



Learning from Poor and Minority Students Who Succeed in School

Children's views on success and failure have a big impact on their learning

By Janine Bempechat

When Raymond was four years old, his family moved to the United States from Mexico. As in many immigrant families, everyone worked hard to get ahead in their new country. The children helped their mother deliver newspapers before she started her day cleaning houses. Their father worked on an assembly line during the day, at a gas station later in the afternoon, and at a pizza factory at night. And the parents still found time to encourage their children to achieve in school. "They helped the four of us get through college and graduate school," Raymond recalls, "not with monetary support, but by demonstrating persistence."

This is one family's story of success against the odds. Raymond and his siblings successfully navigated the journey from working- to middle-class status. The unfortunate reality is that, on average, poor and minority students underachieve relative to their middle-class Caucasian peers on a variety of indices, such as GPA, SAT scores, high school completion, and college completion. What is it about Raymond, his siblings, and his parents that has enabled them to prevail where so many others falter?

Relative to the voluminous literature on the causes of school failure, there is little research on how some students succeed against the odds. Most studies have focused on understanding differences between groups, usually comparing middle-class Caucasian students with poor or working-class minority students. Leaving aside the appropriateness of such comparisons, one important result is that we know little about differences between high and low achievers within the same group.

Recent advances in achievement motivation theory have provided a conceptual framework for exploring the ways in which high and low achievers may differ in their approaches to learning. In particular, the focus on children's beliefs about the causes of success and failure has helped us understand why some students embrace academic challenge while others shy away from it.

Bernard Weiner's influential work at UCLA has guided much of the research in achievement motivation over the past two decades. Studying how students explain their own academic success and failure, Weiner has shown that their explanations tend to focus on three broad categories. The first is innate ability or intelligence; many students believe that those who are smart do better in school. The second is effort; many students cite trying hard as a necessary component of achievement. Third, students mention external factors, such as having been lucky enough to study the right material or being the teacher's pet. As one might expect, students tend to attribute failure to lack of ability, insufficient effort, and external factors such as bad luck. Weiner has demonstrated that, in general, those who attribute success to ability and effort tend to fare better in school than those who implicate luck or other external factors.

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Just how children view ability can have important consequences for their levels of motivation. In separate studies, John Nicholls, author of *The Competitive Ethos and Democratic Education*, and Carol Dweck of Teachers College at Columbia University have concluded that children who view ability or intelligence as a quality that is unfixed and changeable are much more likely to tackle risky, challenging tasks and to rebound

from failures by redoubling their efforts. Those who see their ability as fixed tend to choose easy assignments over challenging ones and to be less resilient about failures. (See "[When Bright Kids Get Bad Grades](#)," *Harvard Education Letter*, November/December 1992.) Furthermore, Nicholls has shown that children's beliefs about intellectual ability can shift when they are young, but tend to gel when they reach 5th or 6th grade.

How, then, do high and low achievers within a given racial or ethnic group differ in their attributions of success and failure? Are there any commonalities among high achievers in all groups? And, given the importance of family involvement in schooling, do high and low achievers report any differences in their parents' attempts to foster academic achievement?

These questions drove a recent study of achievement and motivation in students from groups ordinarily considered to be at risk for school failure —because of poverty or minority status, because their first language is not English, or because they live in single-parent homes or have mothers who did not finish high school. From 1991 to 1995, my colleagues and I surveyed more than 1,000 5th- and 6th-graders in ten public and Catholic schools. The students were African American, Latino, Indochinese, and Caucasian, all drawn from poor neighborhoods in the Boston area.

The students completed two questionnaires. The first asked about their perceptions of the reasons for success and failure in mathematics. The second asked how often their parents provided academic help and spoke about the value of schooling and its relation to their futures. To assess achievement, we also administered a 10-minute computational math test. With this information, we examined what beliefs, if any, and what kinds of parental involvement, if any, were associated with higher achievement in mathematics. Additionally, we were able to investigate whether any such relationships were the same or different for the various ethnic groups.

Although there were differences in average math scores across the groups, the higher achievers in all ethnic groups had similar beliefs about the causes of success and failure. They believed that success was due to high ability and, perhaps more important, they did not believe that failure was due to lack of ability. In contrast, regardless of ethnicity, the lower achievers believed that success was due to external factors and that failure was due to lack of ability.

For example, when students were asked why a teacher might choose them to count the money for a class trip, higher achievers in all groups were more likely to answer that it would be because they were "good in math." Lower achievers were more likely to give answers like, "It was my turn."

In addition, the study showed that when compared with their public school peers, African-American and Latino students in Catholic schools had beliefs about success and failure that were more conducive to learning. They were more likely to attribute success to ability and less likely to attribute either success or failure to external factors, such as luck or a difficult test.

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beliefs about the causes of success and failure.

Our findings also spoke clearly against the popular stereotype of poor parents as being uninvolved in their children's schooling. While there were ethnic differences in actual mathematics achievement (with Indochinese students the highest and African-American students the lowest achievers), in all ethnic groups parental involvement was perceived as higher when math achievement was lower. In other words, all children perceived their parents as concerned about

their education—providing academic support by helping with homework, or providing motivational support by emphasizing the importance of education for future economic survival. There is evidence in educational research for the notion that parents tend to increase their involvement when their children are doing poorly. Simply put, it is the lower achievers who need the help.

In light of this study and other research on motivation, what can parents and schools do to promote both academic achievement and positive attitudes about learning? While there is no one path to academic excellence, these findings do point to some lessons for parents and teachers.

Self-Perception of Ability

It is healthy for children to believe they have some measure of innate ability. There is little question that parents' beliefs are critical for their children's academic self-esteem. Researchers such as Susan Holloway at the University of California, Berkeley, have shown that **parents' beliefs about their children's mathematics ability have a profound influence on the children's evaluations of their own ability, their beliefs about the causes of success and failure in math,** and their attitudes toward math. And several studies of successful adults from minority groups indicate that motivational support from parents—statements that stress the value of effort or of education—may be even more important for poor or minority children than whether the parents can help with homework.

In a 1987 study of Asian-American summer school students at Harvard University carried out by Herbert Ginsburg, now a professor at Teachers College, students recalled that their parents supervised their study habits, limited their extracurricular activities, and refrained from assigning them household duties so as to free up time for study. Parents

frequently discussed the relationship between effort, schooling, and success in life, and they supported academic activities by providing resources such as calculators and workbooks. Interestingly, many parents did not provide specific help with homework.

Indeed, Weiner and his colleagues have found that children may interpret unsolicited help from an adult as an indication of low ability. Weiner has also shown that children as young as five can infer a teacher's beliefs about the causes of their success or failure from the teacher's emotional reaction to their performance. A teacher who reacts angrily to failure, for example, is communicating that the student is able to do much better.

Restructure Classrooms for Learning

The ways in which teachers structure their classrooms have a critical impact on children's beliefs about the causes of success and failure. Nicholls has shown that students in traditional, competitively organized classrooms become overly concerned with how they are doing relative to their friends. This in turn makes them very anxious about mistakes and failure. They tend to become focused on whether, rather than how, they can accomplish a task. Learning becomes an exercise in attaining a desired product—the right answer. Under these circumstances, children come to see mistakes and failures as condemnations of their ability.

In contrast, students who work cooperatively in the classroom tend to be less worried about how smart they are relative to others and to focus on learning for its own sake. In cooperatively based classrooms, children are more likely to focus on how they can accomplish a task. They tend to view mistakes as necessary components of learning, and learning as a process that involves sustained effort. Under these circumstances, many children come to see mistakes and failure as opportunities to learn, no matter what they believe about their own abilities. Depending on the type of classroom structure teachers choose, they are communicating a view of success and failure to their students that can have a critical impact on children's beliefs.

Learn from Catholic Schools Our findings suggest that ethnic minority students are at a distinct advantage when they are enrolled in Catholic schools. Relative to their public school peers, Latino students in Catholic schools believed more strongly that success is due to ability. Both Latino and African-American students in Catholic schools were much less likely than their public school peers to attribute failure to external factors such as a difficult test.

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provided that they invest effort.

Did the Catholic school experience foster these adaptive beliefs, or did the students arrive at Catholic schools with these beliefs already in place? It is impossible to know for sure, but the growing literature on the benefits of parochial education, especially for the poorest children, suggests that aspects of pedagogy may contribute to the development of positive attitudes about academic ability. These aspects include high expectations and standards for both academic and social performance, and the belief that all children can excel in school

This study has given us a clear glimpse into the ways in which high and low achievers think about the causes of their successes and failures in school. The most important implication for teachers in their day-to-day work is that all lower achievers, regardless of ethnicity, are at risk for believing that their poor performance results from lack of ability. This belief is potentially very debilitating, for if students do not think they have at least some ability, it makes little sense to them to invest effort in their learning. The challenge for teachers is to help their students maintain a healthy balance between believing that they have the ability necessary to learn, and knowing that effort will help them maximize their ability.

HARVARD EDUCATION LETTER

When Bright Kids Get Bad Grades

by Adria Steinberg

In elementary school, no one worried about Rhonda. Her sixth-grade teachers found her bright and capable and expected her to do well in junior high. Although sometimes anxious in class, Rhonda was aware of being one of the smartest kids--especially when she go another 100 on a spelling test or was the first to finish a math packet.

But seventh grade was more of a trial for Rhonda than anyone had predicted. Some B's slipped onto her report card, and her attitude toward school changed dramatically. Most upsetting to her parents was her declaration, after getting a 75 on a pre-algebra test, that she was not good at math and would probably put off taking algebra.

Most teachers and parents expect a child's grades and achievement test scores in sixth grade to be fairly accurate predictors of success in junior high. But, as Rhonda's story illustrates, this is not necessarily the case.

Why do some bright children start avoiding academic challenges when they reach junior high and stop liking some or all of their classes? Carol Dweck of Columbia University has discovered three areas in which students who continue to meet or exceed expectations differ from those who become "underachievers": their beliefs about intelligence, their responses to difficult academic tasks, and the rewards they look for from schoolwork.

Born or Made?

Most children, according to Dweck, start out with an "incremental" view of intelligence: they think a person gets smarter by learning things and trying hard. But by third or fourth grade kids have encountered--and many have begun to hold--an "entity" theory. According to this view, you are born with a certain amount of native ability that determines how smart you are.

The question is whether these beliefs about intelligence affect students' performance in school. Although Dweck has found a difference between the ways incremental and entity theorists approach academic tasks, she has not found a link between beliefs and elementary school grades. But there is evidence from a recent study that such a link develops when students move on into junior high.

What they do to feel smart and what they must do to learn new things are at odds at the home environment.

Dweck and Valanne Henderson of the University of Illinois questioned 229 entering seventh grades about intelligence. Nearly two-thirds (139) showed a consistent preference for either an entity or an incremental theory. The researchers then used another measure to divide the students in each group into those with high and low confidence in their own abilities.

Comparing students' grades and achievement test scores in sixth grade with their seventh-grade report cards, Henderson and Dweck found some surprises. They expected that entity theorists who had been low achievers would remain so. But in fact many of those who had performed well in sixth grade--and had entered seventh confident of their abilities--were now receiving grades below those predicted by previous performance.

Meanwhile, incrementalists maintained their performance at a level equivalent to or better than their elementary school grades. Even those who had not done especially well in sixth grade--and had begun seventh with low confidence--matched or exceeded their predicted performance. Perhaps most surprising, the low-confidence incrementalists earned higher grades than the high-confidence entity theorists.

In fact, students who held entity theories and had high confidence at the start of seventh grade showed the most pronounced decline of any group. When Henderson did a follow-up study of these same kids at the end of eighth grade, she found continued low performance. They had not recovered from the seventh-grade slump.

I Think I Can't

To explain this decline, Dweck looks at the way children answer the question "When do you feel smart?" Incrementalists cite times when they put effort into something, when they don't understand something and then get it, or when they figure out something new. In contrast, entity theorists point to times when a task is easy for the, when not much effort is required, when they do not make mistakes, or when they finish first.

Insofar as learning involves putting effort into challenging tasks, entity theorists are caught in a serious bind. What they do

to feel smart and what they must do to learn new things are at odds.

For the past decade, Dweck and her colleagues have investigated why and how some children end up in this bind. Dweck has identified two distinct, coherent patterns in the ways children approach difficult academic tasks.

In the maladaptive or "helpless" pattern, children define themselves as having failed soon after reaching a difficult problem, usually attributing their difficulties to a lack of ability and predicting poor future performance. In one experiment they even had distorted recall of past successes: more than a third believed that if the earlier problems were administered again they would have trouble with ones that in fact they had successfully solved.

Those who believe intelligence is a fixed trait tend to try to prove they have it.

Children manifesting a more mastery-oriented, adaptive pattern respond to difficulty by issuing more self-instructions and by planning strategies to overcome failures. In the same experiment, many of these students spontaneously expressed confidence that they would succeed in the future. Twenty-five percent began to use more sophisticated problem-solving strategies than evidenced in earlier, simpler tasks, in all, 80 percent of the mastery-oriented children maintained or improved their strategies as the tasks got more difficult.

No Pain, No Gain

In trying to explain these two patterns, Dweck discovered that the two groups focus on different goals, which can lead them to construe and react to events differently. Those who believe that intelligence is a fixed trait tend to pursue the aim of proving they have it. Setting what Dweck calls performance goals, entity theorists seek positive evaluations of their abilities and try to avoid negative ones.

In one experiment, children who focused on performance goals rejected the chance to learn something new if it involved any risk of error or confusion. They seemed very vulnerable to losing confidence in themselves and thus to falling into the helpless pattern.

In contrast, children who focus on mastery and hence set learning goals are likely to persist in the face of difficulty. They see effort as something that activates ability rather than as an indicator of low ability. When facing challenging academic tasks, they view these as opportunities to get smarter--a much more adaptive response.

Girls at Risk

While most of Dweck's studies involve the upper elementary grades, she and Henderson emphasize that early adolescence is the period most likely to bring out and solidify maladaptive patterns of achievement. The increased importance and uncertainty of success in junior high create a climate in which students want to avoid academic challenges.

What can teachers or parents do to allay anxiety about school and encourage young people to invest effort and pursue challenging studies? One important step is to recognize who may be vulnerable to the helpless pattern.

Asked to single out children with motivation problems, teachers will generally point to those who are not doing well. But the research shows that fifth or sixth graders can be doing fine in school while at the same time holding beliefs and goals that will later make them vulnerable.

Girls may be especially at risk. In one study, brighter girls were twice as likely as bright boys to endorse an entity theory. Three-fourths of the bright girls, but none of the bright boys, preferred academic tasks easy enough to ensure success.

How to Help

Both performance and learning goals, Henderson and Dweck note, are in everyone's repertoire. In one study, Dweck influenced a group of children to focus on performance by heightening the evaluative aspects of the situation, and got another group to focus on learning goals by emphasizing the value of the task to be learned. In other experiments she successfully trained children to attribute failures to lack of effort rather than to low ability.

But can teachers have a similar influence on students in the classroom? Carol Ames of the University of Illinois warns against simplistic applications of motivation research to classroom practice.

For example, one lesson teachers have drawn from research is that they should provide children with success experiences and plenty of positive feedback. Although this may often be a good strategy, it is not equally helpful for all children in all situations.

When the work becomes more difficult, children who have come to expect a string of successes may fall apart. In the long run it may be better for students to learn to view their mistakes--and the feedback that accompanies these--as sources of information for future efforts rather than as evidence of low ability.

We spend too much time looking at motivation as an individual trait, says Ames, and not enough looking at "how the organization and structure of the classroom shapes and socializes adaptive and maladaptive motivation patterns." In her work in the Champaign-Urbana schools, Ames asks teachers to investigate the possible negative effects of such daily occurrences as "public evaluation practices, normative comparisons, extrinsic rewards, ability grouping, and emphasis on

production, speed, and perfection."

What can teachers do instead? Some teachers and researchers are finding that portfolio assessment encourages students to focus more on their own learning and less on how they compare with others in the class or how the teacher judges their work.

This appears to be particularly true when self-assessment is built into portfolio work. Students write comments about their own work as they produce it and then participate in selecting certain pieces--and explaining the selections in writing--for inclusion in their final portfolio.

Charged with the responsibility for tracking their own progress, students become, in an sense, the chroniclers and judges of their own work. Perhaps, if portfolio assessment becomes widespread, more students will be able to retain their initial incremental views of intelligence and avoid falling into a helpless pattern when they reach work that is difficult for them.