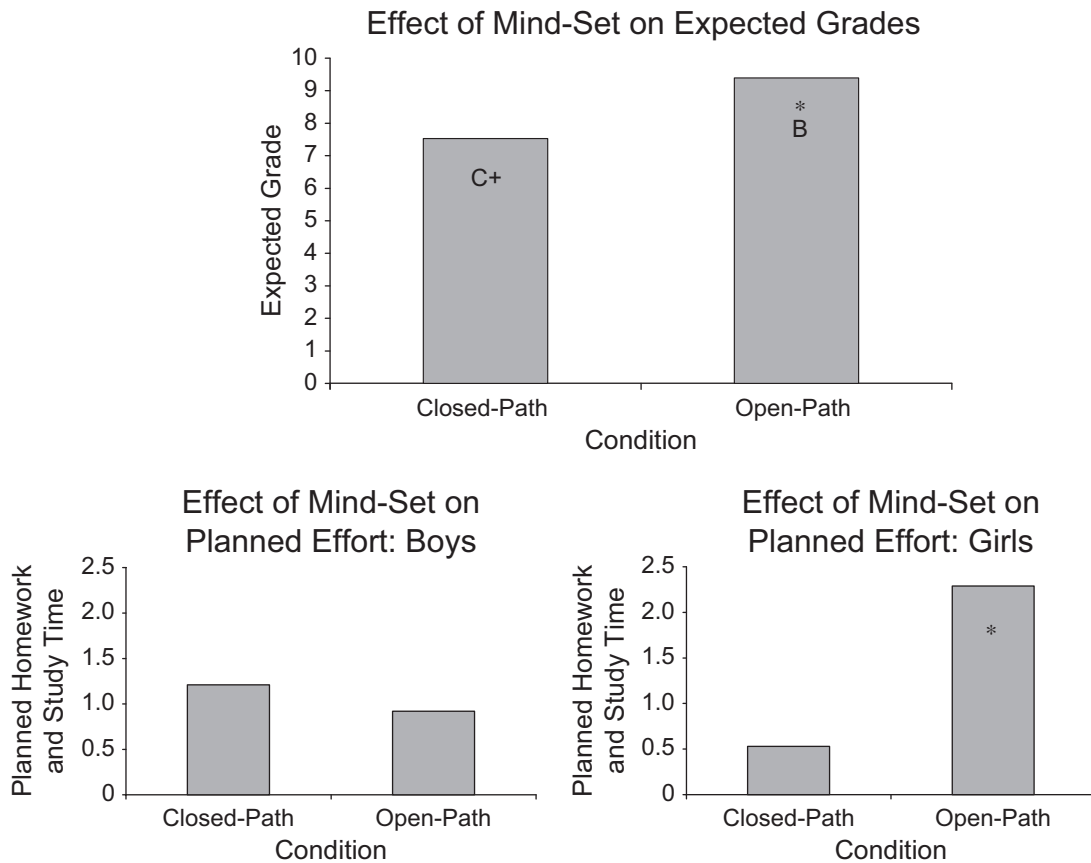


Fig. 1. Mean expected grades and planned effort in Study 1 as a function of condition. The upper panel shows the mean expected grades among students in the closed-path and open-path conditions (1 = F, 13 = A+). The lower panels show mean planned effort (the amount of time participants expected to spend doing homework and studying, on an 8-point scale from 0, *less than an hour*, to 7, *all night long*) among boys (left) and girls (right), also for the closed-path and open-path conditions. Asterisks indicate a significant difference between conditions, $*p < .05$.

that without priming, students' mind-set fits the closed-path frame. Therefore, in Study 2, we compared the open-path condition to a no-prime control group instead of a closed-path condition.

STUDY 2

In Study 2, we compared a condition in which the open-path mind-set was primed with a control condition in which no mind-set was primed and included grade point average as a control variable. We hypothesized that, controlling for current grades, both male and female students primed with an open-path mind-set would plan to engage in more school-focused effort than students in the no-prime control group. The pattern of effects in the no-prime condition was expected to parallel the observed pattern for the closed-path mind-set prime in Study 1.

Method

Sample

Two seventh-grade classrooms ($n = 48$ students; 25 female, 23 male; 28 African Americans, 11 Whites, 3 Latinos, and 6 students of other ethnicities, as determined by self-report) in a low-income Detroit-area middle school (57% free or reduced lunch) participated. The school was low performing—the percentage of students who were attaining state standards (reading: 56%, math: 62%) was lower than the state average (reading: 73%, math: 73%; GreatSchools, 2008).

Procedure

Consent procedures were identical to those of Study 1. Each classroom was randomly assigned to a condition. Students in the open-path condition received financial-aid information ($n = 22$), and students in the no-prime control condition were not given any college information ($n = 26$). Both groups completed the same planned-effort items as in Study 1 ($M = 1.89$, $SD = 1.66$, $\alpha = .66$). Student grade point average ($M = 2.35$, $SD = .90$) was obtained from the guidance office and confidentially linked to students through an ID number, which respondents recorded at the end of their questionnaire.

Results and Discussion

As expected, girls ($M = 2.73$, $SD = .83$) had significantly better grades than boys ($M = 1.94$, $SD = .80$), $F(1, 46) = 11.01$, $p < .01$. Grade point average was therefore included as a covariate in the analyses of the effect of mind-set on planned effort. With this control, planned effort was higher in the open-path ($M = 2.39$, $SD = 2.01$) than in the control condition ($M = 1.47$, $SD = 1.18$), $F(1, 43) = 5.76$, $p < .05$ (see Fig. 2). Grade point average was a significant covariate, $F(1, 43) = 7.23$, $p < .05$. Once grade point average was included, no significant gender effect was found—main effect of gender: $F(1, 43) = 2.56$, $p = .12$; Gender \times Condition interaction: $F(1, 43) = 0.47$, $p = .50$. An open-path

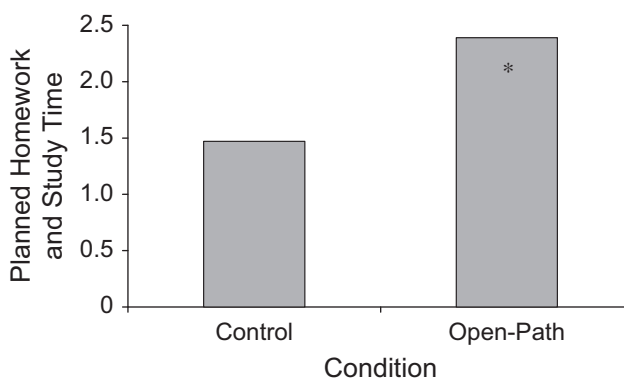


Fig. 2. Mean planned effort (the amount of time participants expected to spend doing homework and studying, on an 8-point scale from 0, *less than an hour*, to 7, *all night long*) in Study 2 as a function of condition (control vs. open-path). The asterisk indicates a significant difference between conditions, $*p < .05$.

mind-set improves planned effort when students are not already behind academically.

GENERAL DISCUSSION

Low-income and minority youth's academic attainment begins to decline prior to the high school years, when information about college is typically provided. We proposed that part of the reason children begin to fall behind is that effort in school is understood to have meaning only when it leads to a path to the future. When the path to college feels closed because of a lack of financial assets, school-focused aspirations and planned effort suffer. In two studies, we demonstrated that, even as early as age 11, thinking about college as affordable with need-based financial aid enhances school-focused goals (Study 1) and corresponding planned effort, when controlling for current achievement level (Study 2). Because the positive effect of perceiving an open path to college is blocked when current grades are already low, our results suggest that, in low-asset contexts, children and parents should learn about the financial accessibility of college early, before gaps in student achievement levels emerge and some fall behind.

Our results are congruent with a growing policy focus on asset building. Asset-policy researchers argue that when families have more assets, both parents and children will be more focused on investing current effort toward long-term goals such as attending college (Haurin, Pacel, & Haurin, 2002; Lindsey, 2004; Schreiner, Clancy, & Sherraden, 2002; Yadama & Sherraden, 1996; Zhan & Sherraden, 2003). Although asset researchers do not test specific process models, our results suggest that assets linked to goals create an open-path mind-set that is vital for maintaining aspirations and planning to invest the effort needed to make the goal a reality. If college seems too expensive, what is the point of homework? Doing homework, studying, staying after school for extra help, and going to the library for extra reading make little sense if all of these are focused on a future that is blocked.

Our results suggest that even young children can and do titrate effort—their expectations and planned effort are undermined when a believable path to future possibilities is not clear. We demonstrated effects on expectations and plans to show that just hearing about financial aid opportunities for college creates an immediate effect on current intentions. Although future studies may include longer-term interventions and longer follow-ups to document behaviors in and outside the classroom across time, the current results are important because they document immediate psychological effects. Adolescents in low-income contexts can more effectively reach toward higher goals when they perceive an open path connecting their efforts to their desired college-bound future selves.

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