Judgement and Decision Making[1][2]

Goals are "internal representations of desired states" (Austin & Vancouver, 1996, p. 338). Goals research can be separated into three focal areas of *goal choice, goal setting,* and *goal pursuit*. A large amount of research has clarified some of the mechanisms through which goal setting and pursuit operate. For example, setting *specific, measurable, actionable, realistic,* and *time-bound* (SMART) goals often increases the diligence with which individuals pursue those goals (Locke & Latham, 2002). In such situations, however, the individual has already made the decision to pursue that goal to which SMART characteristics will be applied. The focus here is to discuss how individuals initially choose the goal to be pursued, which is known as goal choice. At any given point in time, an individual may have several different goals from which to choose when deciding how to act. For example, a student may have an exam the following day (goal 1) but the student may also want to attend a friend's party (goal 2). As such, the individual must decide whether to pursue goal 1 and study or goal 2 and party. The question then is what makes an individual choose goal 1 over goal 2? When considering which goals to choose, individuals consider how likely a goal is to be accomplished (*expectancy*) and how valuable the goal's outcome is (*valence*). In short, individuals choose the goals with the largest expectancy and valence, or goals that are most likely to be achieved and produce the largest reward (Steel & Konig, 2006; Vancouver, Weinhardt, & Schmidt, 2010; Vancouver, Weinhardt, & Vigo, 2014). This expectancy-valence perspective assumes that the individual decision maker has unlimited information processing capabilities and will thus always choose the best goal, which is, unfortunately, not the case.

Choosing Less-Than-Ideal Goals
Research has consistently shown that individuals choose goals ultimately not in their best interest (Steel & Konig, 2006). For example, several students repeatedly choose goal 2 above (party) when goal 1 (study) will clearly lead to better grades, more job opportunities, and higher income. Choosing a goal that is not in one's best interest is known as *bias,* which occurs when individuals cannot completely process all of the available information to make the best goal choice (Hilbert, 2012). The most notable researchers studying these processes are the Nobel Prize winning psychologists Daniel Kahneman and Amos Tversky. These researchers developed *prospect theory (*Kahneman & Tversky, 1979), which shows several biases to which individuals frequently succumb.

First, individuals tend to have biased expectancy beliefs for rare events such that they overestimate the likelihood of the rare event occurring. Winning the lottery is an extremely rare event and yet a large portion of the population continues believing the probability is much higher than reality. With the example above, earning an A in a class is rare compared to earning a B or C. As such, students may overestimate the likelihood of earning an A, which may cause them to choose goal 2 (party) rather than goal 1 (study). Second, the value of a goal diminishes as individuals' initial standing on the goal increases. Consider, for example, that two students chose goal 1 above (study) and that their exam score would be their final course grade. Assume each student was guaranteed 5% extra credit on the exam for writing a one-page summary of their exam studying process. Now, consider that student 1 has an overall grade of 95% and student 2 an overall grade of 65%. Prospect theory shows that student 2 will find the extra credit goal far more valuable than student 1 because student 1 begins with a much better grade (95%) than student 2 (65%), so a 5% increase is less valuable to student 1 than it is to student 2. Third and finally, individuals give more weight to information framed negatively than to the same information framed positively.

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As such, student 1 above would be more likely to choose the extra credit assignment if framed as *not* doing the assignment would deny the student a chance at 100% rather than saying doing the assignment would improve the student's grade to 100%. An example of such negative framing may be, "You essentially already have a 100% in the class. It's yours to lose if you don't do the extra credit." Thus, although expectancy and valence determine which goals individuals will choose, such individuals do not always have accurate expectancy and valence beliefs, which can lead to choosing a less-than-ideal goal.

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