

Applying Prospect Theory to Student Outcomes: Framing Costs Using Student Perceptions of Teaching Effectiveness

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ABSTRACT

Considerable research in higher education has focused on student learning, engagement, and satisfaction. A relatively new application within higher education research, Prospect Theory (Kahneman & Tversky, 1979) provides promising insights to student perceptions and behaviors. Among other things, Prospect Theory has helped to explain why consumers, investors, and patients, to name a few, experience the pain of a “loss” more severely than the pleasure of an equivalent “gain,” and how that gain or loss frame impacts behaviors and decisions. A recent higher education study utilizing Prospect Theory framed gains and losses on student perceptions of college expenses. A primary purpose of this study is to evaluate whether student perceptions of teaching effectiveness can be used as a proxy for gain-loss framing. Secondarily, this study seeks to determine whether such a gain-loss frame contributes to Astin’s (1993) “Input-Environment-Outcomes” assessment model in which student “Input” characteristics combine with “Environmental” characteristics to predict “Outcomes” of student course satisfaction and course learning.

Survey responses and measures of student performance were collected from college students enrolled in an upper level business course across three terms. Measures of teaching effectiveness (Delaney et al. 2010) and student engagement (Dixson 2010) along with additional measures of student background, effort, satisfaction, and learning are examined. A factor analysis revealed measures of teaching effectiveness aligned across two dimensions, summarized here as teacher “helpful interaction” and “style.” A positive gap between experience and expectations, where student rating of teaching effectiveness met or exceeded student-reported importance, serves as the gain frame. A negative gap, where student rating of teaching effectiveness fell below student-reported importance, serves as the loss frame.

The results suggest the gain-loss frames of teaching effectiveness help explain the relationship between student effort and some measures of student satisfaction. The results also suggest the gain-loss frames are important in predicting levels of student course learning and satisfaction. Based on these results, the author provides suggestions on how faculty might use such knowledge of gain-loss frames to improve student outcomes.

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