A Comparison of Motivators between Youth Single-Sport, Multi-Sport, and Single-Sport Specialized Athletes

Introduction: The motivation for youth sport involvement may differ for single-sport (non-specialists), multi-sport, and single-sport specialized athletes. PURPOSE: To investigate differences between adolescent single-sport athletes (SSA), multi-sport athletes (MSA), and single-sport specialized athletes (SSSA) on measures of sports enjoyment and motivation. A secondary aim was to compare these variables between age groups. METHODS: Adolescent sport participants in 6th, 7th, and 8th grade (n=306, age=13.0±1.0 yrs) completed the Sources of Enjoyment in Youth Sports Questionnaire (SEYSQ) that assesses sport enjoyment in the subscales of self-referenced competency (SRC), other-referenced competency and recognition (ORCR), effort expenditure (EE), competitive excitement (CE), affiliation with peers (AP), and positive parental involvement (PPI). Participants also reported age, gender, grade, years of sport participation and sport status (SSA, MSA, SSSA). RESULTS: SSSA reported significantly more enjoyment in all subscales except PPI when compared to SSA (p<0.05; ES 0.4 – 0.99). MSA and SSSA showed significant differences in the subscales of SRC and EE; however, effect size was small (0.37 and 0.33, respectively). Overall scores for intrinsic and extrinsic motivation were significantly lower among SSA compared to MSA and SSSA (p<0.01) with no differences between MSA and SSSA (p>0.05). Results revealed no significant differences in the SEYSQ's subscales for age (p>0.05). CONCLUSION: Within the parameters of this study, adolescents that specialize in a single sport or those who compete in multiple sports both rely on intrinsic and extrinsic sources of enjoyment for motivation in very similar ways; whereas adolescent SSA are less motivated and experience less enjoyment from sport participation compared to MSA and SSSA.

Keywords: Adolescent, Enjoyment, SEYSQ

Introduction

The study of motivation is amongst the most predominant topics within sports psychology (Roberts, 2001). Within athletics, most would agree that motivation is the foundation or the "heart" of sport performance and achievement (Duda & Treasure, 2015). Because of the importance of motivation for optimal sport performance, continued study of the topic, particularly during developmental periods, is warranted. Clancy, Herring, and Campbell (2017) emphasize this need and state, "There is utility in studying motivation, as it provides a theoretical and practical insight into why one initiates, regulates, sustains, directs, and discontinues behavior" (p.1). Ideally, those involved in youth sport development programs understand and utilize motivational techniques that enhance sport performance, enjoyment, and engagement. In turn, this creates situations that encourage an athlete to
continue to participate in sport, reach feelings of competency, and perform to their highest abilities.

Current research suggests motivation levels, as well as specific motivators, vary among athletes. According to the Self-Determination Theory (Deci & Ryan, 1985), the orientation of motivation is distinguished between intrinsic and extrinsic motivation (Ryan & Deci, 2000). Intrinsic motivation refers to engaging in an activity because it is interesting, fulfilling, and enjoyable, while extrinsic motivation refers to external reasons for sport participation, such as receiving a reward or avoiding punishment (Rottensteiner, Tolvanen, Laakso, & Konttinen, 2015). Previous research indicates intrinsic and extrinsic motivation are essential concepts for understanding sources of enjoyment and continued participation in athletics (Deci & Ryan, 2002; Vallerand & Rousseau, 2001).

Throughout an athlete's sports experience, there is a need to balance intrinsic and extrinsic motivation (Sugarman, 1999). Using extrinsic rewards to motivate a young athlete can bring short-term enjoyment and improve athletic performance but relying heavily on such dividends may be detrimental to intrinsic motivation. According to Hatch, Thomsen, and Waldron (n.d.), "Extrinsically motivated athletes tend to focus on the competitive or performance outcome. An over-emphasis on extrinsic motivation may lead athletes to feel like their behavior is controlled by the extrinsic rewards." Thus, an excess of extrinsic rewards will draw athletes away from the enjoyment of sport activity. In addition, focusing on the performance outcomes can cause anxiety and loss of interest and value of achievement for an athlete (Hatch, Thomsen, & Waldron, n.d.). Furthermore, providing tangible rewards for engaging in an activity, completing an activity, or reaching a certain level of performance in an activity, may undermine intrinsic motivation, especially in school-aged children (Deci, Koestner, & Ryan, 2001). However, the use of extrinsic methods of motivation that promote self-determined motivation, such as positive verbal feedback by a coach, positively impacts intrinsic motivation and feelings of competence (Vallerand & Reid, 1988).

Enjoyment is considered a critical component of the competitive youth sport experience (Scanlan & Lewthwaite, 1986), and an important aspect of intrinsic and extrinsic motivation. Research suggests sport enjoyment is correlated with motivation (Scanlan, Stein, & Ravizza, 1989), engagement (Weiss & Chaumeton, 1992), and continued involvement (Scanlan et al., 1993). The definition of sport enjoyment is widely accepted as "a positive affective response to the sports experience that reflects generalized feelings such as pleasure, liking, and fun" (Scanlan et al., 1993). This definition has its roots in an earlier study conducted by Scanlan & Lewthwaite (1986), which introduced the model of sport enjoyment. This model conceptualizes how enjoyment in sport experiences can come from several sources by combining achievement and nonachievement components with intrinsic and extrinsic elements (Wiersma, 2001). Accordingly, enjoyment is not synonymous with intrinsic motivation. Although enjoyment is associated with intrinsic
motivation, sources of enjoyment may also come from extrinsic aspects of
training and competition (Scanlan & Lewthwaite, 1986).

Determining the amount and sources of sport enjoyment experienced by an
athlete also provides valuable information as to what motivates an individual to
participate in sport. The Sources of Enjoyment in Youth Sports Questionnaire
(SEYSQ) (Wiersma, 2001) is a 28-item survey that quantifies sports enjoyment
by, among other things, measuring the level of intrinsic and extrinsic
motivation (Figure 1). Using the SEYSQ for data acquisition, five hundred and
twenty-six adolescents, ages 14-18, participated in a study conducted by Berki
and Piko (2017). Their research indicates that "there are important differences
according to age and gender in the sources of sport enjoyment" (p. 230). Their
results suggest a negative association between age and sources of sports
enjoyment, meaning that sports enjoyment decreases with age. Between
genders, boys scored higher in CE and ORCR subcategories, indicating that
boys are more competitive than girls, whereas girls PPI as a higher source of
enjoyment than boys. Other factors shown to affect sport enjoyment include
coaching influences and the nature of the sport. A 2008 study by McCarthy,
Jones, and Clark-Carter, assessed sources of enjoyment among one hundred
and fifty-two youth sport athletes, ages 8-15, participating in different sport
types (team sports and individual sports) using the SEYSQ. Participants who
competed in basketball, football [soccer], netball, rounders, hockey, and rugby
were classified as team-sport athletes, and those who competed in athletics,
badminton, cricket, cycling, martial arts, swimming, tennis, and trampolining
as individual-sports athletes. Participants in team sports had significantly
greater self-referenced competency, affiliation with peers, competitive
excitement, positive parental involvement, and enjoyment compared with
individual sport participants and authors suggest:

Team sports for children in the sampling and specializing years of sport
participation offer a unique blend of enjoyment sources that would benefit all
children. Moreover, a team sport in addition to an individual sport may serve the
needs of children in the sampling years before they enter the specializing years
when they choose a sport to specialize in (McCarthy, Jones, & Clark-Carter,
2008).

Research on the effects of other factors, such as specific type of sport
played or number of sports in which an athlete participates, on sport enjoyment
is limited. Those involved in youth sport development programs would benefit
from additional research in this area of study. To this end, coaches and trainers
need to understand the different motivators among specific populations of
athletes. Additionally, coaches and trainers would benefit by understanding
common sources of enjoyment and motivation among diverse athlete groups;
however, little is known regarding the level of sport enjoyment and primary
motivators to participate in sport in specific populations. For example, sport
samplers may have different sources and degrees of enjoyment compared to
sport specialists.
Specifically, in reference to sport specialists, previous research suggests early sport specialization may reduce intrinsic motivation (Wiersma, 2000; Gould & Carson, 2004; Côté, Lidor, & Hackfort, 2009). Athletic development occurs over the course of three stages: early years, middle years, late years (Bloom, 1985). Each stage respectively plays a vital role in the development of an athlete. Desired athletic development starts with a focus on fun and passion for athletics through participation in multiple sports (early years), moves to skill progression for specific sports (middle years), and reaches technical skill expansion through extensive, deliberate practice for optimal performance in a single sport (late years) (Gould & Carson, 2004). Gould and Carson (2004) maintain that the majority of champion-level athletes do not skip any of developmental stages in order to specialize early in a sport, and they assert that when stages are skipped in order to specialize early, it "usually has dire consequences, as elite performance is based on the development of proper fundamentals." Moreover, if the early-years stage that emphasizes fun and love of the activity is passed over for specialized practice and advanced training, the athlete may not develop an intrinsic desire and motivation for the sport. Other studies also show that the bulk of elite athletes surveyed participated in various sports (sampling) prior to single-sport specialization (Côté, Lidor, & Hackfort, 2009).

Influenced by the current trend of early sport specialization and outcomes of sport enjoyment and motivation, this study aims to quantify the amount and sources of sports enjoyment among adolescent athletes and assess differences between single-sport athletes (SSA), multi-sport athletes (MSA) and single-sport specialist athletes (SSSA). Specifically, when using the SEYSQ, are there significant differences between SSA, MSA, and SSSA athletes, respectively, on measures of sport enjoyment and/or measures of intrinsic and extrinsic motivation? To the best of our knowledge, this study is the first to consider the relationship between sports status (SSA, SSSA, or MSA) and sources of enjoyment in youth adolescent athletes. A secondary purpose of this study is to describe any differences in sources of enjoyment and motivation between age groups (grades). Ultimately, the findings from this study will help those involved in youth sports tailor motivational practices for specific athlete populations.

**Methods and Materials**

**Participants**

The Southern Utah University IRB committee (IRB APPROVAL #24-032021a) and a Utah school district approved this study prior to participant recruitment. Participants represent a convenience sample of 6th, 7th, or 8th-grade students ranging in age from 11 to 15 years old within a Utah school district and compete in one or more organized sports. Participation was voluntary. The Southern Utah University IRB committee and county school
district waived the requirement for parental permission and minor assent. The county school district and IRB committee permitted passive consent with the precondition that students and parents be provided a parental consent document that included potential benefits, adverse consequences, anonymity protection and data security, the ability for the student to withdraw at any time, researcher’s contact information, and a way for the parent to see survey items. Information was disseminated to parents via handouts and email.

Procedures

A short presentation about the survey was given to students during physical education classes when the survey was distributed. Student-athletes who volunteered to participate were given a pencil and paper document that included the researcher-designed demographic questionnaire and the Sources of Enjoyment in Youth Sports Questionnaire (SEYSQ). The researcher briefly introduced the survey format and terms and answered any questions. Student participants were asked to complete the entire survey as honestly as possible. Upon completing all survey questions, students returned the paper document to the researcher. Participation in this study was voluntary, and data collected from the questionnaire was anonymous, untraceable, and analyzed in aggregate. No compensation was provided for participation.

Instruments

The demographics questionnaire included two sections. Section one contained four multiple-choice questions to assess age, gender, grade in school, and total years involved in organized sports. Section two contained questions regarding the athlete’s status, sports played, and the amount of time spent in each respected sport over the past twelve-month period. The athlete self-identified as either an SSA (athlete that competes in a single organized sport), MSA (athlete that competes in more than one organized sport), or SSSA (athlete that specializes in a single organized sport dedicating eight or more months per year to the specific sport through games, practices, training, etc.) (Jayanthi et al., 2013). Each participant also identified his/her respective sport(s) and the number of months dedicated to each sport in the last calendar year. Time dedicated to each sport for multi-sport athletes had the potential of adding up to more than twelve months, as some sport seasons and training periods overlap.

The third and final portion of the survey was the SEYSQ, a 28-item questionnaire designed to quantitatively measure the sources of enjoyment in youth sport using a 5-point Likert Scale (1=not at all, 2=a little, 3=not sure, 4=yes, 5=very much) Wiersma (2001). The SEYSQ provides data that enables researchers to classify participants within extrinsic/intrinsic and achievement/nonachievement continuums (Wiersma, 2001). The 28-items scaled on the SEYSQ are distributed into a six-factor model of sport enjoyment, including self-referenced competency (SRC), other-referenced competency and
recognition (ORCR), effort expenditure (EE), competitive excitement (CE), affiliation with peers (AP), and positive parental involvement (PPI). Second-order factor structures realized through these six factors are extrinsic/intrinsic and achievement/nonachievement models. Factors that contribute to intrinsic motivation include SRC, CE, and EE subscales. Factors contributing to extrinsic motivation include ORCR, AP, and PPI subscales (see Figure 1). Achievement and nonachievement models were not explored in the present study.

**FIGURE 1.** Contributing subcategories for intrinsic and extrinsic motivation
SRC: Self-Referenced Competency, CE: Competitive Excitement, EE: Effort Expenditure,
ORCR: Other Referenced Competency and Recognition, AP: Affiliation with Peers, PPI: Positive Parental Involvement

**Design and Analysis**

Survey data were checked for completeness, input into Microsoft Excel, and analyzed. Descriptive statistics for age, gender, grade, sport status, and the amount of time spent competing in sport over the previous twelve-month period were calculated. Data were categorized by sport status: SSA, MSA, and SSSA. Means and standard deviations were calculated for each of the six factors on the SEYSQ (SRC, CE, EE, ORCR, AP, and PPI) and compared between SSA, MSA, and SSSA. Scores from corresponding subcategories were summed to yield an intrinsic and extrinsic motivation score, respectively, and means were compared between SSA, MSA, and SSSA. Corresponding subcategories are classified according to Wiersma (2001), see Figure 1. Means and standard deviations for each of the previously listed variables were calculated and compared between all males and females, respectively, as well as between younger (6th grade) and older (8th grade) athletes, respectively. Comparisons between the three sport status groups were made using a single-factor ANOVA test. Post hoc analysis was conducted using the Scheffe
Method. Independent two-sample t-tests were used for age and gender comparisons. Significance was set at $p \leq 0.05$ for all. Effect size was calculated for all variables that showed significant differences and classified, as defined by Cohen (1988), as: small $d=|0.2|$, medium $d=|0.5|$, and large $d=|0.8|$.

Results

The sample for this study consisted of 306 athletes (190 male and 116 female athletes) separated by grades, 6th (11-12 years), 7th (12-13 years), and 8th (13-14 years), who competed in organized sport(s). Participants represented 34 sports, including baseball, basketball, football, soccer, dance, volleyball, cheerleading, etc. Demographic information regarding participant gender and grade is presented in Table 1. Participant gender, grade, and competitive sport status are shown in Table 2.

Table 1. Participant gender and grade

<table>
<thead>
<tr>
<th>GRADE</th>
<th>6*</th>
<th>7**</th>
<th>8***</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>57</td>
<td>27</td>
<td>106</td>
<td>190</td>
</tr>
<tr>
<td>Female</td>
<td>37</td>
<td>13</td>
<td>66</td>
<td>116</td>
</tr>
<tr>
<td>Total</td>
<td>94</td>
<td>40</td>
<td>172</td>
<td>306</td>
</tr>
</tbody>
</table>

* mean age 11.8 years; standard deviation ± .5 years
** mean age 12.7 years; standard deviation ± .5 years
*** mean age 13.6 years; standard deviation ± .5 years

Table 2. Participant sport status by gender and grade

<table>
<thead>
<tr>
<th>Sport Status</th>
<th>Grade</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6*</td>
<td>7**</td>
</tr>
<tr>
<td>Male (n=190)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSA</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>MSA</td>
<td>40</td>
<td>18</td>
</tr>
<tr>
<td>SSSA</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>57</td>
<td>27</td>
</tr>
<tr>
<td>Female (n=116)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSA</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>MSA</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td>SSSA</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>13</td>
</tr>
</tbody>
</table>


* mean age: male=11.8 years; standard deviation ± .5 years/female=11.7 years; standard deviation ± .5 years
** mean age: male=12.7 years; standard deviation ± .5 years/female=12.8 years; standard deviation ± .6 years
*** mean age: male=13.6 years; standard deviation ± .5 years/female=13.7 years; standard deviation ± .5 years
Descriptive statistics (means and standard deviations) for each subcategory of the SEYSQ are presented in Table 3. Higher scores indicate a greater source of enjoyment. The highest possible scores vary between categories and are as follows: SRC, CE, and PPI 20 points each, EE and AP 25 points each, and ORCR 30 points (Table 3). Subcategories were grouped into intrinsic and extrinsic categories, respectively, and summed for a total intrinsic and extrinsic score (Table 3).

Significant differences (p<0.05) between sport groups were found for all of the SEYSQ subcategories except for PPI (Table 3). Post-hoc testing using the Scheffe Method was used to determine where these differences were between each of the respected sport status groups (Table 4). SSA scored significantly lower on several measures of enjoyment and overall intrinsic and extrinsic enjoyment, respectively, compared to MSA and SSSA (Tables 3 and 4). MSA and SSSA differed significantly on measures SRC and EE, both associated with intrinsic motivation, but total intrinsic and extrinsic motivation scores, respectively, did not differ between MSA and SSSA (Table 3 and 4).

Table 3. SSA, MSA, and SSSA comparison within the SEYSQ subcategories

<table>
<thead>
<tr>
<th></th>
<th>SRC</th>
<th>CE</th>
<th>EE</th>
<th>Overall Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(highest score possible= 20)</td>
<td>(highest score possible= 20)</td>
<td>(highest score possible= 25)</td>
<td>(highest score possible= 65)</td>
</tr>
<tr>
<td>SSA (n=42)</td>
<td>16.9 +/- 2.2</td>
<td>16.1 +/- 2.7*</td>
<td>19.1 +/- 3.6*</td>
<td>52.0 +/- 7.0*</td>
</tr>
<tr>
<td>MSA (n=158)</td>
<td>17.5 +/- 2.2**</td>
<td>17.9 +/- 2.1</td>
<td>21.3 +/- 3.0**</td>
<td>56.7 +/- 6.1</td>
</tr>
<tr>
<td>SSSA (n=106)</td>
<td>18.3 +/- 1.8***</td>
<td>17.9 +/- 2.5***</td>
<td>22.2 +/- 2.7***</td>
<td>58.4 +/- 5.5***</td>
</tr>
</tbody>
</table>

P-value = 0.00

<table>
<thead>
<tr>
<th></th>
<th>ORCR</th>
<th>AP</th>
<th>PPI</th>
<th>Overall Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(highest score possible= 30)</td>
<td>(highest score possible= 25)</td>
<td>(highest score possible= 20)</td>
<td>(highest score possible= 75)</td>
</tr>
<tr>
<td>SSA (n=42)</td>
<td>19.6 +/- 5.4*</td>
<td>19.9 +/- 4.4</td>
<td>16.4 +/- 3.7</td>
<td>55.9 +/- 10.6*</td>
</tr>
<tr>
<td>MSA (n=158)</td>
<td>23.4 +/- 4.8</td>
<td>21.1 +/- 3.0</td>
<td>16.6 +/- 3.5</td>
<td>61.1 +/- 8.5</td>
</tr>
<tr>
<td>SSSA (n=106)</td>
<td>23.1 +/- 5.4***</td>
<td>21.4 +/- 3.3***</td>
<td>17.1 +/- 3.2</td>
<td>61.6 +/- 9.5***</td>
</tr>
</tbody>
</table>

P-value = 0.00

significant difference p<0.05
* significant difference found between SSA and MSA
** significant difference found between MSA and SSSA
*** significant difference found between SSA and SSSA
Table 4. Effect Size for significant differences between SSA, MSA, and SSSA within the SEYSQ subcategories

<table>
<thead>
<tr>
<th>Pairwise Comparison</th>
<th>SRC</th>
<th>CE</th>
<th>EE</th>
<th>ORCR</th>
<th>AP</th>
<th>Intrinsic Overall</th>
<th>Extrinsic Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSA MSA</td>
<td>NSD</td>
<td>0.77**</td>
<td>0.67**</td>
<td>NSD</td>
<td>0.71**</td>
<td></td>
<td>0.54**</td>
</tr>
<tr>
<td>MSA SSSA</td>
<td>0.37*</td>
<td>NSD</td>
<td>0.32*</td>
<td>NSD</td>
<td>NSD</td>
<td>NSD</td>
<td>NSD</td>
</tr>
<tr>
<td>SSA SSSA</td>
<td>0.62**</td>
<td>0.73**</td>
<td>0.99***</td>
<td>0.64**</td>
<td>0.4*</td>
<td>1.0***</td>
<td>0.57**</td>
</tr>
</tbody>
</table>

SRC: Self-Referenced Competency, CE: Competitive Excitement, EE: Effort Expenditure, ORCR: Other Referenced Competency and Recognition, AP: Affiliation with Peers
SSA: Single-sport Athlete; MSA: Multi-sport Athlete; SSSA: Single-sport Specialized Athlete
NSD=No significant difference
* ‘small’ effect size
** ‘medium’ effect size
*** ‘large’ effect size

No significant differences in sources of enjoyment scores or measures of intrinsic or extrinsic motivation were found between age groups (see Table 5).

Table 5. 6th-grade* and 8th-grade** comparison within the SEYSQ subcategories

<table>
<thead>
<tr>
<th>Intrinsic Categories</th>
<th>SRC (highest score possible=20)</th>
<th>CE (highest score possible=20)</th>
<th>EE (highest score possible=25)</th>
<th>Overall Scores (highest score possible=65)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th grade (n=94)</td>
<td>17.7 +/- 2.3</td>
<td>17.8 +/- 2.4</td>
<td>21.1 +/- 3.0</td>
<td>56.7 +/- 6.6</td>
</tr>
<tr>
<td>8th grade (n=172)</td>
<td>17.7 +/- 2.0</td>
<td>17.5 +/- 2.5</td>
<td>21.6 +/- 3.2</td>
<td>56.8 +/- 6.3</td>
</tr>
</tbody>
</table>

P-value = 0.97   P-value = 0.26   P-value = 0.22   P-value = 0.85

<table>
<thead>
<tr>
<th>Extrinsic Categories</th>
<th>ORCR (highest score possible=30)</th>
<th>AP (highest score possible=25)</th>
<th>PPI (highest score possible=20)</th>
<th>Overall Scores (highest score possible=75)</th>
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</thead>
<tbody>
<tr>
<td>6th grade (n=94)</td>
<td>23.1 +/- 5.2</td>
<td>21.0 +/- 3.3</td>
<td>17.2 +/- 3.2</td>
<td>61.3 +/- 9.1</td>
</tr>
<tr>
<td>8th grade (n=172)</td>
<td>22.6 +/- 5.2</td>
<td>21.1 +/- 3.4</td>
<td>16.8 +/- 3.3</td>
<td>60.5 +/- 9.3</td>
</tr>
</tbody>
</table>

P-value = 0.42   P-value = 0.73   P-value = 0.32   P-value = 0.49

SRC: Self-Referenced Competency, CE: Competitive Excitement, EE: Effort Expenditure, ORCR: Other Referenced Competency and Recognition, AP: Affiliation with Peers, PPI: Positive Parental Involvement
*Mean age=11.8 years; standard deviation ± .5 years
**Mean age=13.6 years; standard deviation ± .5 years

Discussion

This study aimed to quantify the amount and sources of sports enjoyment, using the SEYSQ, among adolescent athletes and assess differences between SSA, MSA, and SSSA as well as age groups. Results (total SEYSQ scores and
subscales) indicated significant differences between SSA and MSA/SSSA on several measures of sport enjoyment. Except for the subcategory of PPI, SSSA scored higher compared to SSA in every subcategory of the SEYSQ in addition to showing higher scoring results in both the overall intrinsic scores (SRC, CE, and EE combined scores) and overall extrinsic scores (ORCR, AP, and PPI combined scores). MSA scored higher than SSA in overall intrinsic and extrinsic scores; however, no significant differences were found between these groups on measures of enjoyment in subcategories SRC, AP, and PPI, respectively. SSSA scored higher compared to MSA in the amount of enjoyment within subcategories SRC and EE. Other subcategories, including the overall intrinsic and extrinsic results, showed no significant differences. Of the three sport status groups evaluated in this study, MSA and SSSA showed fewer significant differences within the subcategories of the SEYSQ. Furthermore, results from follow-up testing indicate that the significant differences found between MSA and SSSA in the subcategories of SRC and CE had a small effect size (SRC=0.37; CE=0.32) and may not be practically relevant. Thus, it can be concluded that athletes that specialize in a single sport or those who compete in multiple sports both rely on intrinsic and extrinsic sources of enjoyment for motivation in very similar ways; whereas athletes who play, but do not specialize, in a single sport are less motivated and experience less enjoyment from sport compared to MSA and SSSA.

There were no significant differences in total SEYSQ score between the youngest grade (6th grade; mean age=11.8; standard deviation ± 0.5 years) and oldest grade (8th grade; mean age=13.6; standard deviation ± 0.5 years) of athletes who participated in this study. Previous studies have suggested that sports engagement and enjoyment decrease as age increases among youth athletes (McCarthy, Jones, & Clark-David, 2008; Berki and Piko, 2017). However, the current study showed no significant difference between younger and older participants in terms of enjoyment.

McCarthy and Jones (2007) reported the significance of sports enjoyment to children in the sampling years (ages 7-12). Their findings point out that children experience sport enjoyment from intrinsic and extrinsic sources (McCarthy & Jones, 2007). Similarly, this current study’s findings show that youth athletes (ages 11-14 years) experience enjoyment from both intrinsic and extrinsic sources regardless of identifying as an SSA, MSA, or SSSA. The present study expands on previous youth sports motivation research by exploring the differences in sport enjoyment between adolescent SSA, MSA, and SSSA. In addition, this study also examines differences between younger and older adolescent athletes as well as males and females on measures of sport enjoyment and sources of sport enjoyment. Coaches of athletes in this age group may manage a mix of SSA, MSA, and SSSA that often compete on the same teams or in the same leagues. The results from the current study show that SSA scored lower in many of the SEYSQ subcategories compared to MSA and SSSA. More specifically, SSA scored lower than SSSA in all subcategories except for PPI. Furthermore, SSA had lower means scores than MSA and SSSA across all subcategories showing significant differences in the
subcategories of EE, CE, and ORCR, respectively, when compared to both groups.

Based on the findings from the present study, coaches working with SSA should strive to meet the psychological needs of their athletes and create an atmosphere that promotes self-determined motivation. Self-determined motivation can be met if the psychological needs of autonomy, competence, and relatedness are satisfied (Deci & Ryan, 1991). Time devoted to sport participation may also be a factor. SSA may be lower in the SEYSQ subcategories because less time is spent participating in sport than MSA and SSSA; thus, they do not associate as much enjoyment with sports compared to the other groups.

Parents, coaches, and trainers can influence motivation through interactional behavior with their athletes (Mageau & Vallerand, 2003). Pensgaard and Roberts (2002) affirm that coaches have an essential role in creating a motivational climate for their athletes that promotes an atmosphere of mastery rather than performance outcomes and found that even elite athletes emphasize the role of the coach as "important in that he or she is supportive and builds confidence." Parents, coaches, and trainers of youth athletes can emphasize intrinsic motivation by creating a task-oriented climate ("encourages participants to perform an activity in order to improve their skills" (Vallerand, 2007)) as opposed to an ego-involved climate ("leads athletes to believe they must outperform other athletes, including teammates" (Vallerand, 2007)). Focusing on fun and challenging tasks can allow athletes to perform an activity for intrinsic reasons that may lead to more engaged action towards skill development, continued engagement in the sport, and increased enjoyment.

The results of this study are important for understanding the sources of enjoyment that impact intrinsic and extrinsic motivation in young SSA, MSA, and SSSA; however, limitations exist. Participants in this study were all from the same geographical region and thus were exposed to sports through similar developmental sports programs. Consequently, the majority of the participants likely have similar sports backgrounds, limiting the study's external validity.

The results of this study provide helpful information for those involved in youth sports development. Based on our findings, MSA and SSSA experience a similar amount of enjoyment and from similar sources. However, SSA experience less sport-related enjoyment compared to SSSA and MSA, which could hinder continued participation. Coaches need to focus on individual motivational needs to ensure all athletes experience improved competence and enjoyment. Future research in this area of study should include a more diverse geographical, ethnic, and socioeconomic sample of youth athletes. Research should also aim to examine how ability, number of years competing, and individual expectations affect the amount and sources of enjoyment in sport.
Conclusion

Within the parameters it is concluded:

- SSSA scored significantly higher for enjoyment compared to the SSA in the majority of the SEYSQ subscales.
- Except for SRC and EE, no significant difference for enjoyment on any subscales existed between MSA and SSSA. Furthermore, the effect sizes between SRC and EE for both MSA and SSSA were small, making it unclear whether these differences represent a practical difference.
- Except for PPI, SSA scored significantly lower for enjoyment on all subscales when compared to SSSA. Medium to large effect sizes between SSA and SSSA are represented in all subcategories except for AP, which has a small effect size between these groups.
- Significant differences between overall intrinsic and extrinsic scores existed between SSA and MSA/SSSA groups. SSA scored significantly lower compared to MSA/SSSA groups in both categories. A large effect size exists between SSA and SSSA in scores of overall intrinsic motivation. Medium effect sizes are represented between an overall intrinsic score for SSA and MSA and overall extrinsic scores comparing SSA to MSA/SSSA.
- No significant differences between sports enjoyment or motivation when comparing age.
- Implications of the results of this study suggest that to fit the needs of all the types of athletes and improve coaching, those involved in youth sports development programs should incorporate what already motivates these athletes into creating an environment that promotes excitement (CE) and focuses on the athlete or team performance rather than outcomes (SRC). Results also show that coaches, parents, and trainers of MSA and SSSA athletes should emphasize their hard work during practice, training, and competition (EE) and provide them with challenging tasks.

References


