

Grit and Optimism in Leadership Development Event (LDE) Participants: A Descriptive Examination

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Introduction/Need for Research

Researchers have suggested that academic achievement stems from a combination of cognitive and personal traits (Bazelais & Lemay, 2016). There is a growing interest in the importance of non-cognitive traits as drivers of academic outcomes (Charity & Cureton, 2016). Student success in school has been largely attributed to activities which take place outside of the regular classroom (Bazelais & Lemay, 2016). Two non-cognitive factors that may play a role in student achievement are grit and optimism. Grit is a non-cognitive factor defined as “perseverance and passion for a long term goal” (Duckworth, Peterson, Matthews, & Kelly, 2007, p. 1087). According to Carver and Scheier (2002), optimism is a positive expectation for the future. As a personal disposition, optimism refers to tendency to believe that one will generally experience good outcomes in life (Scheier & Carver, 1985). Grit and optimism may be closely tied. Usher and Pajares (2008) noted that optimistic individuals are “equipped with the self-enhancing bias needed to sustain resilient belief in the face of difficulty” (p.785).

Understanding the role of an agricultural education program in student grit and optimism could allow future research into components of the program which are helping increase these traits in students. Although optimism has been widely studied in leadership (Lamm & Lamm, 2014), few studies have been conducted to examine the levels of grit and/or optimism in secondary agricultural education students. We designed this portion of a larger study on grit and optimism to gather the grit and optimism scores specifically for agricultural education students who were competing in FFA LDEs on the district level. Gathering this information was conducted to provide initial data for a more detailed examination of grit and optimism in secondary agricultural education students as a whole.

Conceptual Framework

This study was developed based on the concept of growth mindset (Rattan, Savani, Chugh, & Dweck, 2015). Dweck proposed that individuals are more successful when they are able to look toward and overcome obstacles in order to reach desired results, and stressed the importance of personal change as a factor in improvement. Grit and optimism are both factors related to having a growth mindset (Duckworth, et al, 2007; Usher & Pajeres, 2008). The purpose of this study was to describe the grit and optimism scores for students competing at in a district FFA LDE event.

Methods

This descriptive study was a portion of a larger examination of grit and optimism in secondary agricultural education students. The study population was a census of students ($N = 98$) students attending the [District] Leadership Development Events on the [University] campus in November 2017. As this study involved a selected population, caution should be taken in generalizing results to populations outside of the respondents.

The survey instrument included three sections. Section one were demographic questions including: age, gender, numbers of years competing in CDE/LDE events and chapter. Section two was the short form of Duckworth's (2007) grit scale which included 10 likert-type items, with rating options from 1-5, where 5 was the highest level of agreement. Previous estimates of reliability for this instrument were $\alpha = 0.82$. We used the 10-item life orientation test (Scheier, Carver, & Bridges, 1994) in section three to measure student levels of optimism. This section also included 10 likert-type items, with a scale from 1-5, where 5 was the highest level of agreement. Previously reported reliability estimates for the life orientation test were $\alpha = 0.88$. A post hoc analysis of reliability for this population yielded $\alpha = 0.72$ for the grit section and $\alpha = 0.87$ for the optimism section.

We began this study by developing the required consent documents and obtaining IRB approval. A consent/assent form was emailed to all the participants, and was required to be submitted upon event check-in. A paper copy of the survey instrument was distributed to participants during event orientation, and collected prior to students disbursing for their individual competitive activities. All registered students completed the instrument, for a 100% response rate. Data were entered into an Excel spreadsheet and analyzed using SPSS v. 24.

Results/Findings

Student scores for grit and optimism are shown in Table 1. Self-reported grit scores for LDE participants at the [District] LDEs were $M = 3.66(0.51)$ Normative grit scores for adolescents are 3.4 on the five point scale (Duckworth et al, 2007). Optimism scores for participants were $M = 3.86(0.41)$. By comparison, average scores on the life orientation test range from 3.5 to 3.9 for previously examined populations (Pan, et al, 2017). Male participants had grit scores of $M = 3.48(0.53)$, while the female participants grit scores were $M = 3.77(0.48)$. In regard to optimism, male respondents had scores of $M = 3.58(0.45)$, while females had scores of $M = 3.73(0.45)$.

Conclusion, Implication, Recommendations

From the findings we can conclude that students attending [District] LDE events reported scores that were above the normative scores for both grit and optimism. Students with higher grit are more likely to persist toward goals, even in the face of challenges (Duckworth, et al, 2007). Individuals with higher optimism scores have a more positive life outlook (Carver & Scheier, 2002). The question remains, are students who have high levels of grit and optimism drawn to agricultural education and LDE events, or is there an embedded component within the program and LDE preparation which increases these traits in students? The information gathered through this study yields many opportunities for future research. We recommend an examination of factors within agricultural education programs, including LDE preparation. We also recommend further research to investigate the relationship between demographic characteristics, agricultural education program involvement, and grit and optimism scores. Understanding the role of grit and optimism may play an important role in investigating social skill factors for agricultural education students in the future.

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