

When Do People Pay to Improve Their Chances of Success?

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Abstract: Consumers often have to decide whether to incur a cost in order to increase their chances of success (or avoiding failure). For example, consumers have to decide whether to pay for a vaccine that increases their chances of avoiding illness, or whether to pay for a class that increases their chances of passing an exam or earning a promotion. In our research, we investigate how people make these kinds of decisions. In so doing, we offer a theory called *prospective outcome bias*. According to this theory, when people decide how much they value an improvement in their chances of success (e.g. from 80% to 90%), they place too much emphasis on how much they value the *outcome* of that improvement (e.g. the 90% chance of success) relative to the initial chance of success that they would have to begin with (e.g. the fact that they would be successful 80% of the time anyway). This produces predictable biases and mistakes in consumers' valuations of improvements. First, we find that people are willing to pay more for a 10 percentage point improvement in their chances of winning when their chances are already high (e.g., 80%) than when their chances are relatively low (e.g., 10%). Second, and contrary to theories that posit risk aversion and loss aversion, we find that consumers generally *overpay* for opportunities to improve their chances of success. Third, we find that consumers will pay more to slightly improve their chances of attaining a large reward (e.g., a 1 percentage point improvement from 89% to 90% in their chances of winning \$100) than to substantially improve their chances of attaining a small reward (e.g., a 10 percentage point improvement from 80% to 90% in their chances of winning \$10). Together, these findings provide robust support for our theory of prospective outcome bias, while also suggesting that the way that consumers value goods that *improve* their chances of success is meaningfully different from how consumers value goods that are not framed as improvements.