# Academic Achievement & Ego-Depletion

## Andrews University

### Kristen M. Bishop

bishopk@andrews.edu

*Behavioral Sciences Department & Behavioral Neurosciences Program, Andrews University*

*Karl G. D Bailey, Faculty Sponsor*

## Introduction

Self-control is a trait that is highly desirable. However, the literature has shown that the capacity to continually use self-control behaviors is limited (Baumeister, Bratslavsky, Muraven, & Tice, 1998). Self control is limited in the fact that it requires:

- Energy
- Attention
- Concentration
- Internal resources

all of which have limited boundaries. Therefore self-control behaviors are fatiguing and depleting, drawing on internal energy resources of the mind. When a self-control behavior is exercised and mental resources are temporarily reduced, this phenomenon is referred to as ego-depletion. However the internal energy boundaries of the mind can be increased and strengthened through behaviors such as:

- Goal implementation
- Exercise
- Setting and meeting deadlines

All of the above behaviors require a considerable amount of self-control. High academic performance also requires considerable levels of self-control. It is therefore proposed that students that are characterized as being high academic achievers will display less ego-depletion than low to average performing students. The purpose of this study is to look at the effects of academics on ego-depletion.

## Methods

Participants

85 undergraduate students at Andrews University were split into two groups : general education (N=60 males=23, females=37) and honors students (N=25 males=8, females =17).
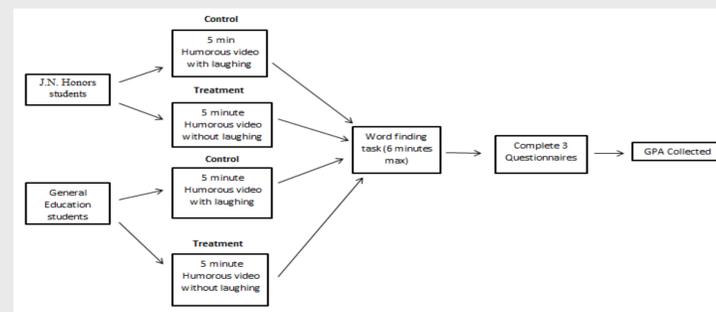


Methodology: Honors students and general education students were split into treatment and control groups. In the treatment group, individuals were instructed to watch a 5 minute humorous video and to not laugh or smile. In the control group, individuals were asked to watch the humorous video and let their emotions flow. After watching the video all 4 groups were given a timed word finding task in which the number of words generated was recorded. Following the word finding task, individuals were instructed to complete 3 questionnaires: the Irrational Procrastination Scale (Steel, 2010), the Active Procrastination Scale (Choi & Moran, 2009) and the Academic Self Regulation Scale (Vansteenkiste, Sierens, Sonens, Luyckx & Lens, 2009). After completing the 3 scales the GPA of each individual was collected.

## Analysis

Using SPSS A 2x2 ANOVA and Pearson's r correlations were used to analyze the data.
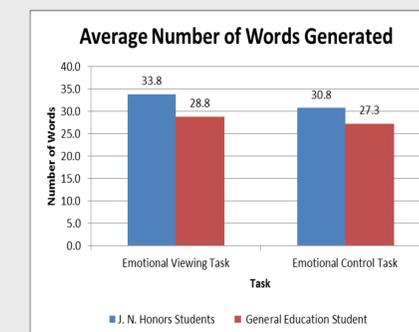
## Results



Figure 1. Statistically there was no difference in the amount of words generated by J.N. honors students and general education students.
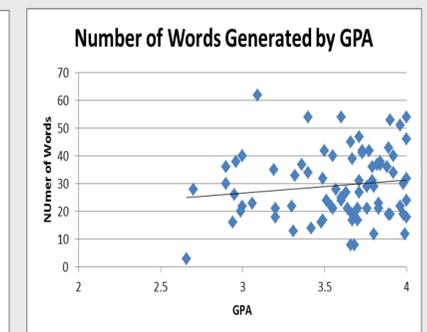
Figure 2. Statistically there was no correlation between the number of words generated and the GPA f<1, (p>0.1), r=0.13.

## Discussion

There was no correlation between the number of words generated and GPA. Additionally, no difference was found between the J. N. Honors students and the General Education students, which goes against our hypothesis. However, individuals in each group were not effectively ego-depleted. This may be due to some other confounding variables such as,

- motivation
- religious identification
- glucose supplementation
- Training on self-control tasks

## Selected Reference

Choi, J. N., & Moran, S. V. (2009). Why not procrastinate? Development and validation of a new active procrastination scale. Journal of Social Psychology, 149, 195-211

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