4-22-2022

The Influence of Scholarship Status on Motivation Type and Grit Levels in Division-I Athletes

Carsten Schmidt
Boise State University

Eric Martin
Boise State University
The Influence of Scholarship Status on Motivation Type and Grit Levels in Division-I Athletes

Abstract
Self-Determination Theory posits that motivation is determined by the fulfillment of three basic needs; competence, relatedness, and autonomy (Deci and Ryan, 1985, 2002). These types of motivation range from external (extrinsic motivation) to internal (intrinsic) and the type of motivation one has for an activity will significantly influence the quality of participation and the outcomes received from engagement. Grit, or "the perseverance and passion for long-term goals despite obstacles (Duckworth et al., 2007)" might be one construct that also helps predict quality of motivation and outcomes from engagement. In the sport environment, motivation type and grit level could influence sport achievement, and ultimately the level of achievement as measured by scholarship status in sport. Previous research has shown that scholarship status was related to motivation (Ryan, 1977), but more recent studies have indicated that instead of scholarship status it might be coaching behavior that is related to motivation (Amorose & Horn, 2000). Therefore, the aim of our study was to further investigate the relationship between scholarship status and motivation type, as well as investigated how grit was related to the other study constructs. In total, 264 athletes from a Northwestern university in the United States completed a survey that assessed scholarship status, Grit (Duckworth et al., 2007) and motivation (Behavioral Regulation in Sport Questionnaire' Lonsdale et al., 2008). Athletes in the sample had high levels of grit and intrinsic motivation and lower levels of more extrinsic forms of motivation. The relationship between scholarship status and motivation type and grit levels were non-significant. Intrinsic motivation was positively related, and extrinsic motivation was negatively related to grit levels. The study results support that scholarship status does not directly influence motivation and the significant relationships between grit and motivation deserve further study.

This student presentation is available at ScholarWorks: https://scholarworks.boisestate.edu/under_showcase_2022/2
Scholarship Status Influence on Motivation Type and Grit Levels in Division I Sports
Carsten Schmidt & Eric Martin, Ph.D.

I. Introduction

- Motivation type is thought to be a major contributor to overall adherence and success in collegiate sports. Previous studies have shown mixed results in terms of scholarship status and its relationship with motivation type (Amorose & Horn, 2000, 2001).
- Grit is another factor that may contribute to athletic success at a high level. This specific factor is defined as, “perseverance and passion for long-term goals despite obstacles” (Duckworth, Matthews, Kelly, & Peterson, 2007).
- Self Determination Theory (SDT)
  - SDT has three key components:
    - Autonomy- "the capacity to be one’s own person” or the sense of self-identity one experiences during sport or activity
    - Competence- having the capabilities to succeed in a particular sport or activity
    - Relatedness- having a sense of “belonging” to a certain group or community and having similar interest with others
- Past Studies
  - Amorose & Horn (2000, 2001)
    - The 2000 study found that Scholarship athletes reported higher levels of Intrinsic Motivation compared to Non-Scholarship athletes, but this difference was eliminated when coaching behavior was also considered.
    - The following 2001 study found that there was no difference in the change of Intrinsic Motivation between Non-Scholarship, Partial Scholarship, and Full Scholarship athletes over the course of a season.
- Motivation type can be broken into two categories: Intrinsic and Extrinsic. Greater levels of Intrinsic Motivation has been linked to greater perceived competence, adherence, and overall success in sport settings (Harrolle, et al., 2019).

Research Questions:
1. Does type of motivation differ between scholarship and non-scholarship athletes?
2. Does the amount of an individual’s grit differ between scholarship and non-scholarship athletes?
3. Is there a relationship between grit levels and the type of motivation reported among athletes?

II. Methods

- Division-I athletes within Boise State’s athletic department completed a self-report questionnaire and a statistical analysis of the data was performed to address each research question.
- Athletes were informed that participation in the study was voluntary and data collection was anonymous.
- 264 athletes completed the survey (189 females, 73 males)
- 90 full-scholarship, 97 partial scholarship, and 45 non-scholarship
- Athletes represented a variety of varsity sports and class rank
- Grit-short scale was the method used to measure total Grit levels. This scale specifically measures Grit based off two components: perseverence of effort and consistency of effort.
- The Motivation scale utilized was the Behavioral Regulation in Sport Questionnaire

III. Results

Descriptive Statistics & Pearson Correlation

<table>
<thead>
<tr>
<th>Subscales</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Intrinsic Motivation</td>
<td>1</td>
<td>.65**</td>
<td>1</td>
<td>.49**</td>
<td>.70**</td>
<td>1</td>
<td>.49**</td>
</tr>
<tr>
<td>2. Integrated Regulation</td>
<td>.65**</td>
<td>1</td>
<td>.49**</td>
<td>.70**</td>
<td>1</td>
<td>.49**</td>
<td>1</td>
</tr>
<tr>
<td>3. Identified Regulation</td>
<td>.49**</td>
<td>.70**</td>
<td>1</td>
<td>.49**</td>
<td>.70**</td>
<td>1</td>
<td>.49**</td>
</tr>
<tr>
<td>4. Introjected Regulation</td>
<td>-.39**</td>
<td>-.11</td>
<td>.09</td>
<td>1</td>
<td>.49**</td>
<td>.70**</td>
<td>1</td>
</tr>
<tr>
<td>5. External Regulation</td>
<td>-.37**</td>
<td>-.19**</td>
<td>.04</td>
<td>.73**</td>
<td>1</td>
<td>.49**</td>
<td>1</td>
</tr>
<tr>
<td>6. Amotivation</td>
<td>-.56**</td>
<td>-.36**</td>
<td>-.14**</td>
<td>-.59**</td>
<td>-.19**</td>
<td>.04</td>
<td>.73**</td>
</tr>
<tr>
<td>7. Total Grit</td>
<td>.27**</td>
<td>.28**</td>
<td>.19**</td>
<td>-.24**</td>
<td>-.32**</td>
<td>-.38**</td>
<td>1</td>
</tr>
<tr>
<td>Mean</td>
<td>6.17</td>
<td>5.97</td>
<td>5.83</td>
<td>3.26</td>
<td>2.35</td>
<td>2.08</td>
<td>3.60</td>
</tr>
<tr>
<td>SD</td>
<td>90</td>
<td>96</td>
<td>100</td>
<td>1.65</td>
<td>1.43</td>
<td>1.34</td>
<td>.55</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed)
** Correlation is significant at the 0.01 level (2-tailed)

Motivation Type and Total Grit Levels in Scholarship and Non-Scholarship

III. Results

1. Division I Athletes reported having higher levels of Intrinsic Motivation compared to Extrinsic Motivation while also reporting higher levels of Total Grit.

2. Scholarship Status had no significant correlation to Motivation Type or Total Grit levels.

3. Total Grit levels showed a positive correlation with Intrinsic Motivation, but a negative correlation with Extrinsic Motivation.

IV. Discussion

- In this sample which was composed of collegiate-level athletes, both high levels of intrinsic motivation and total grit were reported. This could indicate that both may be influential factors in an athlete reaching elite level competition.

- Data contradicted the findings of Amorose & Horn, 2000. However, it was consistent with the later findings of the 2001 study which showed no significant relationship between scholarship status and motivation type.

- Total Grit levels were positively related to Intrinsic Motivation which implies that for an athlete to persevere and overcome obstacles regarding long-term goals, parents and coaches should promote Intrinsic Motivation strategies rather than Extrinsic benefits.

- The lack of a relationship between Scholarship Status and Motivation Type could be due to small sample size or the differences in athletes’ perceptions of scholarship awards. Further studies should examine the influence scholarship perception may have on athletes’ levels of intrinsic motivation.