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Tyson Barrett  
*Utah State University*

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# Delay discounting affects entrepreneurial intention and action

Tyson S. Barrett  
Utah State University

Mentor:  
Daniel Holland, Ph.D.  
Utah State University

**Table 1- Predictors of Entrepreneurial Action**

| Predictors  | Odds Ratio of Action |
|---|----------------------|
| Delay Discounting   | 6.289**              |
| Self-Efficacy   | 4.849*               |
| * = significant at a p-value of 0.05      ** = significant at a p-value of 0.01 |                      |

The odds ratio demonstrates the amount the odds of having acted entrepreneurially increases for every one unit increase in the predictor. Therefore, a one unit increase in delay discounting results in 6.289 times the odds of having acted. A one unit increase in self-efficacy increases the odds by 4.849 times.

## I. Introduction

Delay discounting impacts every decision a human makes when given the option of a sooner or a later receipt of a reward. This tendency results in individuals giving up bigger, later rewards for smaller, sooner ones. However, individuals differ in their level of discounting according to their innate tendency and the situation. For example, some individuals naturally discount future rewards more, resulting in preferring even smaller rewards sooner.

Because delay discounting affects such a broad spectrum of decision making, the authors hypothesized that delay discounting would affect an individual's intentions and actions of starting a business.

This relationship is important due to the necessary preparation that an entrepreneur needs to conduct to increase the venture's likelihood of succeeding (Merz, Shroeter, & Witt, 2010). Therefore, if many nascent and intending entrepreneurs have high delay discounting tendencies this may weaken their desire to prepare adequately, resulting in more failed ventures. Therefore, the study seeks to find the relationship between the level of delay discounting of an individual and his or her intentions and actions in regards to entrepreneurship.

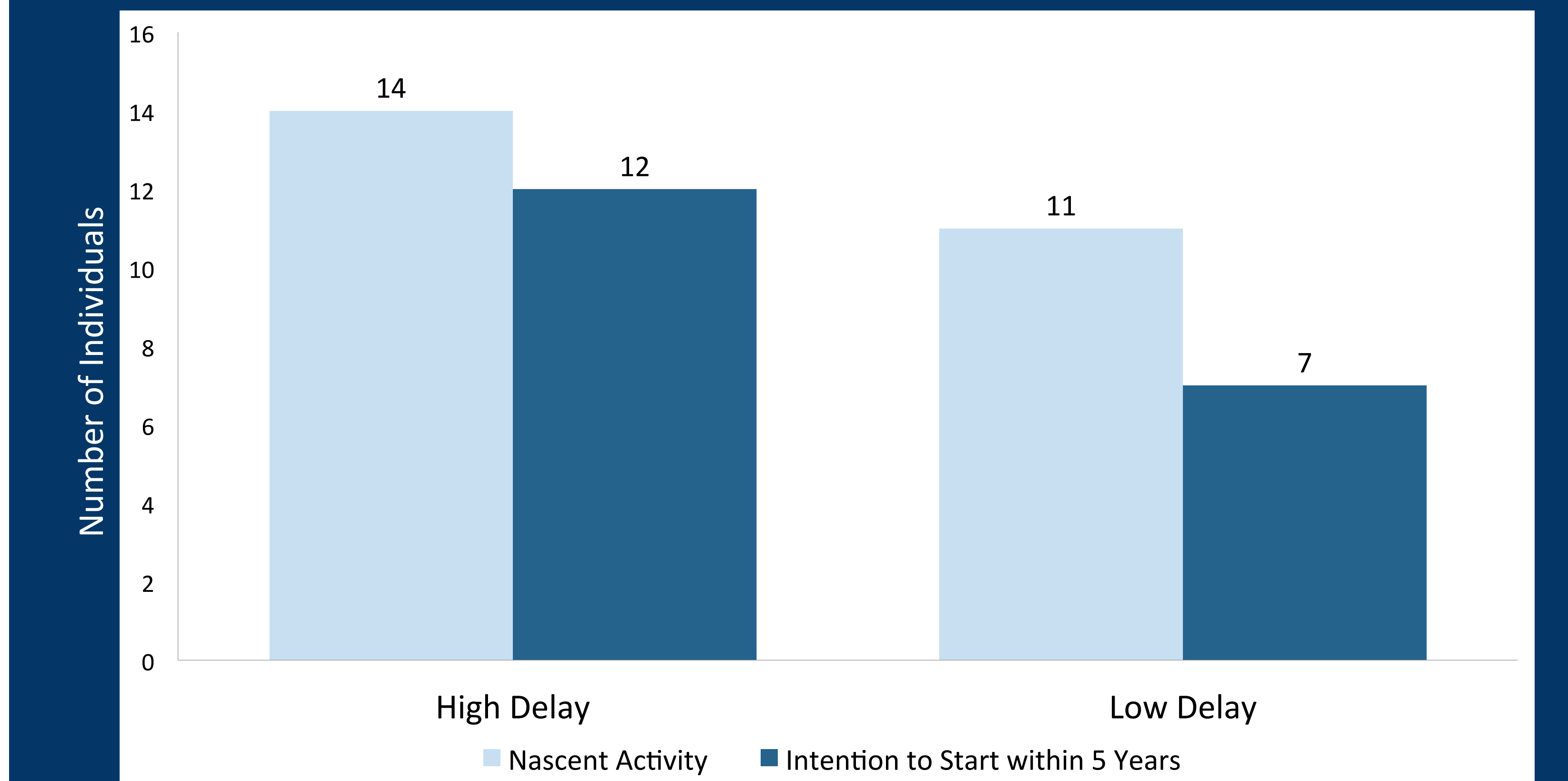
## II. Methods

A questionnaire which included demographics, school major, risk-taking preferences, entrepreneurial experience and intention, and delay discounting was administered to 78 subjects. To measure the discounting, we examined participant's preferences regarding a series of scenarios of a smaller, sooner versus a larger, later reward. By so doing, we were able to find the value an individual placed on a later reward. As seen in Figure 1, the further out a reward is, the less the subjective value to the participant. The results of the scenarios were analyzed using the area under the curve (Madden, 2010).

## III. Results

The results indicated that higher levels of delay discounting significantly increased the likelihood of intending to start a business within five years. It does not, however, increase the likelihood of intending to start a business in general. Results also demonstrated that higher levels of delay discounting was a significant predictor of nascent entrepreneurship (i.e., in the beginning stages of entrepreneurship). Thus, high levels of delay discounting predicts the timing of entrepreneurial intention and action (see Figure 3). Entrepreneurial self-efficacy was also a predictor of both intention and action.

**Figure 3 – High vs. Low Delay Discounting**

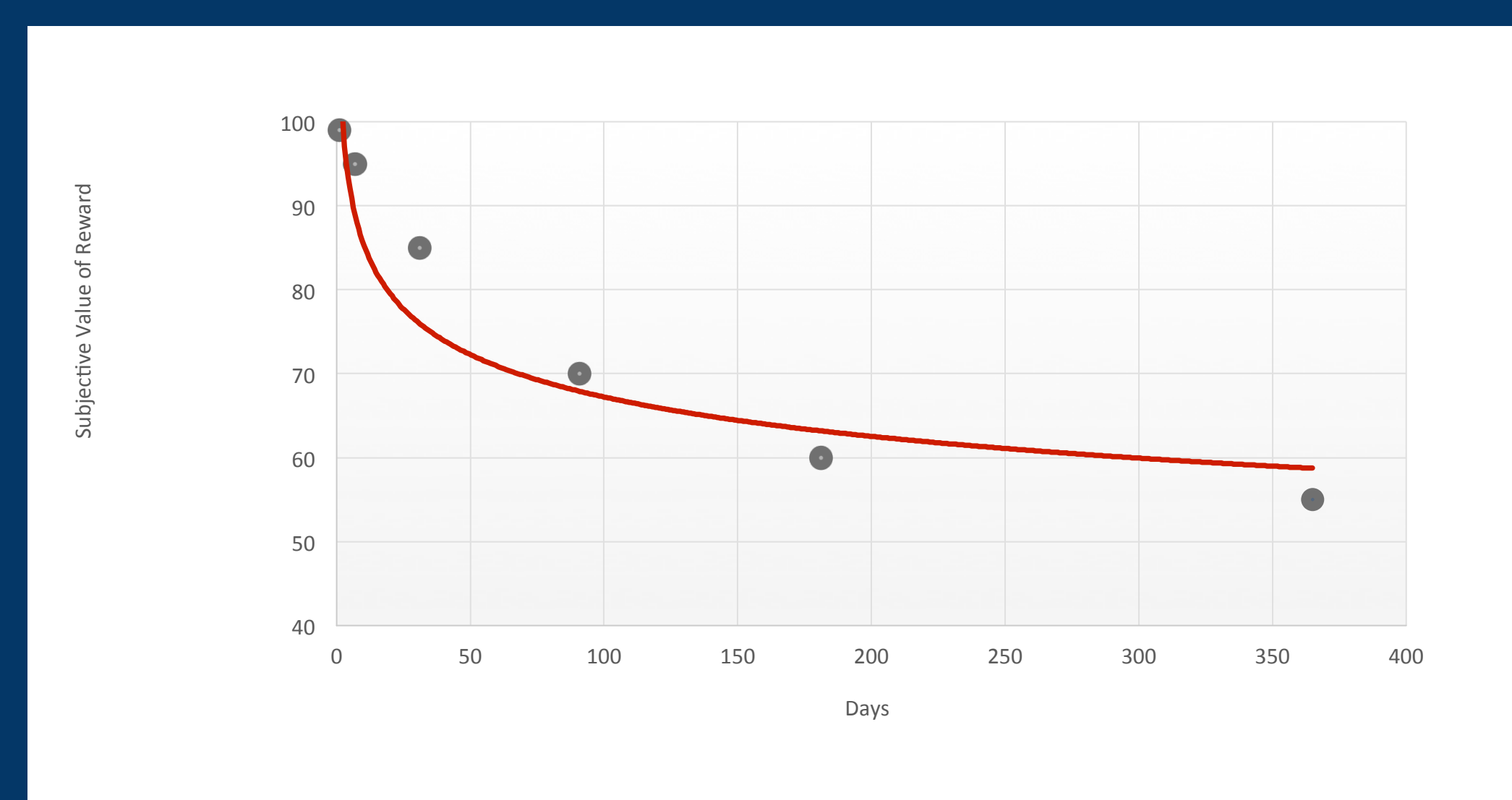


High delay discounting individuals were more likely to have nascent entrepreneurial activity and were more likely to intend to start a business within 5 years than low delay discounting individuals.

## IV. Conclusions

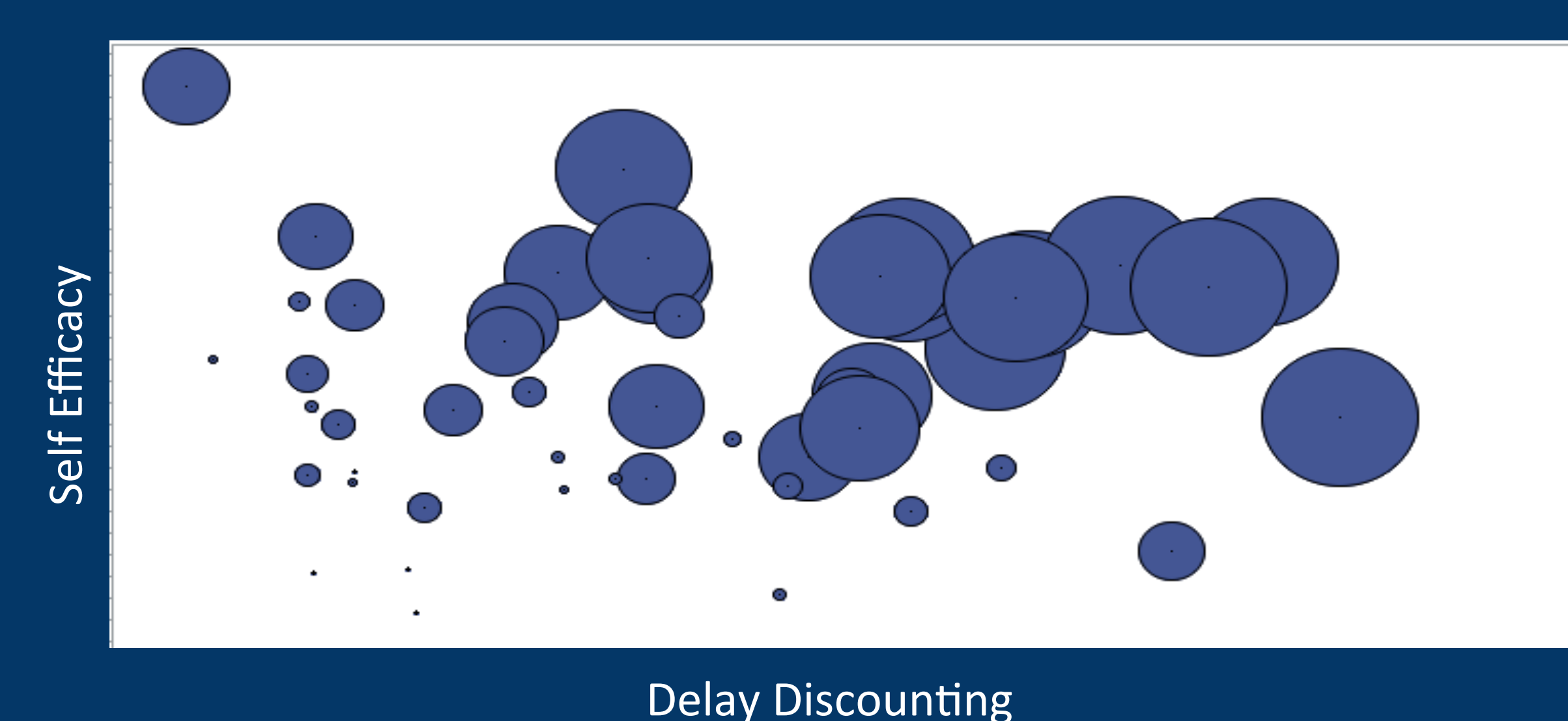
Individuals that are higher in delay discounting, as well as higher in self-efficacy, are more likely to intend on starting a business sooner and are more likely to have acted on those intentions. This suggests that many entrepreneurs that started their business quickly or jumped into the nascent entrepreneurial activities are likely to have high delay discounting and are therefore more impulsive. This relationship could help explain who succeeds and who fails in business ventures. The findings also suggest, however, that higher delay discounting may lead to more action, a required component of any entrepreneurial venture.

**Figure 1 – Hyperbolic discounting curve**



As the time to receive the reward is lengthened, the subjective value of the reward decreases. Thus, in 365 days this individual values \$100 as \$55.

**Figure 2 – Bubble Chart of Probabilities**



The radius of the bubbles is the relative probability of intending to start a business within 5 years. Thus, as self-efficacy and delay discounting increase, the probability of intending to start a business within 5 years increases.

## V. References

- Merz, C., Schroeter, A., & Witt, P. (2010). Starting a new company- which types of personal experience help? *Journal Of Enterprising Culture*, 18(3), 291-313.
- Madden, G. J. & Bickel, W.K. (EDS.). 2010. *Impulsivity: The Behavioral and Neurological Science of Discounting*. Washington, DC: American Psychological Association.

## VI. Acknowledgement

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