Empirical study

No pain no gain? Social demographic correlates and identity consequences of interpreting experienced difficulty as importance

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ABSTRACT

Community college students are less likely to graduate than university students, perhaps because their difficult life circumstances increase their vulnerability to misinterpreting the identity implications of experienced difficulty with schoolwork. Without guidance, they may fail to take a "no pain, no gain" perspective in which experienced difficulty with schoolwork implies the importance of succeeding in school. Two studies support this prediction: Study 1 (N = 1035) finds that education is associated with higher likelihood of interpreting experienced difficulty as signaling task importance among adults. This effect is pronounced for racial minorities. Study 2 (n = 293) finds that students who disagreed that experienced difficulty implies impossibility were more certain about attaining their academic possible identities and more willing to sacrifice to attain these identities. Moreover, community college students benefited more than university students from being guided to consider what experienced difficulty might imply or from considering that experienced difficulty implies importance, rather than impossibility.

1. Introduction

Currently, almost two thirds (65.9%) of American high school graduates start attending college immediately after graduating from high school (National Center for Educational Statistics, 2016). Of those, the majority start at a community college (Cabrera & La Nasa, 2001; Rowan-Kenyon, 2007). Unfortunately, of the total estimated 10.1 million students currently enrolled in community colleges, about 8 million will not graduate – graduation rates for community colleges average 21% – 79% do not graduate (Ginder, Kelly-Reid, & Mann, 2014). This community college graduation rate is less than half the graduation rate of students entering four-year colleges, about 54% of whom graduate with a bachelor's degree within six year's time (ACT Research and Policy Issues, 2012). That most high school graduates start college implies that lack of college aspirations is not the problem – entering students likely do imagine "college graduate" as an academic possible future identity – an academic identity that they might have in the future. However, that most students fail to graduate implies that

the problem is translating this academic possible identity into persistent action.

Students are right to focus on their academic possible identities—having credentials beyond high school is increasingly necessary in modern societies. Low education is associated with worse outcomes on almost every dimension of human development including unemployment, poverty, mental and physical health problems, and healthy family relationships (e.g., Card, 1999; Daly & Bengali, 2014; Leonhardt, 2014; Morgan & David, 1963; Valletta, 2015; for a full review, Oyserman, 2015). Each of the negative effects of low education are particularly likely for racial-ethnic minorities with less than a college education (Ahmed, Hill, Smith, & Frankenberger, 2007; Sassi, Devaux, Cecchini, Church, & Borgonovi, 2011; Shi & Stevens, 2005; U.S. Bureau of Labor Statistics, 2014). Having a college degree is buffering, and this is especially true for stigmatized racial-ethnic minorities. Though there are likely a number of underlying processes explaining the link between education and life outcomes, one of the important ways that college education likely reduces economic and health risk is by influencing the likelihood of chronically experiencing lack of choice and control (for reviews, Lewis & Oyserman, in press; Oyserman & Fisher, in press). Lack of choice and control, in turn, are posited to increase the likelihood that experienced difficulty is interpreted as implying impossibility rather than importance

(Elmore, Oyserman, Smith, & Novin, 2016; Oyserman, 2015; Oyserman, Smith, & Elmore, 2014). We take the literature documenting the economic and social costs of low community college graduation rates, the economic and social benefits of graduation, and the gap between high desire and low success as pointing toward the need to develop scalable solutions to support college completion. In the current paper we focus on one scalable solution, which is guiding productive interpretation of experienced difficulty, especially among students likely to experience much difficulty. We detail our reasoning and studies next.

2. Identity-based motivation and interpretation of experienced difficulty with college

Identity-based motivation theory (IBM) describes the process by which interpretation of experienced difficulty operates to influence the self, motivation, and engagement (IBM, Oyserman, 2007, 2013, 2015). A core prediction of IBM is that it is not experienced difficulty per se but rather how that experienced difficulty is interpreted that matters for whether academic possible identities and strategies to attain them come to mind and influence engagement. Following common definitions of academic engagement (Fredricks, Blumenfeld, & Paris, 2004; Glanville & Wildhagen, 2007; Landau, Oyserman, Keefer, & Smith, 2014; Libbey, 2004; Veiga et al., 2012), we operationalized academic engagement in terms of intentions – the degree to which individuals intend to prioritize and put their best effort into a given task, and behavior – the extent that they actually do spend time, study, ask questions, and persist. There is some evidence that interpretation of experienced difficulty influences engagement. Thus, if engagement is operationalized as time spent on a subsequent academic task, students led to recall times in which they interpreted their experienced difficulty with schoolwork as implying schoolwork's importance were more engaged than students led to recall a time in which they interpreted their experienced difficulty with schoolwork as implying schoolwork's impossibility (Smith & Oyserman, 2015).

IBM predicts that social stratification (including social class and racial-ethnic minority status) matters in part by changing the odds that people will experience success-likely vs. failure-likely contexts and hence need to interpret experienced difficulty (Lewis & Oyserman, in preparation; Oyserman & Fisher, in press; Oyserman et al., 2014). Experienced difficulty can be interpreted as implying importance, "no pain, no gain" and highlight the need to sacrifice to work toward a possible academic identity and to come up with strategies to do so (Oyserman, Bybee, & Terry, 2006). But experienced difficulty can also be interpreted as implying impossibility, "not worth my time" and result in shift in effort and attention to other goals. Middle school students guided to interpret experienced difficulty with schoolwork as implying importance performed better on a subsequent test of fluid intelligence than those guided to interpret experienced difficulty with schoolwork as implying impossibility of success (Oyserman & Fisher, in press).

These insights have been used to develop an identity-based motivation intervention that, when tested in a randomized control trial intervention, improved the attendance and grade point average of low income and minority students (Oyserman, Terry, & Bybee, 2002; Oyserman et al., 2006). For example, in one randomized control trial of the identity-based motivation intervention, eighth grade students in the control condition went to school as usual and experienced the usual difficulties with schoolwork without structured interpretation (Oyserman et al., 2006). They were followed through eighth grade and the next year as they transitioned to high school. The identity-based motivation intervention occurred twice a week in the beginning weeks of the school year for a total of 12 sessions, ending before the first quarter marking period ended. Students randomly assigned to the intervention condition participated in in-class small group activities. Activities focused on the three pillars of IBM (connection, strategies, interpretation of experienced difficulty), with the goal of fostering three norms. These norms were first, that everyone has academic possible identities and can have strategies to attain them. Second, that next year and adult possible identities – the selves one believes one might become in the near and the more distal future, are linked. Third, that along the way everyone experiences difficulties and that experiencing difficulties is a sign that one is working on a task that is important, worth one's while.

At baseline, intervention and control group did not differ on any of the obtained measures (school grades, attendance, homework time, in-class behavior including teacher report of engagement and possible identities) and no difference was expected given randomization to group. However, at the end of eighth grade and at the end of ninth grade the following school year, students in the intervention group had better grades, spent more time on their homework, were more engaged by teacher report, had better attendance and standardized test scores compared to control group students. Effects were mediated by change in school-focused possible identities and strategies to attain them. Results implied that vulnerable students are more likely to succeed if guided to interpret experienced difficulties with schoolwork as the importance of these tasks.

Although the initial test involved middle school students, later experiments demonstrated that interpretation of experienced difficulty effects are not limited to vulnerable middle school students. For example, college students were led to recall a time they interpreted experienced difficulty with schoolwork either as a sign of task impossibility or as a sign of task importance (Smith & Oyserman, 2015). Students in the interpretation of experienced difficulty as importance group rated academics as more central to their identity. They also performed better on a test of fluid intelligence. In addition, college students guided to focus on interpretation of experienced difficulty as importance generated more academic possible selves and strategies to attain them than college students guided to focus on interpretation of experienced difficulty as impossibility (Oyserman, Novin, Smith, Elmore, & Nurra, in preparation). The effect of guided focus was not moderated by how much participants endorsed the interpretation of experienced difficulty they were guided to focus on, suggesting that effects are due to cuing associated knowledge in memory rather than due to endorsement itself (for further discussion of how priming works, see Forster, Liberman, & Friedman, 2009).

Prior studies on guided interpretation of experienced difficulty highlight the effect of having people focus on one or another interpretation, but people also differ in their chronic (trait) interpretation of experienced difficulty (Fisher & Oyserman, 2016; Oyserman et al., in preparation). Across studies, when interpretation of experienced difficulty as importance and as impossibility are measured, people agree more with the idea of interpreting experienced difficulty as importance and less with the idea of interpreting experienced difficulty as impossibility. However, across studies each interpretation of experienced difficulty contributes separately to variance in relevant constructs – including efficacy and locus of control (Fisher & Oyserman, 2016; Oyserman et al., in preparation). The correlation between the two scales (interpretation of experienced difficulty as importance, interpretation of experienced difficulty as impossibility) is low with the confidence interval of the average correlation ranging from −0.13 to −0.06 in one set of four studies (Fisher & Oyserman, 2016) and the correlations ranging from −0.18 to 0.08 in another set of four studies (Oyserman et al., in preparation).