

POSTSECONDARY
VALUE COMMISSION

PSYCHOLOGICAL PERSPECTIVES ON POSTSECONDARY EDUCATION RETURNS

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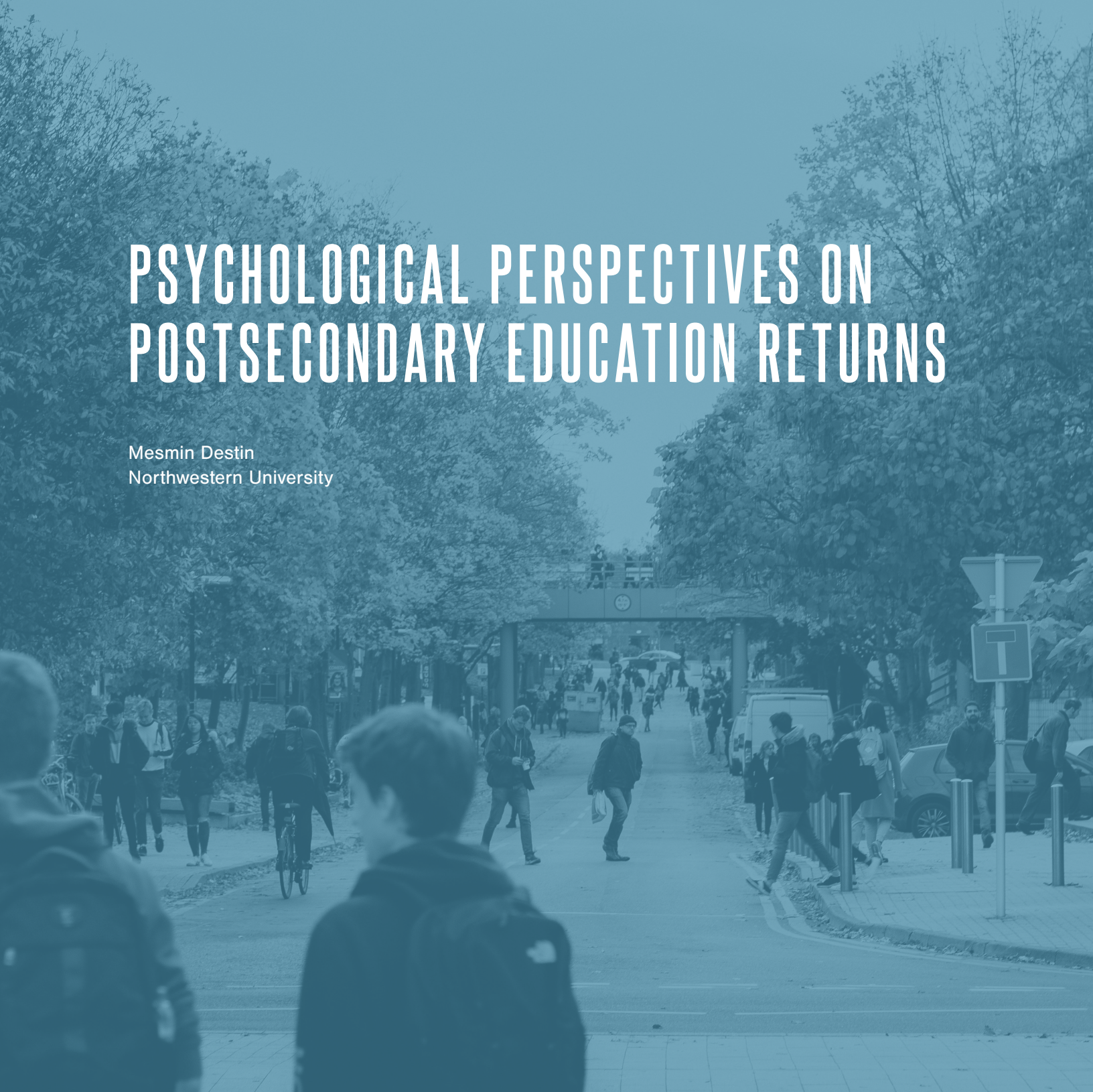


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This paper is one in a foundational research series for the Postsecondary Value Commission authored in summer 2019 by scholars with diverse backgrounds and expertise. The research presented in these papers applies an equity lens to the philosophical, measurement, and policy considerations and assumptions underlying key components of postsecondary value to students and society, including investment, economic and non-economic returns, mobility, and racial and socioeconomic justice.

The Postsecondary Value Commission consulted this foundational research as it developed a conceptual definition of postsecondary value, a framework for measuring how institutions and programs create value and ensure equitable outcomes, and an action agenda with recommendations for applying the definition and framework to change policies and practices. Through this breadth of scholarship, the commission was better able to define the value of postsecondary education and the role institutions can play in creating a more equitable and fair United States.

Following the May 2021 release of the commission's findings, these foundational papers were prepared for publication. The views and opinions expressed in these papers do not necessarily reflect the positions of individual members of the Postsecondary Value Commission or the organizations they represent.

The Postsecondary Value Commission along with the Bill & Melinda Gates Foundation and Institute for Higher Education Policy are deeply grateful to the authors of this series. The authors' extensive expertise and thoughtful engagement in this work provided the foundation for the commission to develop an informed, innovative, and equity-driven framework. They also thank Deborah Seymour for editing the written products and the team at GMMB for their creative design and layout.

Suggested citation: Destin, M. (2021). Psychological Perspectives on Postsecondary Education Returns. Postsecondary Value Commission.

INTRODUCTION

Students who pursue postsecondary education are likely to do so in part because of expectations about what benefits a degree will bring to their lives. A wide range of institutional characteristics, such as financial resources, high quality teaching, and effective advising opportunities, shape the postsecondary outcomes of students. These characteristics matter, in part, because they influence how students experience their time in college. The scientific study of this subjective experience of college students demonstrates important psychological factors that affect their outcomes and can be divided into three categories: students' beliefs about themselves, their beliefs about school tasks, and finally their beliefs about structures and society. These factors are summarized in Table 1 below. For example, some studies indicate that even before reaching college, students can be motivated by learning about the financial returns of higher education and the availability of financial aid to pay for college (Destin, 2017; Destin & Oyserman, 2009, 2010). Another area of research shows that for college students from family backgrounds with limited economic resources, the socioeconomic mobility resulting from educational attainment may lead to a sense of uncertainty about their place in the world (Destin et al., 2017) and instability in their post-college workplaces (Stephens et al., 2019). However, the strongest and most extensive evidence in this area focuses on the psychological factors that affect college student achievement and completion.

A growing body of experimental studies (for a review, see Harackiewicz & Priniski, 2018) provides strong evidence for how these psychological factors affect academic achievement and wellbeing in college, with implications for college completion and long-term economic trajectories. Some of these factors are especially consequential for students who face barriers like socioeconomic disadvantage or racial-ethnic group stigma, discrimination, and underrepresentation in higher education and beyond. A deeper understanding of each type of psychological factor can contribute to the development and refinement of more effective institutional practices and social policies to support positive student outcomes. More attention to these factors can help educational institutions to effectively support the success of their students during college and beyond. Accordingly, institutions of higher education can improve the postsecondary value they provide by effectively incorporating research-backed practices that support students' psychological wellbeing in ways that encourage their success.

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Table 1. Summary of Psychological Factors That Affect Students' Higher Education Experiences

Psychological Factor		Institutional Practice or Social Policy	Impact on Students
Thoughts About Self	Future identity, or the way that a person imagines what is likely for their life	Advising practices that encourage college students to meaningfully envision and work toward their desired futures	Students become more likely to engage with academic opportunities and institutional resources with positive implications for achievement and wellbeing
	Social/cultural identity, or feelings of connection to important groups	Institutional structures and resources that embrace racial-ethnic and socioeconomic backgrounds that have been historically marginalized	
Thoughts About School Tasks	Utility-value, or how course material relates to students lives and goals	Ongoing professional development for instructors to engage in classroom practices that convey an emphasis on learning and the value of academic effort	Students find greater meaning in academic tasks and become more likely to persist when facing difficulty
	Learning vs. selection, or the stated purpose of educational tasks		
	Mindset, or promotion of the idea that people can learn, grow, and enhance their abilities		
Thoughts About Structures & Society	Climate, or how institutions welcome and value students from historically marginalized communities	Visible supports for students from economically disadvantaged backgrounds	Students have increased confidence in their ability to succeed and commitment to their goals
	Perceptions of mobility, or students' notions about the potential for improvements in their economic circumstances	Investment in efforts to reduce economic inequality in local and surrounding communities	

STUDENTS' BELIEFS ABOUT THEMSELVES

Students' thoughts and beliefs about who they are—their identities—have strong effects on their postsecondary outcomes. One specific aspect of student identities that warrants attention is a student's future identity, or the way that a young person imagines how their life is likely to unfold. Future identities are shaped by students' environments and influence how they engage with academic opportunities. For example, one study demonstrated that when students are guided to think about their future career and financial stability after college, they are better able to successfully complete academic tasks compared to when students are guided to think about the stress of their loans and financial instability (Destin & Svoboda, 2018). Similarly, when college students from lower socioeconomic status (SES) backgrounds are led to think about their desired future careers and lifestyles, it leads to increases in their academic effort and other positive academic outcomes (Destin et al., 2018). Further, experiments demonstrate that activating desired future identities is most effective in contexts where students have support to succeed (Oyserman et al., 2015) and opportunities to connect their visions for the future with concrete plans (Chen et al., 2017; Oettingen et al., 2015). These studies of future identity suggest that advisors and other institutional supports should engage college students in ways that allow them to meaningfully envision and work toward their desired futures.

In addition to future identity, another important area of students' thoughts about themselves comes from studies of social and cultural identity. For example, in one series of studies, college students from underrepresented racial-ethnic groups performed better on academic tasks in contexts where they had opportunities to celebrate their cultural heritage (Brannon et al., 2015). Relatedly, students from underrepresented racial-ethnic groups earned higher grades in college if they were randomly assigned to encounter orientation materials and testimonials conveying that academic difficulty is not a signal that they do not belong (Walton & Cohen, 2011; Yeager et al., 2016). Finally, students from groups that have been historically marginalized in postsecondary education experience academic and psychological benefits when learning environments provide opportunities to consider the strengths that they have gained from their life experiences (Destin et al., 2021; Hernandez et al., 2021). In one series of studies, first-generation college students earned higher grades after hearing the testimonials of students from a range of diverse backgrounds in a way that emphasized difference and diversity as a part of success rather than a barrier (Stephens et al., 2014; Townsend et al., 2019). This experimental treatment closed a gap in achievement between first-generation and continuing-generation college students of .30 grade points that emerged in the control group. Institutions that meaningfully support a broad range of racial-ethnic cultural groups and activities and celebrate the diversity of their student body increase the likelihood that students from underrepresented groups can express their full potential.

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STUDENTS' BELIEFS ABOUT SCHOOL TASKS

Another set of significant psychological factors for postsecondary outcomes pertains to students' beliefs about school tasks. The ways that college instructors design their classrooms and introduce assessments can dramatically affect students' beliefs about school tasks and subsequent performance. One important area of work shows that when students are given opportunities to consider the utility-value of a school task, or how course material and assignments matter in relation to their own lives and goals, they earn higher grades, (Harackiewicz et al., 2016). This emphasis on conveying utility-value is especially beneficial in STEM courses and for students who are first-generation college students or from underrepresented racial/ethnic groups.

In general, classroom practices support better postsecondary outcomes for more students when they convey to students that effort, improvement, and learning are more important than simply demonstrating inherent ability. Practices focused on improvement express a growth, rather than fixed, mindset to students, which encourages them to approach challenging academic tasks and can lead to higher academic achievement (Dweck, 2006; Yeager et al., 2016). In one growth mindset experiment, students were randomly assigned to complete an online orientation that encouraged a growth mindset as they approached their first year of college. First-generation college students and students from underrepresented racial-ethnic groups who were randomly assigned to the growth mindset orientation were more likely to remain enrolled in college at the end of their first year, reducing the gap in enrollment between them and their peers by 40%. Importantly, more of a fixed mindset among instructors is associated with larger racial-ethnic group achievement gaps (Canning et al., 2019) and student beliefs can be meaningfully shaped by instructor practices that promote effort and provide opportunities for students to grow from challenge (Murphy & Destin, 2016). A related area of work demonstrates that when instructors present academic tasks as a way to sort and select students by their intelligence levels, first-generation college students experience a threat that leads them to perform worse than continuing-generation students. In comparison, when instructors explain that assessments are designed to promote learning, there are no differences in performance by student background, and first-generation college students subsequently perform better on those tasks than when they are framed as tools for selection (Jury et al., 2015). Further, framing assessments as tools for selection leads instructors to demonstrate biases in evaluation that result in better grades for students from higher SES backgrounds (Autin et al., 2019). Altogether, the evidence suggests that instructors should receive ongoing professional development to engage in classroom practices that convey an emphasis on learning and the value of academic effort.

STUDENTS' BELIEFS ABOUT STRUCTURES AND SOCIETY

Students' beliefs about structures and society can also influence their postsecondary outcomes. Especially for students from lower SES backgrounds, as they navigate institutions of higher education, their perceptions of opportunities in society evolve in ways that affect their academic outcomes. More specifically, students attending colleges that have inclusive atmospheres that genuinely welcome students from a variety of diverse backgrounds tend to perform better academically. In contrast, at selective institutions, students from lower SES and underrepresented racial-ethnic backgrounds often encounter “chilly” climates characterized by intergroup antipathy or institutional neglect (Ostrove & Long, 2007). In experiments, the more that students encounter cues

that the institution does not support students from their backgrounds, the less capable they feel of succeeding academically. On the other hand, when an institution promotes practices and policies that convey warmth and support for students from lower SES backgrounds in particular, those students subsequently feel equally capable of success as their higher SES peers (Browman & Destin, 2016). These studies suggest that institutions can increase their visible supports for students from economically disadvantaged backgrounds in ways that make full participation in college life more universally accessible.

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In addition to students' experiences and beliefs relevant to specific institutions, they also develop important beliefs about the nature of society as a whole that influence postsecondary outcomes. Many students are motivated to pursue education because of its link to the potential for economic advancement and financial stability (Ma et al., 2016). For students from lower SES backgrounds in particular, a stronger belief that socioeconomic mobility occurs in society predicts higher academic persistence and achievement. Those who instead encounter evidence that socioeconomic mobility is unlikely tend to show decreases in academic persistence and performance (Browman et al., 2017). Experiments show that these important beliefs about opportunity are malleable, and can be shaped by experiences during childhood and the postsecondary years. One factor that weakens people's belief in the likelihood of socioeconomic mobility is economic inequality (Browman et al., 2019; Davidai, 2018; McCall et al., 2017). These findings suggest that efforts to reduce inequality and increase actual opportunities for socioeconomic mobility can increase the ability of students to reach their postsecondary goals. Through this mechanism, institutions that play a meaningful and visible role in efforts to reduce inequality in their communities and beyond contribute to increasing the value of higher education.

CONCLUSION

By attending to various aspects of the psychological experience of students during college, institutions are better able to support students' academic success, wellbeing, and progress in pursuing their desired lifetime trajectories. The categories of psychological considerations presented here are not comprehensive; however these findings indicate the importance of institutional practice in shaping the value students receive from their education. These findings also suggest that efforts should involve the entire educational institution from individual instructors to higher level financial decision-makers. In other words, attention to several of these factors simultaneously would help institutions move toward holistic cultural change.

The majority of the evidence base on the role of psychological factors in college student outcomes comes from studies of relatively selective four-year colleges and universities. It remains less clear how some of these processes relate to the experiences of students at other types of institutions. However, most of the described psychological factors and approaches are especially focused on improving the experience of students from groups who have been historically excluded from or marginalized within higher education. For example, building upon students' future identities through

comprehensive advising may be especially beneficial for students from lower SES backgrounds. This is likely because future identity matters most for students from groups who may be more likely to be intimidated by unfamiliar academic situations than students from other groups. Similarly, attention to social identities through the promotion of cultural groups can be especially beneficial for students from underrepresented racial-ethnic groups who might otherwise experience cultural isolation. However, these approaches do not have adverse effects on students from other backgrounds.

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Attention to students’ thoughts about school tasks through evidence-based teaching strategies can have positive effects on all students’ academic achievement. However, several studies demonstrate that these strategies can be especially beneficial for students from lower SES backgrounds and first-generation college students who are less likely to be familiar with unwritten norms of college. Finally, the same is true for factors related to students’ thoughts about structures and society. Inclusive financial policies and institutional attempts to reduce inequality and expand socioeconomic opportunities have the most positive effects for students from lower SES backgrounds, and they do not have any consistent negative effects on the outcomes of students from wealthier or higher SES backgrounds.

A growing understanding of the role of psychological factors in supporting college student achievement, success, and completion can help educational institutions to better reach their missions. Further, increasing rates of college success, especially for members of marginalized groups, can extend the possible economic benefits of college completion to more people including increased financial stability and cycles of upward socioeconomic mobility. A realization of the full potential of attention to psychological considerations, however, requires deep commitment to institutional change and the ongoing dedication of necessary resources.

There remains a need for more research investigating the factors that influence students’ experiences after college. Higher education can provide many long-term benefits for students’ psychological wellbeing, including higher levels of social status and individual agency among graduates (see Fiske, 2011). At the same time, however, the socioeconomic mobility associated with postsecondary success can also strain important networks of social support and even lead to negative trajectories of important indicators of physical health (Destin, 2019; James et al., 1983; Miller et al., 2015). Assessments of the value of postsecondary education should take into account the effectiveness of the psychological supports institutions use to promote student success, as well as the overall impact of success on economic, psychological, and physical wellbeing.

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