SOURCES OF EXPECTANCY INFORMATION

AMONG YOUTH AND HIGH SCHOOL COACHES

by

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SOURCES OF EXPECTANCY INFORMATION
AMONG YOUTH AND HIGH SCHOOL COACHES

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INTRODUCTION

Working in the athletic environment is very unique. Coaches come from a variety of training backgrounds. For instance, most youth coaches are volunteers who help young athletes develop talents for the enjoyment of coaching. Professional coaches are paid to coach athletic teams in hopes of winning tournaments. From youth to the professional ranks, coaches play an integral role in the development of athletic skill. Either as a youth or professional coach, the basic function of the coach is to help athletes reach full potential in order to win athletic events.

Therefore, the coach is a significant mentor when helping athletes to advance in physical and psychological skills. Coaches must determine and assess athletic ability in their players. There is a plethora of information on how coaches develop expectations of athletes and help them perform at their individual best (Becker & Solomon, 2005; Solomon & Rhea, 2008).

Definition of Terms

Sport psychology researchers have developed terms to enhance the understanding of expectancy information. There are a variety of terms within this review; thus, those words are defined upon context within this section. These terms will allow a greater understanding of the expectancy research.

1. Expectancy Theory – also called the self-fulfilling prophecy, proposes that through a series of phases coaches can impact player ability by communicating their expectations of ability (Solomon, 2002)

2. Impression Cues: There are three types of impression cues (Solomon, 2012).
   a. Personal: height, male, gender, ethnicity, grades
   b. Performance: agility, speed, endurance, strength
   c. Psychological: confidence, motivation, focus, anxiety

4. **Self-fulfilling prophecy** – “states that the external expectation is a stimulus to behavior causing the expectation to come true” (Merton, 1948, p. 195).

**REVIEW OF THE LITERATURE**

**Expectancy Theory**

A coach’s expectation is a significant factor in determining the skills of the performer. Expectancy effects have a dense history. It ranges from Greek mythology to the Great Depression of the 1920s and 30s, to the classroom, and now to sports settings (Merton, 1948; Rejeski, Darracott & Hutslar, 1979; Rosenthal & Jacobson, 1968).

The Pygmalion effect also helped to shape the existence of expectancy theory. Greek mythology depicts the self-fulfilling prophecy in the story of Pygmalion, a Greek sculptor. Pygmalion created a statue of his ideal woman, which he named Galatea. The beauty of the sculpture mesmerized him and he fell in love. He prayed to Venus, the goddess of love, to bring Galatea to life. Venus, taking pity on Pygmalion, brought the statue of the woman to life. Pygmalion and Galatea married and had a happy life. The Pygmalion effect led to the idea that expectations can become reality (Solomon, 2012).

Robert K. Merton (1948) discussed the phenomenon of anticipation becoming reality and called it a “self-fulfilling prophecy.” Merton explains the occurrence of the self-fulfilling prophecy through his analysis of the Great Depression. During the Great Depression, a rumor spread that the banks were running out of money. In actuality, the banks were solvent and capable of meeting financial obligations. However, due to the rumor, people were fearful that the banks would go bankrupt. In turn, people rushed to the banks and withdrew their money.
Therefore, the fear of the banks losing money became true due to the perceptions and subsequent actions of people (Merton, 1948). Expectation, thus, became reality. Intrigued by the phenomenon, researchers investigated the effects of expectancy among other areas of life starting with the classroom (Rosenthal & Jacobson, 1968).

**Expectancy Effects in the Classroom**

Investigators wanted to know if teacher expectations would influence the children’s academic progress. The educational setting of the classroom is an important area of study in exploring expectancy information. Children are vulnerable entities, and their minds are continually being shaped by teachers’ expectations. Rosenthal and Jacobson (1968) originated a study based on the Greek myth of Pygmalion to investigate how teachers’ expectations affected students’ performance. They informed the teachers that some students were “spurters” and would accelerate academically. The researchers predicted that when giving the educators the information that some students were academic “spurters,” they would act in a way to facilitate and enhance those students academically, making the expectation a reality. They found that teachers treated the “spurters” better and, in turn, the students performed better by illustrating significant gains on a post IQ test. This finding initiated further investigation in the educational setting (Rist, 1970). Intrigued by expectancy findings in the classroom, researchers began to investigate different areas in the classroom, including social class and teacher expectations. Exploration of social class and teacher expectation started with investigating how the teachers’ expectations influenced the children’s organization in the classroom. The teachers were instructed to place children in groups that correspond to their expectations of society. It was hypothesized that these children would gravitate towards others that share the same expectations given by the teacher (Rist, 1970).
The researchers found that the organizational system of the classroom reflected that of the larger society and influenced the students’ educational abilities and attainments. In the classroom, a kindergarten teacher assigned her students to three tables. The educator put the high expectancy students in the front of the classroom and the less promising students near the back of the classroom (based on appearance not academic ability). Those in the front received more interaction with the teacher than those in the back. Thus, a caste-like system arose in the classroom. Accordingly, Rist (1970) found that the gap between these groups of students only increased through elementary school. For instance, the children met the expectations of the teacher by gravitating toward other groups with the same expectations in elementary school. By staying in these groups, they maintained what they believed to be the social norm. The results of this study illustrate that teacher expectations of student performance were shaped by the reinforcement of inequalities within the classroom (Rist, 1970). Exploration of expectancy in the classroom and educational setting generated exploration in physical education. Researchers wanted to investigate expectations of physical educators, and how those expectations may influence the students. Therefore, various studies were initiated that explored physical educators and their expectancy effects on students in a physical education setting (Martinek & Johnson, 1979; Martinek & Karper, 1984).

**Expectancy Effects in Physical Education**

Physical education is an important aspect in the development of motor and behavioral skills. It is taught at a variety of levels to ensure health, fitness, and socialization. Findings of expectancy effects in the physical education setting led to a four-step model that examines the expectancy process from the perspective of the leader (Martinek, 1982). Researchers suggested that coaches and leaders utilize the four-step process when evaluating athletes and students in
physical education (Solomon, 2008a). In step one, coaches assess athlete ability using impression
cues: personal, performance, and psychological (Horn, Lox, & Labrador, 2010; Solomon, 2001). This step is highly important, because it is where coaches form expectations. Findings indicate that coaches put a higher emphasis on psychological cues when evaluating athletes (Solomon, 2001). In step two, the coach behaves toward the athlete as if his or her expectations are true. In this step, the coach will demonstrate differential treatment in the form of socio-emotional climate (non-verbal), quantity and quality of feedback (verbal), input opportunities (challenges), and output opportunities (Rosenthal, 1974). In step three, the athlete interprets the coach’s behavior toward them and behaves in a way that makes the expectation true. The differential treatment given by the coach will influence that athlete’s self perceptions and behavior. Thus, the athlete will perform better if they are a high expectancy athlete as opposed to a low expectancy athlete. In step four, validations of the original expectations occur and the cycle continues, because the athlete’s performance coincides with the coach’s expectation (Solomon, Wiegardt, Yusuf, Kosmitzki, Williams, Stevens, & Wayda, 1996; Solomon, DiMarco, Ohlson, & Reece, 1998).

Investigators utilized this four step model when exploring expectancy effects in physical education (Martinek & Johnson, 1979; Martinek & Karper, 1984). Researchers sought to explain the teacher-student interactions. Specifically, they sought to interpret teacher evaluations of the students’ efforts as high or low expectancy in a noncompetitive instructional setting. They found that low expectancy (below average) students received more support and sympathy than the high expectancy (above average) students in competitive and noncompetitive activities contrary to other studies (MacDonald, 1990; Martinek & Johnson, 1979). Their focus was on 8 to 12 year olds and found that high expectancy students received more support and feedback. Therefore, the
physical educators will spend more time with those that show a greater interest and ability in the physical education setting.

Research in the classroom and the physical education settings prompted exploration of how a coach’s expectations contribute to an athlete’s performance. For instance, some researchers found that the educator’s expectations affected the students’ performances (Martinek & Johnson, 1979; Martinek & Karper, 1984; Rosenthal & Jacobson, 1968). Intrigued by the findings among physical education and expectancy, researchers began to speculate how expectations of coaches influence athletic performance in a competitive setting. Thus, researchers sought to investigate how the coach’s expectations in youth, high school, and college competitions may affect an athlete’s ability to attain athletic achievement.

**Expectancy Effects in Youth Sport**

Youth sport is an important milestone in the future of a young athlete. Development of critical skills (speed, agility, reaction time, commitment, and responsibility) are learned in the youth setting and help young athletes prepare to become stronger in these skills or more interested in certain sports as they get older. Children ages 6 to 18 are increasingly participating in competitive sports. There are about 44 million young athletes participating in youth sports in the United States (Miller, Hart, Macknight, 2010). By studying youth, the researcher investigated the athlete’s perception and coach’s perception of feedback and athlete ability (Solomon, 2008a). Participants included six youth sport teams. The researcher found no differential feedback between low and high expectancy in youth sport (Solomon, 2008a).

There is not a lot of research within the field of youth sport and expectancy information among coaches towards athletes. The research in this area is inconclusive and must be researched further. For instance, some studies found that coaches reinforce youth athletes that show more
potential in the beginning phases of development than low expectancy youth athletes who are learning at a slower pace (Abrams, 2002). Findings also indicate that high expectancy youth athletes receive different responses than low expectancy athletes (Rejeski, Darracott, & Hutslar, 1979). This finding corresponds to step two of the four-step model where coaches demonstrate differential treatment, quantity or quality of feedback. On the contrary, another researcher found that junior high school girls’ softball athletes who were low expectancy were given more feedback and reinforcement after successful performances in practice but not in games (Horn, 1984). The findings in this study did not illustrate evident of negative expectancy effects. The low expectancy athletes received more instruction, feedback, and reinforcement in general compared to the higher expectancy players. This is contrary to the findings in the physical education setting and the classroom, where teachers pay more attention to high expectancy students (Martinek & Karper, 1984; Rosenthal & Jacobson, 1968). The possible cause for the differences in data could be due to the different settings.

Explorations of expectancy information effects in the youth setting would be beneficial to enhance the knowledge of how youth coaches evaluate athletes. The youth sport experience is a significant factor in future participation in sports. Experiences in the youth sport setting lead to future participation in high school sports.

**Expectancy Effects in High School**

When moving from youth to high school sports, most athletes will specialize in a certain sport and must try-out to make the team. High expectancy athletes are more likely to continue on in that sport (Horn, 1984; Rejeski et. al., 1979). Unlike the youth setting, research suggests that high expectancy interscholastic athletes receive more feedback than their low expectancy
counterparts (Horn, 1984). There are also differences in feedback patterns among starter and nonstarter athletes that correspond to findings among high and low expectancy athletes.

Investigators found that high school starter athletes in volleyball received differential treatment (step two of the four-step model). The starters received more feedback in auditory, visual, and movement. This means that the athletes were given feedback verbally (positive or negative), physically shown, or given demonstration by the coach. Findings indicate that coaches tend to spend more time and effort with high expectancy athletes to be a part of those athletes’ successes (Markland & Martinek, 1988). Similarly, college athlete starters received more feedback than those athletes on the bench (Lacy & Martin, 1994). Further evidence demonstrated that even when starters and athletes on the bench get equal amounts of practice time, starters still received more feedback. Additional support illustrated that high expectancy athletes received more praise and instruction opposed to low expectancy athletes (Solomon, DiMarco, Ohlson, & Reece, 1998). Consequently, researchers found coaches offered more feedback between to high school athletes identified as having high basketball abilities (Solomon, 2008a).

Overwhelmingly, evidence supports that high and low expectancy athletes are treated differently, and evidence supports that starter athletes receive more feedback opposed to nonstarter athletes. Thus, the coach’s expectation of athlete ability is a strong predictor of feedback to the athlete. Researchers found that high and low expectancy athletes were treated differently at the high school level. Sparked by the finding in high school athletic contexts, researchers developed inquisitive drive to examine expectancy effects among the college athletic setting.
**Expectancy Effects in College**

In some cases, high school athletes develop enough skill and passion to enter into the more prominent context of college athletics. Intrigued by research among the high school athletic setting, researchers conducted studies to examine expectancy effects among college athletics. Comparably, research within the college athletic context parallels that of the high school context.

For instance, findings demonstrate that amount of feedback issued to athletes was significantly different between those of low and high expectancy (Solomon et al., 1996a; Solomon, Striegel, Eliot, Heon, Maas, & Wayda, 1996b). Solomon (2008) initiated a study examining the relationships among expectations, perceptions, and feedback among two college teams. The researcher found that the coach’s expectation of athlete ability explained differential feedback among college athletes, and that high expectancy athletes received more feedback than their low expectancy counterparts. Additional studies investigated the phenomenon of differential feedback given by college coaches. One study, specifically investigated this phenomenon by examining patterns of differential feedback given to college basketball athletes of different ethnicities (Solomon et al., 1996b). Results confirmed that feedback was not prioritized by ethnicity or expectancy in terms of instruction or praise. Conversely, in another study, researchers hypothesized that coaches would use more instructional feedback when coaching their athletes and high expectancy athletes would receive more instructional and reinforcement feedback as opposed to their low expectancy counterparts. It was confirmed that high expectancy athletes were given more feedback than the lower expectancy athletes, and all of the athletes perceptions of coach expectations were accurate (Solomon et al., 1996a). However, this study indicated that assistant coaches offered more reinforcement and encouragement, while head coaches focused more on mistake criticisms. When the athlete was high expectancy, the
head coach provided all different types of feedback as opposed to the low expectancy athlete (Solomon et al., 1996a).

Thus, researchers found that high and low expectancy athletes were treated differently by the coaches with the exception of assistant coaches (Solomon et al., 1996a). It is clear that the expectation of the coach is a strong predictor of feedback for the athlete. Intrigued by the patterns of differential feedback, researchers wanted to know how coaches determined an athlete’s ability (high or low expectancy). Coaches are clearly assessing their athletes, and researchers wanted to determine the sources of that assessment.

Assessment of Athlete Ability

In order to determine an athlete’s ability, the coach must determine the factors that the athlete possesses that make them high or low expectancy. Interestingly, research in this area developed a four-step model illustrating the process coaches utilize when assessing athletic ability. The four-step model examines the expectancy process from the perspective of the coach. In step one, the coach assesses athlete ability using impression cues: personal, performance, and psychological (Solomon, 2001). It was also determined that the head coach’s evaluation of psychological cues is what predicts athletic performance (Solomon, 2001). This finding led to many explorations in the field of expectancy; thus, paving the way for the creation of the Solomon Expectancy Sources Scale (Solomon, 2008b; SESS). Researchers wanted to know what impression cues coaches were utilizing to evaluate athletes. Thus, the SESS was created using four coach samples totaling 292. Investigators conducted a study to measure the primary sources of information that coaches use to assess athletic ability (Solomon & Rhea, 2008). The lead researcher conducted interviews with 18 NCAA Division I head coaches and explored the differences and similarities of the coach’s perception of the athlete’s ability based on the sport
coached. After 18 interviews and three phases of factor analysis with NCAA Division I head and assistant coaches, four major factors emerged housing 30 items (Coachability (n= 11), Team Player (n= 8), Physical Ability (n= 10), and Maturity (n= 5)). These four factors reinforce two of the original impression cues: performance and psychological. Personal cues are not reported in this new tool. The purpose of the SESS is to assess a coach’s source of expectancy information when evaluating athletes.

The SESS is a tool used in three studies to assess sources of expectancy information among coaches (Becker & Solomon, 2005; Solomon, 2010; Solomon & Lobinger, 2011). In a study on coach effectiveness on intercollegiate basketball, researchers examined 70 coaches and 186 athletes. Their purpose was to determine the sources of information coaches utilize to form expectations of athletic ability in the athletes. Researchers found that a coach’s perceptions and an athlete’s perceptions on successful teams were equal, and that of less successful teams had different perceptions of their abilities (Becker & Solomon, 2005). This was further verified by Solomon (2010) were results concluded that athletes’ perceptions of coach ability were accurate on three of the four factors of team player, physical ability and maturity, and that the number one factor when evaluating athlete ability was coachability (psychological cue). Athletes’ perceptions of coachability coincide with the coach’s expectations (Becker & Solomon, 2005; Solomon, 2010). However, this is not always the case. Another study found that American and German coaches differ in expectancy sources utilized to assess athletes. Therefore, cross-culturally, coaches have differences when evaluating players (Solomon & Lobinger, 2011). Investigators found that college coaches have similar sources of expectancy when assessing athletic ability. Explorations in the youth and high school sports are needed.
Because the SESS was created by and for intercollegiate coaches, there are no current studies that assess its’ effectiveness among other coaches, such youth and high school. Since no instrument exists to measure youth and high school coaches’ impression cues, testing the efficacy of the SESS with these samples seems appropriate. Therefore, the purpose of this study is to test the efficacy of the SESS among youth and high school coaches. This study will examine two hypotheses. The first hypothesis is twofold; the first part states that high school coaches would be more likely to prioritize psychological cues over performance cues than youth coaches. Hypothesis one will also explore the question of differences among youth and high school coaches on physical cues. Hypothesis two stated that high school coaches would prioritize the four factors of the SESS more than youth coaches. Thus, researchers explored the utilization of the four SESS factors among youth and high school coaches. The primary purpose of the study was to determine the effectiveness of the SESS among youth and high school coaches.

METHOD

The major purpose of this study was to determine the efficacy of the SESS among youth and high school coaches, and determine their sources of expectancy information. The methodology section of this paper introduces the participants, the measures, procedures, and design used to perform this study. This study included two groups of participants: youth and high school coaches. Researchers utilized two instruments of measurement that included a demographic questionnaire and the Solomon Expectancy Sources Scale (SESS; Solomon, 2008b). The SESS included a list of procedures and statistical analysis. This section provides the details on the investigation of youth and high school coaches.

Participants

Participants included high school and youth coaches. The sample included 35 participants
(18 youth and 17 high school coaches). Coaches were found on online databases and included all types of team sports. Coaches were easily accessible via internet regardless of type of sport.

**Measures**

Two instruments were utilized for this study. A demographic questionnaire was created and administered to access background information. The second instrument employed was the Solomon Expectancy Sources Scale (SESS; Solomon, 2008b) designed to measure impression cues.

**Demographic Questionnaire**

A demographic questionnaire (see Appendix A) was administered to the coaches. The questionnaire accumulated descriptive data. It accessed personal information such as age, gender, and athletic experience. It also gathered professional data such as coach status (youth, high school), target sport, years of coaching, and past coaching experiences.

**Solomon Expectancy Sources Scale**

The Solomon Expectancy Sources Scale (SESS; Solomon, 2008b) is a 30-item tool that measures impression cues among coaches. The SESS is scored on a 7-point Likert scale (see Appendix B). All 30 items are categorized into four factors: Coachability (11 items), Team Player (8 items), Physical Ability (6 items), or Maturity (5 items). The SESS is a valid and reliable tool created from a three-phase study utilizing interview data (Solomon & Rhea, 2008). It was validated on college coaches and was determined to be a reliable tool of measurement (Becker & Solomon, 2005; Solomon & Rhea, 2008).

**Procedures**

Approval for this study was received from the Department Institutional Review Board (see Appendix C). All coaches at the youth and high school level received an e-mail inviting
them to participate in the study (see Appendix D). The invitation linked to the questionnaires that were hosted on a survey website (see Appendix A & B). Consent was obtained by those who accept the invitation and complete the surveys (see Appendix D). After one week, coaches who did not complete the survey received a reminder e-mail (see Appendix E).

After the coach agreed to participate a link within the e-mail led to the survey website. First, it directed participants to complete the Demographic Questionnaire. Then, subjects were directed to the Solomon Expectancy Sources Scale (SESS). It took approximately 10 to 15 minutes to complete both questionnaires.

**Design**

The purpose of this study was to determine the efficacy of the SESS among youth and high school coaches. Two hypotheses were developed to test the SESS among youth and high school. Hypothesis one was analyzed by reviewing the raw SESS means for each category. The researcher implemented independent sample t-tests with the independent variable as type of coach (youth or high school), and the dependent variables were the 21 psychological cues. The researcher also used an independent sample t-test to explore the utilization of physical cues. The independent variable was type of coach, and the dependent variable was the seven physical cues. In the second hypothesis, the researcher ran four independent sample tests with the independent variable being the type of coach and the dependent variable was the four SESS factors of Coachability, Team Player, Physical Ability, and Maturity.

**Results**

The purpose of this study was to determine the SESS effectiveness among youth and high school coaches. The researcher compared the raw means to that of past research among college coaches to determine efficacy (Becker & Solomon, 2005; Solomon, 2010; Solomon &
Lobinger, 2011). Also, data from the hypothesis and questionnaires are reported throughout this section.

**Demographic Results**

Participants included youth and high school coaches (n = 35). Coaches were both male (n=20) and female (n=15). The age of the coaches ranged from 19-44 years (mean= 28.82, SD=9.39). For the 18 youth coaches, the mean years of experience was 6.39 (sd= 7.046). The average number of years of high school coaching experience for high school coaches was 8.05 (s=5.960 years). For the complete demographic profile of coaches see Table 1.

**High School Coaches Prioritization Psychological Cues**

There are two parts to hypothesis one. The first part reported that high school coaches would be more likely to prioritize psychological more than youth coaches. For hypothesis one, part one, a series of independent t-tests were conducted. The independent variable was type of coach (youth or high school) and the dependent variables were the 21 psychological cues of the SESS. Of the 21 values, six reached or approached significance. Part two of hypothesis one tested the difference between high school and youth coaches on performance factors. To test this, a series of independent sample t-tests were also conducted. The independent variable was type of coach (youth, high school) and the dependent variables were the seven physical cues.

Of these 30, seven were physical/performance cues and 21 were psychological factors. The results illustrated that high school coaches prioritized some psychological cues more than youth coaches when evaluating athlete ability, partially supporting the first part of hypothesis one. This finding explains that there may be some differences as to how coaches evaluate young athletes. The results only partially support the hypothesis, because most of the factors (besides six) were similarly evaluated on the 7-point Likert Scale among high school and youth coaches.
The 21 factors were all rated moderately high on the 7-point Likert scale (above a five), meaning that youth and high school coaches are rating them similarly. Both groups are rating psychological cues high when evaluating athlete ability. A complete list of the means, standard deviations, t-values, and p-values for each of the 30 SESS factors among high school and youth coaches are found in Table 2.

Table 1

*Coach Demographic Information*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coach Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Team Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Coach Type</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>35</td>
<td>28.89</td>
<td>9.394</td>
</tr>
<tr>
<td><strong>Years of Youth Coaching Experience</strong></td>
<td>35</td>
<td>6.39</td>
<td>7.046</td>
</tr>
<tr>
<td><strong>Years of High School Coaching Experience</strong></td>
<td>35</td>
<td>8.05</td>
<td>5.960</td>
</tr>
</tbody>
</table>

Also, the second part of hypothesis one was supported, because researchers found no significant difference between means of youth and high school coaches when evaluating performance cues (n=7). A complete list of means and standard deviations for the seven performance cues among youth coaches are found in Table 3.
Table 2

Means, Standard Deviations, T-values, and P-values Among Youth and High School Coaches

<table>
<thead>
<tr>
<th>Factors</th>
<th>Youth</th>
<th></th>
<th>High School</th>
<th></th>
<th>t-values</th>
<th>p-values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Willingness to Listen</td>
<td>6.22</td>
<td>0.647</td>
<td>6.59</td>
<td>0.618</td>
<td>-1.709</td>
<td>0.097</td>
</tr>
<tr>
<td>Willingness to Learn</td>
<td>6.39</td>
<td>0.778</td>
<td>6.59</td>
<td>0.618</td>
<td>-0.836</td>
<td>0.409</td>
</tr>
<tr>
<td>Receptivity to Coaching</td>
<td>6.06</td>
<td>0.639</td>
<td>6.41</td>
<td>1.004</td>
<td>-1.26</td>
<td>0.217</td>
</tr>
<tr>
<td>Respect</td>
<td>6.17</td>
<td>0.786</td>
<td>6.41</td>
<td>0.795</td>
<td>-0.917</td>
<td>0.366</td>
</tr>
<tr>
<td>Being a Hard Worker*</td>
<td>5.94</td>
<td>0.639</td>
<td>6.35</td>
<td>0.606</td>
<td>-1.937</td>
<td>0.061</td>
</tr>
<tr>
<td>Team Chemistry***</td>
<td>5.72</td>
<td>0.826</td>
<td>6.29</td>
<td>0.849</td>
<td>-2.019</td>
<td>0.052</td>
</tr>
<tr>
<td>Honesty****</td>
<td>5.72</td>
<td>0.752</td>
<td>6.24</td>
<td>0.831</td>
<td>-1.917</td>
<td>0.064</td>
</tr>
<tr>
<td>Integrity</td>
<td>5.67</td>
<td>0.907</td>
<td>6.18</td>
<td>0.883</td>
<td>-1.683</td>
<td>0.102</td>
</tr>
<tr>
<td>Self Discipline</td>
<td>5.94</td>
<td>0.639</td>
<td>6.12</td>
<td>0.697</td>
<td>-0.767</td>
<td>0.448</td>
</tr>
<tr>
<td>Competitive Demeanor**</td>
<td>5.17</td>
<td>1.249</td>
<td>6.06</td>
<td>0.659</td>
<td>-2.62</td>
<td>0.013</td>
</tr>
<tr>
<td>Trust</td>
<td>5.61</td>
<td>0.979</td>
<td>6.06</td>
<td>0.899</td>
<td>-1.407</td>
<td>0.169</td>
</tr>
<tr>
<td>Role Acceptance**</td>
<td>5.00</td>
<td>0.907</td>
<td>5.94</td>
<td>0.659</td>
<td>-3.493</td>
<td>0.001</td>
</tr>
<tr>
<td>Handling Pressure</td>
<td>5.78</td>
<td>0.808</td>
<td>5.82</td>
<td>1.015</td>
<td>-0.148</td>
<td>0.883</td>
</tr>
<tr>
<td>Concentration</td>
<td>5.89</td>
<td>0.758</td>
<td>5.82</td>
<td>0.728</td>
<td>0.26</td>
<td>0.797</td>
</tr>
<tr>
<td>Mental Maturity**</td>
<td>5.44</td>
<td>1.097</td>
<td>5.82</td>
<td>0.809</td>
<td>-1.158</td>
<td>0.013</td>
</tr>
<tr>
<td>Courage</td>
<td>5.50</td>
<td>0.985</td>
<td>5.82</td>
<td>0.883</td>
<td>-1.021</td>
<td>0.315</td>
</tr>
<tr>
<td>Love of the Sport</td>
<td>6.06</td>
<td>0.998</td>
<td>5.76</td>
<td>1.033</td>
<td>0.847</td>
<td>0.403</td>
</tr>
<tr>
<td>Communication</td>
<td>5.89</td>
<td>0.832</td>
<td>5.76</td>
<td>0.752</td>
<td>0.426</td>
<td>0.647</td>
</tr>
<tr>
<td>Leadership Qualities</td>
<td>5.50</td>
<td>0.707</td>
<td>5.76</td>
<td>1.033</td>
<td>-0.889</td>
<td>0.380</td>
</tr>
<tr>
<td>High Aspirations</td>
<td>5.33</td>
<td>1.188</td>
<td>5.65</td>
<td>0.862</td>
<td>-0.89</td>
<td>0.380</td>
</tr>
<tr>
<td>Confidence Level</td>
<td>5.33</td>
<td>0.907</td>
<td>5.53</td>
<td>1.007</td>
<td>-0.606</td>
<td>0.549</td>
</tr>
</tbody>
</table>

* p = 0.061, ** p < .05, *** p = 0.052, **** p = 0.064,

Comparison of the Four Factors Between Youth and High School Coaches

The second hypothesis stated that high school coaches would prioritize the four factors more than the youth coaches. It also illustrated the differences between youth and high school coaches on the utilization of the four SESS factors: Coachability, Team Player, Physical Ability, and Maturity. Four independent sample t-tests were conducted. The independent variable was coach status (youth, high school), and the dependent variables were the four factors (Coachability, Team Player, Physical Ability, and Maturity). The mean scores were analyzed and
determined the main factors utilized when assessing athlete ability. Refer to Table 4 for an overview of statistics resulting from these analyses.

Table 3

<table>
<thead>
<tr>
<th>Factors</th>
<th>Youth Mean</th>
<th>SD</th>
<th>High School Mean</th>
<th>SD</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination</td>
<td>5.56</td>
<td>1.042</td>
<td>5.71</td>
<td>0.985</td>
<td>-0.438</td>
<td>0.664</td>
</tr>
<tr>
<td>Athleticism</td>
<td>5.22</td>
<td>0.808</td>
<td>5.65</td>
<td>0.862</td>
<td>-1.505</td>
<td>0.142</td>
</tr>
<tr>
<td>Speed</td>
<td>5.50</td>
<td>0.857</td>
<td>5.53</td>
<td>0.800</td>
<td>-0.105</td>
<td>0.917</td>
</tr>
<tr>
<td>Agility</td>
<td>5.61</td>
<td>0.698</td>
<td>5.47</td>
<td>0.800</td>
<td>0.555</td>
<td>0.583</td>
</tr>
<tr>
<td>Reaction time</td>
<td>5.67</td>
<td>0.767</td>
<td>5.41</td>
<td>1.064</td>
<td>0.817</td>
<td>0.420</td>
</tr>
<tr>
<td>Strength</td>
<td>5.17</td>
<td>0.786</td>
<td>5.18</td>
<td>0.951</td>
<td>-0.033</td>
<td>0.974</td>
</tr>
<tr>
<td>Athletic Experience</td>
<td>4.72</td>
<td>1.127</td>
<td>4.65</td>
<td>1.539</td>
<td>0.166</td>
<td>0.870</td>
</tr>
</tbody>
</table>

Table 4

<table>
<thead>
<tr>
<th>Factors</th>
<th>Youth Mean</th>
<th>SD</th>
<th>High School Mean</th>
<th>SD</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coachability*</td>
<td>5.83</td>
<td>0.112</td>
<td>6.18</td>
<td>0.144</td>
<td>-1.945</td>
<td>0.060</td>
</tr>
<tr>
<td>Team Player**</td>
<td>5.67</td>
<td>0.104</td>
<td>5.95</td>
<td>0.122</td>
<td>-1.758</td>
<td>0.088</td>
</tr>
<tr>
<td>Physical Ability</td>
<td>5.45</td>
<td>0.148</td>
<td>5.49</td>
<td>0.187</td>
<td>-0.153</td>
<td>0.879</td>
</tr>
<tr>
<td>Maturity</td>
<td>5.22</td>
<td>0.159</td>
<td>5.34</td>
<td>0.169</td>
<td>-0.512</td>
<td>0.612</td>
</tr>
</tbody>
</table>

*p= 0.06, **p= 0.088

The results illustrated no significant difference between youth and high school coaches when evaluating athlete ability. Researchers noted that Coachability and Team Player were approaching significance. When analyzing the results of these two factors, researchers noted that the mean scores among these factors were slightly higher among high school coaches than youth coaches. It is important to note that none of the four factors reached significance. The data analyzed also reported that all coaches rated the four factors above a five on the 7-point Likert scale. This high rating concludes that all coaches are utilizing these factors. Overall, high school and youth coaches are employing the SESS items and factors differentially (psychological not physical).
**Efficacy of the SESS Among Youth and High School Coaches**

The SESS was developed among college coaches to measure impression cues. The primary purpose of this study was to test the SESS efficacy among youth and high school coaches. The data analyzed in this study was comparably similar to the data among college coaches. Studies among intercollegiate coaches also found that coaches rely on psychological factors as their main impression cues when assessing athletic ability (Becker & Solomon, 2005; Solomon, 2010). In one study, the research found that Coachability (psychological cue) was the number one factor when evaluating athlete ability (Solomon, 2010). However, a cross-cultural study found that coaches have differences when evaluating players’ abilities (Solomon & Lobinger, 2011).

Due to college coaches utilizing psychological cues, this study hypothesized that high school would too. The hypothesis was partially supported by the data analyzed. In one study, items that head basketball coaches utilize when evaluating athletes was determined (Becker & Solomon, 2005). When comparing the mean data of the items in the recent study to that of the college head basketball coaches, researchers determined close similarities. The present study is also congruent with past research supporting that psychological cues are the most salient factors when evaluating athlete ability (Becker & Solomon, 2005; Solomon, 2010). Thus, the present study forecloses partial evidence that the SESS is an effective tool for measuring impression cues among youth and high school coaches.

**Discussion**

Other reports state that coaches utilize personal, performance, and psychological factors when evaluating athlete ability (Horn et al., 2001). Later research found that coaches prioritize psychological factors over physical factors when determining athlete ability (Becker & Solomon,
2005). The primary purpose of this study was to determine the SESS efficacy among youth and high school coaches. The first hypothesis had two purposes. The first part of hypothesis one reported that high school coaches would prioritize psychological cues more than youth coaches when evaluating athlete ability. This hypothesis was partially supported within the data. The second part of hypothesis one tested the difference between high school and youth coaches on performance factors. Researchers found no significant difference between means on performance factors (n=7). The second hypothesis tested whether there would be differences between youth and high school coaches on the utilization of the four SESS factors: Coachability, Team Player, Physical Ability, and Maturity. Results demonstrated no significant differences among the four factors. Furthermore, results illustrated that youth and high school coaches employ the four SESS items and factors when comparing the raw means to past research (Becker & Solomon, 2005). These following sections will provide an in depth interpretation of the data analyzed, practical implications, and future directions for research.

**High School Coaches Prioritization Psychological Cues**

The first hypothesis of this study proposed that high school coaches would prioritize psychological factors of the SESS more than youth coaches when evaluating athletic ability. The data partially supported this hypothesis. High school coaches prioritized three psychological cues (mental maturity, role acceptance, and competitive demeanor) more than youth coaches when evaluating their athletes. Researchers also noted that being a hard worker, team chemistry, and honest were approaching significance.

Comparably, past research illustrates that the coach’s evaluation of psychological cues is a strong predictor of athletic ability (Solomon, 2001). Further research verified that Coachability was the number one factor when evaluating athlete ability (Becker & Solomon 2005; Solomon,
Investigators found that youth and high school coaches utilize the SESS somewhat similarly to that of college coaches when assessing athletic ability.

Studies among intercollegiate coaches also found that coaches rely on psychological factors as their main impression cues when assessing athletic ability (Becker & Solomon, 2005; Solomon, 2010). In one study, the research found that Coachability (psychological cue) was the number one factor when evaluating athlete ability (Solomon, 2010). However, a cross-cultural study found that coaches have differences when evaluating players’ abilities (Solomon & Lobinger, 2011). Due to college coaches utilizing psychological cues, this study hypothesized that high school would too. The hypothesis was partially supported by the data analyzed.

**Comparison of the Four Factors Between Youth and High School Coaches**

The second hypothesis of this study proposed that high school coaches would prioritize the four SESS factors more than youth coaches. The data resulting from this hypothesis did not find a significant difference between youth and high school coaches in their utilization of the four SESS factors when evaluating athletic ability. Even though significant differences were not found, an interesting finding was the trend towards significance among the factors of Coachability and Team Player. Past studies support that Coachability, a psychological cue, is the number one factor when evaluating athlete ability (Solomon, 2010). Impression cues, especially psychological impression cues, are also prioritized among college coaches when evaluating athlete ability (Becker & Solomon, 2005; Solomon, 2001; Solomon, 2010). Therefore, the results among youth and high school coaches partially coincide with that of past research on college coaches when evaluating athlete ability.
Practical Implications

This study had three main points of interest. The key results reported from the data, allow further insight into how coaches evaluate their athletes. Practical implications from this study may provide the coach and other sport psychologists with valuable information. For instance, the role of the coach is to develop athletes and help them reach their full potential in order to win athletic competitions. Thus, due to the findings in the recent study, coaches should understand that their expectations have strong influences on an athlete’s athletic performance. The coach should also be able to assist in athletic development by identifying the important factors and communicating the importance of these factors to their teams. Furthermore, sport psychologists will also benefit from the information presented in this study, because they can convey the importance of identifying and communicating psychological cues to youth and high school coaches. The study presented also allows insight into the area of youth and high school that was recently unknown. Sport psychologist now have a comparable means of which to measure and evaluate how coaches are assessing athletic ability in these settings.

Future Directions

The primary purpose of this study was to test the efficacy of the SESS among youth and high school coaches. This study was the first of its kind and explored the sources of expectancy information among youth and high school coaches when evaluating athlete ability. This study compared partially similar to that of college studies. Although this study, has prominent findings it is warranted to study the SESS in this setting further to increase validation of the findings. The next logical step in the development of research among the youth and high school setting would be to test the efficacy of the SESS among specific sports such as soccer versus basketball. It is likely that coaches of different sports would evaluate athlete ability differently. Another route of
investigation would to be to examine the differences among the utilization of the SESS between team sports and individual sports (tennis and swimming). Again, it is likely that due to the solitary nature of individual sports, those coaches would evaluate these young athletes differently.

**Conclusion**

This study had three key findings. First, this study reported that high school coaches partially prioritize psychological cues more than youth coaches. Second, there were no significant differences between youth and high school coaches among the four SESS factors. The third finding in this study answered the primary question of whether or not the SESS is a valid tool that can be used in these athletic settings to evaluate athlete ability. When comparing the means to past research, the results concluded similar means and standard deviations among the coaches. Therefore, this tool is partially effective when youth and high school coaches are evaluating athlete ability. Coach expectations are important influential factors in developing athletic ability. This study explored the sources of expectancy among youth and high school coaches. Significantly, youth and high school lays the foundation for future participation and success at college and professional levels of competition. Accordingly, the results of this study illustrate significant factors of the SESS that are worth further exploration. Furthermore, the findings of this study provide insight to the information coaches utilize when evaluating athlete ability.
REFERENCES


Solomon, G.B. (2012). Expectancy effects in competitive sport. Lecture conducted from Texas Christian University, Fort Worth, TX.


APPENDIX A
Demographic Questionnaire
COACH DEMOGRAPHIC QUESTIONNAIRE

Age: ______________

Sport Coaching
____ Girls Basketball
____ Boys Basketball
____ Girls Soccer
____ Boys Soccer

Coach Gender (circle one): Male Female

Team Gender (circle one): Male Female

Type of Coach (circle one): Youth High School

Years of College Playing Experience: ______________

Years of Youth Coaching Experience In This Sport: ______________

Years of High school Coaching experience in This Sport: ______________
APPENDIX B
Solomon Expectancy Source Scale
Solomon Expectancy Sources Scale (2003)

Directions: Below is a list of factors that coaches may consider when assessing athlete ability. Complete the sentence highlighted below by filling in each factor. Please read each sentence carefully and circle the response that reflects your perception when evaluating ability in college athletes. Circle the number of the response that identifies your use of that component when assessing your players’ athletic ability.

When evaluating athlete ability, _____________ is a component which I use a majority of the time.

<table>
<thead>
<tr>
<th></th>
<th>Very Strongly</th>
<th>Very Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Disagree</td>
<td>Disagree</td>
</tr>
<tr>
<td>High Aspirations</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Self Discipline</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Being a Hard Worker</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Love of the Sport</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Team Chemistry</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Role Acceptance</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Communication</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Leadership Qualities</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Handling Pressure</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Concentration</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Mental Maturity</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Competeive Demeanor</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>---------------------</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Receptivity to Coaching</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Willingness to Listen</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Willingness to Learn</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Integrity</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Courage</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Trust</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Honesty</td>
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<td>2</td>
</tr>
<tr>
<td>Respect</td>
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<td>2</td>
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<tr>
<td>Confidence Level</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Coordination</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Strength</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Speed</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Reaction Time</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Agility</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Athleticism</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Athletic Experience</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Ability to Use Good Strategy</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Making Complete Assessments</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
APPENDIX C
Institutional Review Board Protocol Review Request
DEPARTMENTAL PROTOCOL REVIEW (Student Version)

The TCU Institutional Review Board (IRB) is responsible for protecting the welfare and rights of the individuals who are subjects of any research conducted by faculty, staff, or students at TCU. Approval by the IRB must be obtained prior to initiation of a project, whether conducted on-campus or off-campus. Student research is encouraged at both the undergraduate and graduate level. Only Protocol Reviews submitted by TCU students as the Principal Investigator will be accepted for review by the Departmental IRB committee. Protocol Reviews submitted by faculty as Principal Investigators or projects that are considered above “minimal risk” need to be submitted to the TCU IRB Committee not the Departmental IRB Committee.

Please submit this protocol electronically to the Chair of your Department IRB committee. Also submit a consent document, HIPAA form if applicable, Protection of Human Subjects Training certificates, and any questionnaires, or other documents to be utilized in data collection. A template for the consent document and HIPAA form and instructions on how to complete the consent are available on the HCNHS website at the Student Research link (place the link here).

1. **Date:** 11/05/2012

2. **Study Title:** Sources of Expectancy Information Among Youth and High School Coaches

3. **Principal Investigator - must be a TCU student:** Megan England

4. **Department:** Kinesiology

5. **Other Investigators - list the faculty mentor first as well as other faculty, staff, and students conducting the study including those not affiliated with TCU:** Gloria B. Solomon, PhD, Dan Southard, PhD, and Cathy R. Cox, PhD

6. **Project Period:** December 2012-December 2013

7. **Funding Agency:** NA

8. **Amount Requested From Funding Agency:** NA
9. **Due Date for Funding:** NA

10. **Purpose** - Describe the objectives and hypotheses of the study and what you expect to learn or demonstrate: The purpose of this study is to explore the sources of expectancy information in youth and high school coaches. It is hypothesized that youth coaches will prioritize their sources of expectancy on psychological cues, because research in expectancy suggests that coaches put more emphasis on the psychological aspects of their athletes.

11. **Background** - Describe the theory or data supporting the objective(s) of the study and include a bibliography of key references as applicable:

   Researchers suggested that coaches utilize the four-step process when evaluating athletes (Solomon, 2008a). In step one, coaches assess athlete ability using impression cues: personal, performance, and psychological (Horn, Lox, & Labrador, 2001; Solomon, 2001). This step is highly important, because it is where coaches form expectations. Findings indicate that coaches put a higher emphasis on psychological cues when evaluating athletes (Solomon, 2001). In step two (also known as Rosenthal’s four factor theory), the coach behaves toward the athlete as if his or her expectations are true. In this step, the coach will demonstrate differential treatment in the form of socio-emotional climate (non-verbal), quantity and quality of feedback (verbal), input opportunities (challenges), and output opportunities. In step three, the athlete interprets the coach’s behavior toward them and behaves in a way that makes the expectation true. The differential treatment given by the coach will influence that athlete’s self perceptions and behavior. In step four, validations of the original expectations occur and the cycle continues, because the athlete’s performance coincides with the coach’s expectation (Solomon, DiMarco, Ohlson, & Reece, 1998; Solomon, Wiegardt, Yusuf, Kosmitzki, Williams, Stevens, & Wayda, 1996).

   The four-step cycle of expectancy led to the creation of the Solomon Expectancy Sources Scale (Solomon, 2010; SESS). The SESS was created relative to step one of the four step model. Researchers wanted to know what impression cues coaches were using to evaluate athletes. Thus, the SESS was created and evaluated through a number of studies. The main bases of exploration was in step one where the coach forms an expectation of the athlete. Investigators conducted a study to measure the primary sources of information that coaches use to assess athletic ability (Solomon & Rhea, 2008). The lead researcher conducted interviews with 18 NCAA Division I head coaches and explored the differences and similarities of the coach’s perception of the athlete’s ability based on the sport coached. The interviews were conducted to allow the coaches to express what they look for when assessing athletes. Four major factors resulted that coaches use when evaluating athlete ability: Coachability, Team Player, Physical Ability, and Maturity. Coachability and Team Player contain psychological cues, Maturity contains both psychological and personal cues, and Physical Ability contains performance cues. Further research was conducted to create an instrument that would measure primary sources of expectancy information among intercollegiate coaches (Solomon, 2008b). The four major categories that resulted were investigated by inviting NCAA Division I head and assistant coaches to complete the Solomon Expectancy Sources Scale (SESS; Solomon, 2008b). The SESS is a tool that categorizes 30 items into one of the four factors. The purpose of the SESS is to assess a coach’s source of expectancy information when evaluating athletes.
There are no current studies that either support or deny the SESS effectiveness in youth and high school coaches. It is possible that there will be some differences as to how coaches in the youth and high school settings assess athletic ability. Investigations should analyze the four factors of Coachability, Team Player, Physical Ability, and Maturity within these settings. It is important to acknowledge the SESS and test its significance within these areas, because researchers want to know how youth and high school coaches evaluate athletic ability. Investigators want to know the patterns of coaching among these age groups to enhance knowledge of the coaching techniques within these areas. The purpose of this study is to explore the sources of expectancy information in youth and high school coaches. This study will expand the literature on expectancy information among coaches. It will allow more insight into the essential qualities coaches look for when assessing athletic ability. Hypothesis one is that youth and high school coaches will prioritize physical over psychological impression cues. Also, as a source of investigation, researchers will explore the question of difference between youth and high school coaches on utilization of the SESS.

References:


12. **Participant Population** - Describe the characteristics of the participant population including the inclusion and exclusion criteria and the number of participants you plan to recruit:

Participants will include high school and youth coaches. Deselection criteria will include youth coaches with a background of higher educational coaching, such as high school, college, or professional coaching, and all coaches must have a minimum of two seasons of coaching. The sample will include 50 participants in each group for a total of 100 participants. Sports that will be selected include boys and girls basketball and soccer. These sports will be selected due to the season in which data selection and collection will occur. They are team sports that can be found in the youth and high school settings (unlike individual sports that are rarely found in the youth setting). Basketball and soccer are also easily assessable and include moderate to large amounts of participants.

13. **Recruitment Procedure** - Describe your recruitment strategies including how the potential subjects will be approached and precautions that will be taken to minimize the possibility of undue influence or coercion.

Participants will be identified and their email addresses obtained from online databases listing the coaches. Then, they will be contacted electronically with an initial email including a letter (see Appendix C) that invites them to participate and a link to access the questionnaires (see Appendices A & B) via Qualtrics. The link will direct the coaches to the survey site that includes consent form, instructions, a Demographic Questionnaire (see Appendix A), and the SESS (see Appendix B). Participants will be allotted two weeks to access the website and complete the instruments. A reminder email (see Appendix E) will be sent after one week to those who have yet to complete the surveys.

14. **Consenting Procedure** - Describe the consenting procedure, whether participation is completely voluntary, whether the participants can withdraw at any time without penalty and the procedures for withdrawing, whether an incentive (describe it) will be offered for participation. If students are used as subjects, indicate an alternative in lieu of participation if course credit is provided for participation. If a vulnerable population is recruited, describe the measures that will be taken to obtain surrogate consent (e.g., cognitively impaired subjects) or assent from minors and permission from parents of minors.

Participants will be sent a consent form to describe the purposes and procedures of this study. Participants may choose to not participate or withdraw at any time by not completing the online surveys. Consent is assumed when participants read the consent form and proceed to complete the surveys online. There are no incentives for involvement; at the conclusion of the study the participants will be thanked for their participation and issued a report of major findings.

15. **Study Procedures** - Provide a chronological description of the procedures, tests, and interventions that will be implemented during the course of the study. Indicate the number of visits, length of each visit, and the time it would take to undergo the various
tests, procedures, and interventions. If blood or tissue is to be collected, indicate exactly how much in simple terms. Flow diagrams may be used to clarify complex projects.

There are two questionnaires that the participants will be asked to complete. First, the Demographic Questionnaire (see Appendix A) will be administered to the coaches. The questionnaire will be aimed at accumulating descriptive data. It will include personal information such as age, gender, and personal athletic experience. It will also include professional data such as youth or high school coach, target sport, years of coaching, and past coaching experiences. The second measure will be the Solomon Expectancy Sources Scale (SESS; Solomon, 2008). It is a 30-item tool that measures sources of expectancy among coaches. The SESS is scored on a 7-point Likert scale (see Appendix B). All 30 items are categorized into four factors: Coachability (11 items), Team Player (8 items), Physical Ability (6 items), or Maturity (5 items). The SESS is a valid and reliable tool created from a three-phase study utilizing interview data (Solomon & Rhea, 2008). This scale was tested in three phases to determine relevance of the questions and themes. However, it has been successfully employed with college and junior college (Becker & Solomon, 2005; Solomon, 2010). The SESS will be tested among the youth and high school setting to establish validity with these populations.

16. Data Analyses - Describe how you will analyze your data to answer the study question.

This study seeks to explore the significance of the four SESS sources (Coachability, Team Player, Physical Ability, and Maturity) among youth and high school coaches. Hypothesis one will be analyzed by reviewing the raw data SESS means for each category. The exploratory question will be tested by a series of four individual sample t-tests. The independent variable will be type of coach (youth or high school), and the dependent variables will be the four SESS factors of Coachability, Team Player, Physical Ability, and Maturity.

17. Potential Risks and Precautions to Reduce Risk - Indicate any physical, psychological, social, or privacy risk which the subject may incur. Risk(s) must be specified. Also, describe what measures have been or will be taken to prevent and minimize each of the risks identified. If any deception is to be used, describe it in detail and the plans for debriefing.

There is minimal risk in participating in this study. The instruments are non-sensitive tools, which have been employed in past studies. The assessments question coaches about various aspects of their decision-making and do not contain sensitive information.

18. Procedures to Maintain Confidentiality - Describe how the data will be collected, de-identified, stored, used, and disposed to protect confidentiality. If protected health information is to be re-identified at a later date, describe the procedure for doing so. All signed consents and hard data must be stored for a minimum of 3 years in a locked filing cabinet (and locked room) in the principal investigator's office, or a storage closet at TCU. Your professional society may recommend keeping the materials for a longer period of time.

Each sample member will be issued a number, which will be used throughout the data analysis. The identifying information linking the participant to his/her data will be stored on a password-protected computer in the TCU Sport Psychology Lab (Rickel 257), which is only accessible by the professor, Dr. Solomon. The goal is to present the findings at the
annual sport psychology conference in October and then write a manuscript for publication in a scientific journal. All data will be discussed in group format and no single subject will be identified in this process.

19. **Potential Benefits** - Describe the potential benefits of the research to the participants, to others with similar problems, and to society.
Immediate benefits are minimal because of the investigative nature of the study. Participation may provide information that could benefit or assist coaches when evaluating athletes in youth or high school settings. The information found in this study could lead to better coach education and training. At the conclusion of the study, subjects will be informed of the purpose of the investigation, and those that requested final reports of the findings in this study will be issued a group report via email.

20. **Training for Protecting Human Research Participants** – Submit training certificates for all the study investigators. The training link is available on the TCU IRB webpage at: [www.research.tcu.edu](http://www.research.tcu.edu).

21. **Checklist for the Items that Need to be Submitted**: Please combine all the files into one pdf document before submitting the materials electronically to the Departmental Committee Chair. To prevent any delay in the approval of your protocol, use the most recent template for the protocol, consent document, and HIPAA form by downloading them from [www.research.tcu.edu](http://www.research.tcu.edu) or [http://www.harriscollege.tcu.edu/research.htm](http://www.harriscollege.tcu.edu/research.htm) each time you prepare your materials.

   a. Protocol
   b. Consent document
   c. HIPAA form (if applicable)
   d. Protecting Human Research Participants Training Certificate for each investigator
   e. Recruitment fliers, letters, ads, etc.
   f. Questionnaires or other documents utilized in screening and data collection
Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that megan england successfully completed the NIH Web-based training course “Protecting Human Research Participants”.

Date of completion: 01/28/2012

Certification Number: 847034
Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that Gloria Solomon successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 01/06/2011

Certification Number: 591229
APPENDIX D
Invitation to Participate and Informed Consent
November 12, 2012

Dear Coach,

My name is Megan England. I am an honors student in the Department of Kinesiology at Texas Christian University. As an honors student, I am encouraged to create and my own research question. My purpose is to investigate and explore the information coaches use to assess their athletes in the youth and high school athletic settings.

Currently, I am gathering information on how coaches develop and assess athletes. My goal is to discover the factors that youth and coaches consider when evaluating athletic ability. My aim is to compare the results to past investigations among college coaches. I am inviting youth and high school coaches of boys and girls basketball and soccer to take part in this study. Your involvement would require the completion of two brief questionnaires that will take approximately 10 to 15 minutes.

All answers to questionnaires will be confidential and completely anonymous. Once you click the link to the survey, you will receive a number and will be identified from then on with that number. All data and results will be reported as a group. As a graduating student, I will soon find myself coaching coaches and athletes alike. Your input about how you evaluate athletic ability in your athletes will help all future coaches in this field train coaches and athletes.

If you have any questions at this time, please respond to this message. Then, read the attached consent form provided below. To access the questionnaires, just click on this link.

https://qtrial.qualtrics.com/SE/?SID=SV_cM8W6hA1ru1lg8Z

Thank you for your attention.

Sincerely,

Megan L. England, BS, AASP
Student: Department of Kinesiology
TCU Box 290249
Texas Christian University
Fort Worth, TX 76129
megan.england@tcu.edu
CONSENT TO PARTICIPATE IN RESEARCH

**Title of Research:** Sources of Expectancy Information Among Youth and High School Coaches

**Funding Agency/Sponsor:** N/A

**Study Investigators:** Megan England

**What is the purpose of the research?** To explore the sources of expectancy information among youth and high school coaches.

**How many people will participate in this study?** Youth (50) and high school (50) coaches will be invited to participate in this study (N=100). Contact information will be found through an athletic directory online.

**What is my involvement for participating in this study?** Your participation requires a signed consent form, a Demographic Questionnaire, and completion of the Solomon Expectancy Sources Scale.

**How long am I expected to be in this study for and how much of my time is required?** Completion of the above mentioned paper work should take you between 10 and 15 minutes and that is the extent of your participation.

**What are the risks of participating in this study and how will they be minimized?** There is little risk in participating in this study. The instruments are non-sensitive tools, that have been utilized in other studies. The surveys question coaches about the various ways they evaluate athletes. The questionnaires do not contain sensitive information.

**What are the benefits for participating in this study?** Due to the exploratory nature of this study, immediate benefits are minimal. Your participation may provide information to assist
coaches in their evaluation and development of athletes in youth or high school settings. At the end of the study, participants will be informed of the purpose of the study and issued a group report if requested, via email, at the conclusion of the study.

**Will I be compensated for participating in this study?** There will be no compensation for your participation, but a copy of the final report is available upon request.

**What is an alternate procedure(s) that I can choose instead of participating in this study?** There is no alternate procedure.

**How will my confidentiality be protected?** Each individual’s name will not be on the questionnaires. Furthermore, no information identifying the schools or facilities the information came from will be utilized. The data will be stored on a password-protected computer in the TCU Sport Psychology Lab. At the completion of the study, and the proper waiting period, all questionnaires and consent forms will be erased and destroyed. The group findings will be presented at a national conference and then published in a coaching journal.

**Is my participation voluntary?** Participation in this study is completely voluntary.

**Can I stop taking part in this research?** Yes, you can stop taking part at any time.

**What are the procedures for withdrawal?** I may withdraw from the study at anytime without penalty by simply not completing or submitting the online questionnaires.

**Will I be given a copy of the consent document to keep?** You can print a copy of this informed consent form to keep for your records.

**Who should I contact if I have questions regarding the study?** Megan England will be available to answer any questions you may have now or later about this research. You can contact her through email at megan.england@tcu.edu.

**Who should I contact if I have concerns regarding my rights as a study participant?**
Dr. Gloria B. Solomon, Chair, TCU Institutional Review Board, Telephone 817 257-7665.
Dr. Tim Barth, Associate Dean for Research and Graduate Studies and Co-Chair of the Institutional Review Board, Telephone 817 257-7104.

Your signature below indicates that you have been read the information provided above, you have received answers to all of your questions and have been told who to call if you have any more questions, you have freely decided to participate in this research, and you understand that you are not giving up any of your legal rights.
Participant Name (please print): __________________________________________________

Participant’s Signature: ________________________________ Date:______________

Investigator’s Signature: ________________________________ Date:______________
November 12, 2012

Dear Coach,

I want to thank you for participating in the survey. When the analyses are complete, I will share the results with you. If you have yet to fill out the survey, it is not too late. Just click the link below.

Let me know if you have any questions, comments, or concerns, by responding to this message. Also, please read the attached consent form provided.

https://qtrial.qualtrics.com/SE/?SID=SV_cM8W6hA1ruJlg8Z

Thank you for your attention.

Sincerely,

Megan L. England, BS, AASP
Student: Department of Kinesiology
TCU Box 290249
Texas Christian University
Fort Worth, TX 76129
megan.england@tcu.edu
ABSTRACT

Information on the criteria coaches use to evaluate athletes is a relatively new field of explorations. Expectancy theory helps researchers determine the actions of the coach. Results from a three different studies illustrate that coaches utilize 30 items categorized into four factors when evaluating their athletes. However, there are no current studies on youth and high school coaches. The primary purpose of this study was to test the efficacy of the Solomon Expectancy Sources Scale (Solomon, 2008b, SESS). The first hypothesis stated that high school coaches would prioritize psychological cues more than youth coaches, and this hypothesis also explored the differences between youth and high school on physical cues. The second hypothesis stated that high school would prioritize the four factors of the SESS higher than youth coaches (especially the factors with psychological cues). Eighteen youth coaches and 17 high school coaches completed the Solomon Expectancy Sources Scale (SESS). Results only partially supported the first hypothesis, and there were no significant differences between youth and high school on utilization of the four factors. When comparing results to past research done on college coaches, researchers found that the SESS can be used to measure impression cues coaches use in these settings to determine athlete ability.
ABSTRACT

Information on the criteria coaches use to evaluate athletes is a relatively new field of explorations. Expectancy theory helps researchers determine the actions of the coach. Results from a three different studies illustrate that coaches utilize 30 items categorized into four factors when evaluating their athletes. However, there are no current studies on youth and high school coaches. The primary purpose of this study was to test the efficacy of the Solomon Expectancy Sources Scale (Solomon, 2008b, SESS). The first hypothesis stated that high school coaches would prioritize psychological cues more than youth coaches, and this hypothesis also explored the differences between youth and high school on physical cues. The second hypothesis stated that high school would prioritize the four factors of the SESS higher than youth coaches (especially the factors with psychological cues). Eighteen youth coaches and 17 high school coaches completed the Solomon Expectancy Sources Scale (SESS). Results only partially supported the first hypothesis, and there were no significant differences between youth and high school on utilization of the four factors. When comparing results to past research done on college coaches, researchers found that the SESS can be used to measure impression cues coaches use in these settings to determine athlete ability.