INVESTIGATING YOUTH COACHING CLIMATES AND TECHNIQUES: PERCEPTIONS OF PERSONAL AND EMOTIONAL GROWTH FROM ATHLETES WITH AND WITHOUT DYLSEXIA

Marko Branislav Pavlovic

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INVESTIGATING YOUTH COACHING CLIMATES AND TECHNIQUES: PERCEPTIONS OF PERSONAL AND EMOTIONAL GROWTH FROM ATHLETES WITH AND WITHOUT DYLSEXIA

by

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A Dissertation
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Abstract

Current literature demonstrates that coaches must assist athletes beyond motor-development to ensure their psychological well-being and promote personal/social growth. This analysis entailed two studies, and both utilized a mixed methods approach to explore youth coaching climates and techniques and perceptions of personal and emotional growth from athletes with and without dyslexia. Study one explored general student-athlete population of four youth soccer teams (two male teams, two female teams) and the relationships between the coaching climate and their social and emotional outcomes in the sport. Results showed that sporting experiences and motivational climate created by the coaches can have tremendous impact on students physical, social, and psychological growth. Also, the results showed the importance of utilizing a humanistic approach to coaching in addition to developing task-mastery climate as an intentional way to influence non-sport related youth outcomes. Also, the results showed that the coaches’ character and behavior can impact athlete’s perceptions of personal and social development. However, the results also indicated a distinction between boys and girls recognition of coach and team relationship, and that male and female teams held different personal/social/emotional priorities.

Study two explored the relationships between youth athletes’ with dyslexia and their perceptions of their coaches, coaching climates, and their report of personal/social development. This study targeted athlete emotional experiences when in sport and the coaching behaviors they perceived to accommodate (or failed to do so) their disability and their personal development. This study hoped to identify help for coaches that work with these students to integrate psychological skills (leadership, positive aspirations, goal setting, self-awareness, visualization, etc.) in their coaching practice. This research also unveiled that student athletes with dyslexia
generally speaking, did not understand what was going on and that they would rather not say anything and look incompetent in front of their friends and coaches, instead of asking for help or clarification. Results showed that sporting experiences can have impact on these athletes' social, physical, and psychological growth. This study’s results also exposed that the psychological, emotional, and motivational aspects of youth-athletes’ with dyslexia development can be encouraged through the motivational climate created by the coaches.
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Physical activity, organized sports, and play are all fundamentally important for children’s physical health, mental health, social emotional development, and gross and fine motor development (Pellegrini, 2002; Pellegrini & Smith, 1998). However, children progressively engage in less physical activity and sport as they age, often due to a lack of physical skill ability, lack of improvement over time (Liu & Breslin, 2013), lack of enjoyment due to pressure to win (Hedstrom & Gould, 2013), and even negative interactions with a coach (Breunner, 2021). This decrease in participation over time, specifically within sport, may be problematic for youth as sporting experiences can have a positive impact on students physical, social, and psychological growth. In sum, sport can encourage personal growth in a way that can positively impact several aspects of one’s physical and mental health for a lifetime (Donelly et al., 2016; Harwood et al., 2015; Rasberry et al., 2011). Specifically, decades of research show that primary positive psychological implications of participating in sports includes positive emotional experiences from social activity/interactions (e.g., increased enjoyment, friendships; Vargas et al., 2018) increased motivation to participate in healthy lifestyle choices (e.g., food choices, behavioral choices; Pate et al., 2000) desire to continue with sport and remain active with increased self-esteem and higher levels of academic achievement (Taliaferro et al., 2008; Harrison & Narayan, 2003).

Thus, researchers and physical education professionals strongly encourage youth physical activity and sport participation on a regular basis for all youth, due to a plethora of physical, psychosocial, and psychological advantages (Holt, 2016; Howie et al., 2018; Sierra-Díaz et al., 2019; Eime et al., 2013). From a social perspective, sport participation can be a positive outlet
for many as it can encourage individuals’ to engage with others, and to react to challenging individual and group tasks (Malm et al., 2019). However, at the same time, negative experiences can turn youth off to many aspects of sport, activity and peer interactions, which likely hampers their physical, personal, psychological, and social-emotional growth. Given these implications, it is important to recognize that the psychological, emotional, and motivational aspects of youth-athletes’ development can be fostered through important elements such as the motivational climate created by the coaches (Papaioannou et al., 2007). A positive climate that increases motivation can be a deciding factor for continued participation while a negative can have the inverse effect. The influential role the coach plays in athlete happiness is huge when considering the long hours associated with practices and games (Breunner, 2021).

Creating a motivational climate can aid in producing positive athlete goal orientations and perceived sport ability (Jaakkola et al., 2016), which can enhance features of sport including knowledge, skill development, enjoyment, longevity, and achievement. Similarly, youth athletes may have a more positive outlook on participating in recreational sports if the sport occurs in a supportive environment where they experience affirming emotions (Fontana et al., 2017). Therefore, sport climates have been identified as a critical contextual factor in which youth may encounter positive and/or negative experiences that shape their future behaviors and self-beliefs (Vallerand et al., 2007). If coaches promote less than ideal climates, some youth athletes can be marginalized or excluded which limits their growth and connection to the sporting environment, their peers, and their own self-confidence.

While much of the research to this point has captured how climates and coaching practices can enhance physical performance and skill development (Bissett et al., 2020; Bird et al., 2021; Cogan & Cohen, 2021; Smith & Smoll, 2017) and generalized statements regarding
other facets of development, relatively little is known about the factors or facets of coaching that directly contribute to creating an environment that leads to participants developing a positive personal, social, psychological relationship with sport (Macdonald et al., 2011). Specifically, youth athletes are in a particularly vulnerable time in their physical, mental/emotional, and personal social development (Fontana et al., 2017). Thus, coaches must entertain strategies that assist in motor-development, while also considering their individual mental/emotional needs, as well. Current techniques that have been suggested to support the personal and social development of athletes include a humanistic approach to coaching (Falcão et al., 2020) as well as developing a process- and improvement- oriented climate, known as the task-mastery climate. At the same time, Falcao et al., (2016) suggest that athletes are not objects that need fine tuning for their sport performance, but they are humans that need connection, interpersonal relationships, and have considerations for unique needs mentally/personally (Lombardo, 1987). In an effort to delve into the role of the coaching climate, this current study explores how coaching climates in youth sport may impact the athlete’s personal and social growth in addition to their commitment to their team and to the sport and outlines factors needed to create a healthy, motivational climate, which is currently an area not well researched in the literature.

**Coaching Climates: Task-mastery & Ego-performance**

A coaching climate is created by the coach and is often based on their past experiences with sport as a player or as a coach. Often the climate is tied to the coaches philosophy, rationale for coaching, and coaching education (Cote, 2006) and the integral instructional components of the motivational climate developed by the coach can foster two general sub-climates described as task-mastery or ego-performance (Møllerløkken et al., 2017; Keegan et al., 2014). Task-mastery approach aligns with humanistic coaching assumptions while the ego-climate likely does not.
Humanistic coaching can be defined as the application of the principles of humanistic psychology to the practice of coaching (Gregory & Levy, 2013). The task-mastery climate is grounded in the achievement goal theory (Ames, 1992) and it represents the social setting developed by the coach and/or the other athletes with reference to achievement goal orientations (Duda & Balaguer, 2007). Within a task-mastery climate, athletes have a task as their objective, which means that the emphasis is on effort and personal improvement in a specific task. It provides athletes an environment in which one can be rewarded for personal and individual growth, for supporting teammates, and for pursuing their best effort (Fontana et al., 2017).

Moreover, perceptions of a task-mastery climate are associated with several adaptive motivational outcomes such as positive perceived competence, self-esteem, objective performance, fundamental procedures of motivational parameter, practice and competitive strategies and moral attitudes, and the experience of flow (Harwood et al., 2015). This is opposed to an ego-performance climate, in which the focus is predominantly on demonstrating superior performance compared to other athletes. The ego climate often results from coaches purposefully putting their athletes in situations where they are being compared to other athletes’ abilities/resulting performances who share different abilities and experiences. Recent research shows that more effective youth coaches have the skill set to deliver and promote a task mastery-oriented climate to foster sport enjoyment and encourage social interactions (Chodzko-Zajko, 2000; Malina, 2001). However, the overall analysis of athletes’ emotional experiences and their impact on one’s perceived non-sport related personal growth is limited. Specifically, less information is available on the diversity of emotional experiences in sport and how they support or hinder connection/burnout to their team and to their personal/social growth.
Youth Athlete personal/social development

Commonly, numerous constituents influence youth athletes, because they are particularly vulnerable in their physical, mental/emotional, and personal-social development. While substantial literature investigates youth athletes’ perceptions of the motivational climate operating on their teams (Fontana et al., 2017), limited exploration has investigated the relation of climate with the importance of emotional experiences, social and emotional development, and the importance of player/coach relationships. In the 21st century, coaches are called upon to act as mentors, role models, and leaders who train athletes to perform well, while simultaneously providing them guidance for life-skills and personal growth (Falcao et al., 2012, 2016). Youth coaches also have a particularly important job to consider, especially when it comes to the personal and social development of athletes, because at times, the athlete spends more hours with the coach then with the family (Merkel, 2013) Thus, there is likely a strong relationship between the climate created by the coach and the athlete’s emotional experience, which goes beyond skill performance and achievement. Both of which will impact long term athlete outcomes and beliefs.

Athlete emotions

Given the influence emotions have on youth academic and nonacademic achievement outcomes (Zins et al., 2007; Palardy, 2019; Bernard, 2006), it is inevitable their emotional experiences in sport will also influence their behavior and development in that context as well. Thus, it is important to understand what those emotions are, where they come from, and potentially, what ramifications they may have. For instance, emotions can provide a more profound understanding of motivation (Pekrun, 2006, 2017; Pekrun, Goetz, Titz, & Perry, 2002), and they have been found to be related to one's thoughts, behaviors, expressions, stimulation, and
everyday actions (Fredrickson, 2001; Pekrun, 2017). Recognizing positive and negative strategies that incite emotional patterns (e.g., learning, self-control, and attentiveness; Pekrun et al., 2002) has helped practitioners in the academic setting and has great potential for expanding youth athletes' learning and achievement as well. In general, youth athletes’ perceived emotions are focused on in this study include enjoyment, anger, and anxiety. These affective experiences can provide strong, nuanced, and accurate information on students’ affective experiences in sports and reveal fundamental internal developments. Also, how these emotions predict behaviors, can potentially help researchers to acquire knowledge on distinctive athlete actions like motivation, self-esteem or resilience. These specific behaviors are called one’s motivational action tendencies (Fredrickson, 2001). While less in known about discrete emotions in sport, exploring emotions may provide detailed and individualistic approaches to understanding key actions and outcomes, like those focused on in this study, regarding personal/social skill development, team commitment, and potential for sport burnout. Each key action and outcome is reviewed below.

**Athlete Personal/Social Responsibility Skills**

Based on previous literature it appears that more understanding into the sporting climate and youth athlete’s psychosocial outcomes while participating in sport need further investigation. This is particularly important given the myriad of differences in youth athletes including their potential physical, mental, emotional, and social discrepancies that a coach may encounter. For instance, identifying how youth athletes’ perceptions of coach leadership behavior, team cohesion, and team commitment influenced team and their personal liking, are in general, critical aspects that must be observed when exploring youth sports. According to Bloom et al., (2020) a
humanistic approach to coaching influences these personal and social outcomes but there still tends to be a limited track record of training and developing these coaching skills.

It is important to first identify the nonphysical-sport outcomes that may need to be explored and to consider ways these constructs or phenomena can be investigated. For instance, youth personal and social skills, initiative, goal setting, cognitive skills, and emotional awareness need consideration as these skills represent important elements in youth development. Personal and social skills are positively associated to life satisfaction (Gilman, 2001), peer relationships (Smith, Ullrich-French, Walker, & Hurley, 2006), character building (Bredemeier & Shields, 2006; Camiré & Trudel, 2010), leadership skills (Wright & Côté, 2003), educational achievement (Eccles & Barber, 1999), and even, identity development (Coatsworth & Conroy, 2009). Furthermore, sport represents an ideal environment for the development of goal setting skills as well as creative skills, which both could be very effective tools for influencing athlete behaviors. In addition, destructive psychological and emotional development, may results from a lack of positive sport climates and negative emotional experiences in sport, however less empirical evidence exists on these relationships.

**Team commitment**

Another critical psychosocial outcome tied to the youth athlete experience that has received minimal investigation regarding coaching climates and athlete emotions includes their beliefs about their commitment to the team. These beliefs go beyond one’s skill ability, but more so their connectedness to their peers, coaches, and perceived social satisfaction (Paradis & Loughead, 2012). Team commitment generally means that team members recognize and agree to support team goals and resolutions. In this case, common goal occurs when each member of the team focuses on reaching the team's aim rather than own their individual objectives. It seems
evident that team commitment is highly related to both the climate created by the coach and is likely reinforced when athletes are having strong positive experiences, regardless of their role on the team, but more work is needed. Recent research shows that perceived team satisfaction increased as a result of athlete camaraderie and positive coaching feedback that reinforced commitment and self-improvement (Shang & Ku, 2018). These results would suggest that when teammates are more supportive and personally and socially skilled, they can foster better sporting environments and team cohesion. In other words, emotional commitment to a team, being socially supportive, as well as sharing positive instructional behavior, increased the team satisfaction for both high and low skilled youth athletes (Martin et al., 2018).

Therefore, recognizing the importance of perceptions of team commitment and its likely subsequent enhancement from a positive coaching climate and emotional experience could potentially shed light on youth involvement and participation. Findings like this are significant for youth sport settings and could help inform coaching practices beyond individual skill development. Generally speaking, identifying with a group or a team will more than likely develop youth athlete’s views of self-confidence, commitment, or determination (Vallerand et al., 2007). Consequently, the magnitude to which they intend to remain involved with their teams (i.e., commitment), will likely be impacted by predictors such as the motivational climate and the emotional state of the athlete in this environment.

**Burnout**

Youth athlete burnout represents an important topic in the field of sport and exercise and is a critical outcome in this study. Youth athlete burnout is described as a negative reaction to psychological or physical stress leading to abandonment of the activity (Harris & Watson, 2014; Gustafsson et al., 2016; Eklund & DeFreese, 2015). The conceptualization of burnout suggests
that the psychosocial experience of the athlete will be impacted by their perspective of the motivational climate and the day-to-day emotions one has in their sport. For instance, Schloder & McGuire (2007), argue that 67% of children burnout or drop out of sports by the age of 12 due to negative experiences in their sport. They also found that in these particularly social and emotionally vulnerable years that another 8% leave sport by the age of 15, thus, an examination of present coaching climates is necessary. Retaining children in sports is significant because children who participate in youth sport receive many physical, psychological, social, and health benefits, many related to participation in physical activity during sports (Eime et al., 2020).

Moreover, there is evidence that participation in club-based and specifically team-based sport can be related to better psychosocial health than individual activities, due to the social nature of participation (Eime et al., 2013). Participation in organized sport makes an important contribution to overall leisure-time physical activity (LTPA) levels throughout lifetime (Olds et al., 2009; Makela et al., 2017). While there are likely multiple reasons for this increase in dropout of youth sport, these negative responses are likely tied to burnout and the coach’s role in considering the athlete’s social, emotional, and psychological developmental needs. Research suggests that burnout may exist among younger athletes as a result of stress and other negative sport experiences (Amorose et al., 2009), which suggest more specificity in the relationships between climate, athlete emotions, and negative outcomes like burnout need investigation.

In combination, the social aspects of sport including the importance of relationships for young athletes, the coaching climates, and athlete emotions, continues to be an area of additional exploration to understand youth athlete motivation and development. Researchers’ suggest these causal relationships are underdeveloped and the lack of consideration has led to limited
prioritization for the athletes needs and development beyond their sport skill abilities (Nichols et al., 2021).

Overall, youth athletes’ primary psychological implications of participating in sport, includes positive emotional experiences (enjoyment and motivation) which stimulates them to be socially active and to participate. The emotional and motivational aspects of youth-athletes’ development can be encouraged through the motivational climate created by the coaches, which can furthermore, improve sporting abilities as well as one’s personal/social growth and commitment. Current literature demonstrates that coaches must entertain strategies that assist in athletes’ improvement, while also considering their individual emotional needs. Coaches do play a role in athletes’ psychological well-being and impact athletes’ emotions, commitment, and burnout in sports context, which is why it is essential to identify effective strategies that promote personal and social growth for all athletes, and which include a humanistic approach to coaching as well as developing task-mastery climate. However, exploration into these relationships’ and the impact of both environmental (i.e., coaching climates) and personal factors (i.e., athlete emotions) on these outcomes has been limited.

**Purpose**

The purpose of this study was to investigate the relationships between youth athletes’ perceptions of their coaching climates, their emotions, and important sporting outcomes including the athletes’ personal/social development using a mixed methods approach. Specifically, how both environmental and personal emotional factors contribute to the key outcomes identified previously. This study was be framed in terms of motivational climate and personal social development. The research questions include:
1. To what extent does the perceived motivational climate created by the coach and the athletes’ emotions (enjoyment, anxiety, anger, and shame) relate to their perceptions of personal social responsibility, skills, team commitment, sport burnout?

2. What coaching characteristics have the biggest positive and negative impact on youth athlete’s social and emotional experience in the sport?

3. In what ways does the coach support/not support individual needs including sport-related and non-sport related social-emotional needs?

**Methods**

**Procedures and Participants**

After receiving Institutional Review Board approval from the university, a local youth soccer club consisting of multiple competitive boy’s and girls’ soccer teams was contacted to recruit participants for this study. Following program coordinator and coach approval, the researcher visited the individual soccer teams to explain the study and seek parental permission to participate in the study. The athletes were asked to return parent permission slips within one week of the initial visit to be eligible to participate in the survey and follow up focus group interview. All participants were reminded that all data collection was completely anonymous and that there are no correct or incorrect answers to survey or focus group questions. All participants were allowed to ask questions and/or stop their participation at any time. During all data collection, coaches were asked to step away as not to interfere with any participant responses. In total, the survey took approximately 10 minutes to complete and the follow up focus group interviews for each team took approximately 30-40 minutes as well. In total, 60 youth athletes from four competitive your soccer teams (two boys and two girl’s teams) volunteered to participate in parts 1 and 2 of this mixed methods study. The participants reported being between
12 and 18 years of age (m=14.68), with a total 36 boys and 24 girls (boys 60%; girls 40%), Caucasian (n=68.3%), African American (n=6.7%), Hispanic (n=3.3%), Asian/Asian-American (n=5%), American Indian/Native (n=11.7%), Multi-Racial (n=3.3%), and Other (n=1.7%) who participated in competitive soccer on average for just over 5 years (range from 1-10 years reported).

A descriptive sequential mixed methods design provided the methodology for this study which entailed gathering, incorporating, and developing justifications based on quantitative and qualitative data so that the research problem can be understood (Collins et al., 2007). Because qualitative methods are susceptible to contextual factors (Green et al., 2007; Klassen et al., 2012), combining them with quantitative methods can establish greater connection with the current theoretical and practical understanding of physical activity behaviors (Otundo & MacGregor, 2019). Therefore, researchers utilized an explanatory approach consisting of two segments including the collection of quantitative data through a survey, followed by the gathering of qualitative data through focus group interviews (Creswell, 2015). Qualitative data was collected following the initial review of quantitative results to further explain and expanded on identified relationships. Thus, the primary rationale for using mixed methods in this study was that reciprocity could be instituted and then more comprehensive analyses attained (Morgan, 2014). Quantitatively, surveys were collected to make team comparisons by gender as well as differences between middle school versus high school age student-athletes, followed by potential relationships between the climate, emotions, and outcomes to inform qualitative investigation. Focus groups interviews were intentionally selected to gain multiple perspectives from the team in terms of coaching climate while we recognize that players and social interaction amongst the players can also contribute to the sporting climate in some ways. This study focused on athletes’
perceptions of the coaching climate specifically, and they were asked to give perspective on the personal-social development and their emotional experience as well (what they liked and how they perceived the coach on a daily basis).

**Measures/ Instruments**

**Part 1: Quantitative Data Collection**

For the quantitative portion of the study, surveys, rating scales, and other peer reviewed published instruments were used to collect variable constructs of interest in addition to basic demographic information for each participant including age, gender, ethnicity, age group (middle or high school level) and number of years in the sport. The published instruments, described below, were used to measure key actions and outcomes along with other variables of interest.

**Motivational Climate Scale for Youth Sports.** To measure the coach initiated motivational climate perceived by the soccer athletes, the Motivational Climate Scale for Youth Sports (MCSYS; Smith et al., 2008) was used. Climate subscales included items for the task-mastery climate and the ego-performance climate. Athletes were prompted by, “Please read each item and circle which answers is more correct for you regarding your soccer coach.” An example of a task-mastery climate item included, “The coach makes players feel good when they improve in a skill.” An ego-performance item included, “Winning games is the most important thing for the coach.” There were a total of a total of six items each for both subscales. All items were measured on a five-point Likert scale ranging from “not true at all” (1) to “very true” (5).

**Discrete Emotions in Physical Education Scale.** A variety of positive and negative athlete emotions were measured by adapting the Discrete Emotions in Physical Education Scale (DEPES; Simonton et al., 2021) to soccer and to target their youth soccer experience as opposed to physical education focused items. Subscale items for athletes’ perceived enjoyment, anger,
and anxiety were measured using the 12 adapted items (four items for each emotion). Athletes were prompted by, “The following questions pertain to your feelings that you may experience during the soccer program your involved with. Please indicate how you typically feel during soccer. Example items included, for enjoyment, “I enjoy being in this activity”, for anger, “I get frustrated when I don’t perform well during this activity”, and for anxiety, “thinking about participating made me feel uneasy.” All items were measured on a five-point Likert scale ranging from “strongly disagree” (1) to “strongly agree” (5).

**Youth Experience Scale for Young Athletes.** To measure athlete’s perceived personal and social growth and development, the personal and social skills subscale from the Youth Experience Scale for Young Athletes (MacDonald et al., 2012) was used. This measure consisted of 14 items that included statements regarding both personal and social skill awareness. Participants were prompted by, “Circle the answer to each statement that best describes your beliefs about yourself in your experiences during the soccer program. Items examples included, “I became better at giving feedback,” “I learned that working together requires some compassion,” and “I learned about helping others.” Each item was measured on a four-point Likert scale ranging from “not at all” (1) to “yes, definitely” (4).

**Multi-dimensional Sportsperson Orientation scale.** Athletes’ beliefs regarding their team commitment were measured using the five-item subscale from the Multi-dimensional Sportsperson Orientation scale (Vallerand et al., 1997). Athletes were prompted to rank each statement based on how commented they feel to their soccer program. Items included, it is “important to be at all practices,” and it is important to “give maximum effort during practices.” All five items were measured on a five-point Likert Scale ranging from “no” (1) to “yes” (5).
Athlete Burnout Scale. For sport burnout, the Athlete Burnout Scale (Raedeke & Smith, 2001) was used consisting of 15 items specified to the participants experience in their soccer program. Participants were prompted by asking them to please circle how they felt regarding each item as it related to their continued participation in the soccer program. Example items included, “I’m accomplishing many worthwhile things in soccer,” “I feel so tired from my training that I have trouble finding to do other things,” and the effort I spend in soccer would be better spent doing other things.” Positively worded items were recoded to align with the intentional burnout focused questions. Each of the items was ranked on a five-point Likert scale ranging from, “almost never (1) to “almost always” (5).

Part 2: Qualitative Focus Group Interviews

Following the analysis of the survey data, four semi-structured focus group interviews (Patton, 2015) were conducted, one for each of the four teams (2 boys’ teams, 2 girls teams; one of which was at the high school level and one of which was at the middle school level, respectively). Equivalent interview questions were asked in each group. During the interviews, team participants were asked to provide information on their relationships with their coaches and prompted to explain characteristics about the environment that helped them develop personal/social or, non-sport related ways. Additionally, nuance was targeted in their emotional experiences and if coaches are meeting their individual needs in a way that helps them develop commitment and continued participation in the program. Athletes were also prompted to share experiences they felt may have had a negative influence on their emotions or those that made them feel burnout in their sport. All interviews were recorded and transcribed verbatim. Researchers removed and excluded any personally identifying information from all data.
Data Analysis

For part 1 of this study, quantitative analysis first consisted of inputting data into excel and investigating descriptive statistics and data accuracy using SPSS (Version 26). All data were evaluated for missing data and outliers and were corrected if necessary. In this case, all participants completed 100% of their survey response items and not outliers were identified. Next, Cronbach’s alpha scores were calculated for each multi-item variable, followed by creating composite mean scores for each construct.

Preliminary analysis focused on exploring potential differences in perceptions of the coaching climate, emotions, and outcomes (personal/social skills, commitment, and burnout) by gender (reported as male or female) and age group (middle or high school level). Researchers conducted a Multivariate Analysis of Variance (MANOVA) with a Bonferroni adjustment with all variables of interest as the dependent variables (climate, emotions, personal/social skills, commitment, and burnout) with participant gender and age group as the fixed factor variables. The adjustment is necessary given the studies sample size and to account for potential type error and/or inflated alpha results which is more conservative and prevents overstated results (Mertler & Reinhart, 2017). All MANOVA results were examined based on the Wilk’s Lambda and $f$-test scores based on a $p$-value of .05 (Tabachnick & Fidell, 2013). Lastly, any significant within or between group interactions were followed-up by individual analysis of variance (ANOVA) test to identify where differences may be occurring.

Secondly, researchers explored the potential relationships between the coaching climate and athlete’s emotions as predictors of their perceived personal/social skill development, team commitment, and burnout. Thus, a hierarchical linear regression technique was used based on the sample size and research questions (Raudenbush & Bryk, 2002). Due to the perceived climate
being a group-centered variable and emotions being a more person-centered and proximal variable, the theoretical recommendations would suggest inputting the climate variables in step 1 of the analysis followed by the input of the emotional variables in step 2 of the model as the climate variables likely influence the athletes’ emotional beliefs. The hierarchical regression provides a wholistic perspective of the potential influence of the independent variables on the dependent variables together and separately. Final regression models provided information on both the statistical results of the multi-level model and the significant relationship pathways between all independent and dependent variables (Tabachnick & Fidell, 2013). Results were analyzed using the $f$-test statistic, unstandardized and standardized coefficients based on a p-value of .05, and effect sizes determined by explained variance ($R^2$).

For part 2 of the analysis, each interview transcript was analyzed using both inductive and deductive analysis techniques. Each interview was read multiple times, first using line by line coding to develop an initial code book regarding phrases and responses provided by participants groups. Then, interviews and codes were evaluated a second time to deduct and identify information as it relates to the predictive relationships identified in the research questions and part 1 analysis. Codes that share relationships were linked using constant comparison techniques (Lincoln & Guba, 1985) and were used to create themes and subthemes to represent the key findings (Patton, 2015). Main themes were those that emerged most often from connecting subthemes and those of which that provided detailed explanation to the various patterns from the quantitative analysis and the theoretical backgrounds of the variables of interest (Creswell, 2015).
Results

Part 1: Preliminary analysis

Descriptive statistics for all composite mean scores are provided on Table 1 including the descriptive statistics, correlation estimates, and Cronbach’s Alpha coefficients. Reliability analysis showed that the Cronbach alpha scores all met acceptable levels for the multi-item variables that were measured ($\alpha$ range = .704-.858). Each of the positive variables showed higher mean scores then the negatively associated variables, however, group reported anger ($M= 2.68$) was above the midpoint as opposed to its negative reported counterparts. Next, researchers calculated bivariate correlations and individual means scores and standard deviations for all constructs (Table 1).

Next, a sequence of MANOVA tests were evaluated which were structured to assess differences regarding all element means by a series of demographic and contextual variables. Each met the assumptions of no multicollinearity with intercorrelations below .8 (Stevens, 2002). Multivariate results for gender were found to be significant (Wilk’s $\Lambda=.436$, ($F(8, 49)= 7.911$, $p<.001$, $\eta^2_p= .564$) as well as for grade level (Wilk’s $\Lambda=.646$, ($F(8, 49)= 3.351$, $p<.001$, $\eta^2_p= .354$). Post hoc results showed, male athletes reported higher perceptions of ego climate ($F= 45.038$, $p< .001$), while female athletes reported higher perceptions of the mastery climate ($F= 11.073$, $p= .002$), enjoyment ($F= 6.072$, $p= .017$), and personal and social skills ($F= 14.881$, $p< .001$). Male athletes also reported higher perceptions of burnout ($F= 3.516$, $p= .041$). From a grade span perspective, middle school athletes overall reported less ego ($F= 6.488$, $p= .014$) and anger ($F= 22.607$, $p< .001$) than HS athletes. Lastly, HS girls reported lower ego climate ($F=35.295$, $p< .001$) than their male or middle school counterparts.
Lastly, hierarchical regression analysis (Table 2) findings were mixed in each of the three models. For personal and social skills, the task-mastery climate ($\beta = .365$) was a positive predictor in step 1 but was no longer significant in step 2, when including the self-reported emotions. In step 2, enjoyment was on the cusp of being a significant predictor ($\beta = .365$, $p = .054$) with no other significant factors. For model 2 predicting team commitment, ego-performance was found to be a negative significant predictor in step 1 and in step 2 when including emotions. Additionally, enjoyment was found to positively associated with team commitment while the other emotions were non-significant. Lastly, neither climate was significantly associated with burnout in the third model. However, enjoyment and anger were found to be negatively and positively associated with sport burnout in step 2. Interestingly, significant value trends suggested that both climate perceptions were approaching significant in step 2 when adding the emotions to the model.

Part 2: Qualitative Themes

Qualitative analysis resulted in three major themes reported by the soccer teams (both boys and girls at both grade span levels) including, (a) team/coach relationships and the climate, and (b) emotional experiences. Following analysis, these three reoccurring themes were suggested to have the most impact on the athletes’ involvement in terms of the three key actions or outcomes of interest: personal and social development, team commitment, and burnout.

Theme 1: Team/coach relationships and the climate

Likely the most significantly reported theme by all groups was that of the team/coach relationship. In all of the reports, regardless of sport outcomes, it was evident that the coaches’ character and behavior can impact athlete’s perceptions of personal and social development. Middle school boys emphasized the importance of coaches’ role, coaching climate, and the
significance of having a good/strong/leader-coach. These boys reported how their coach “is just trying to push us and get the best out of us”. High school boys believed that their coach “is trying to do it to make us better, and that he likes to show a lot of tough love”. On the other hand, middle school girls team, also showed appreciation of a strong coach but in a distinctively different way. This team reported they liked,

“how their coach is a very people person, and that he is good at keeping us positive and making sure that even if we do something wrong, he points out like what we do right and how to fix what we do wrong”.

High school girls team reported that their coach is “not only a good coach, he's like a good person outside of like soccer too so, which makes a big difference because he takes into account our emotions”. In other words, the girls teams seemed to place more significance on positive emotional connections with their coach and the fact the coach showed positive and kind personality traits beyond the scope of their sport performance duties.

**Theme 2: Emotional experiences**

The second theme, the importance of emotional experiences, was also depicted as an important element for all teams and grade spans. For example, enjoyment (a positive emotional experience) proved to be the biggest predictor of positive personal-social experience for athletes of both genders and grade spans. Middle school boys team members collectively reported that “they have enjoyed being part of sports program, because there's always something driving you to go farther”. One middle school boy reported that “It's a very encouraging environment. The team is very positive and friendly, and you never feel put out” Another middle school boy stated that it helped him “make more friends or just get closer to the group and made the bonds between me and my friends stronger”. Similarly, one middle school girl reported how she “made great
friends that pull her up sometimes, and I would not play in another program unless my friends are there”. Collectively, middle school girl team members reported how they “absolutely love it, love the program, and friends they have on a team”.

For high school boys, enjoyment was also essential but was born from the competitive nature of the sport, and a reaction to individual sporting improvement. One boy stated that being on a sports team made him really feel important because he enjoys “the competition and the drive it brings”. Collectively, high school boys team reported how “this is a good program, and a good school and we have facilities here that other schools don’t have and we’re really grateful for that. That is why we are ready, and we can win” Similarly, the girl’s teams reported strong importance placed on emotional experiences, but the indicators of significance were less specific to the team or winning and more so in personal-social aspects of sport. Specifically, the female athletes placed emphasis on how the social environment prompted stronger emotional aspects of being involved in sport and this led to a more positive atmosphere and enjoyment. High school girls collectively reported that “It's a good way to meet people outside of your school environment, because you see those people every day. So, these people can just like a different set friend group. It's like a bond playing sports.” Additionally, for middle school girls, it was important to be engaged on the team as “soccer is good for a distraction from school”, while high school girls underlined “being with friends and building relationships with teammates” as the major contributors for importance positive emotional experiences in sport. In other words, both boys and girl’s teams favored positive personal-social experiences, but they perceived that experience in distinctive ways. Additionally, there were distinct differences between MS and HS teams. This aligns with reports of less anger and less ego-climates as the coaches were focusing on friendships and connections at the MS level more than the HS level given their responses.
However, this theme unmistakably represents a key contributor for both male and female youth athletes motivation, eagerness, and readiness to play.

**Theme 3: Individual and team growth and development**

Furthermore, the last theme on individual and team growth and development was highlighted through multiple reports on individual and team goals as a major contributor to positive sporting experiences. The ‘team goal’ focus proved to be important for the middle school boys’ team as team cohesion and commitment was strongly linked to their growth together. The team emphasized on team objectives, responsibility, and holding players accountable. For example, one boy on this team reported how,

“through all the ups and downs everybody got on fine and we were all friends, and if we did if we didn't know somebody by the beginning of this thing we definitely knew him by the end. You know people make mistakes, but it's good that you guys kind of went through it together, right?”.

High school boys team member also, revealed strong indicators for individual and team growth and development as well but as a result of two key subthemes such as winning or competitive nature. Being part of the team inspires these boys to “always want to be better” and where one wants to “make that jump from JV to varsity, from the bench to be a starter, from just a player to a leader and you know from there, winning a state championship”. These boys felt more socially accepted and emotionally successful as a result of development and growth, both individually and as a team. In juxtaposition of this, the middle school girls team also indicated team bonding and commitment as important elements, but because their sporting experience “teaches things important outside of sports”. Similarly, the high school girls team emphasized that “even though it's just sports, it will teach you cooperation in the real world.” Evidently, team
commitment also represents another key contributor for both boys and girls teams, and it absolutely makes a tremendous effect on their willingness to participate in sports. However, the sources of these themes were quite different. Thus, in summary, it was evident that bonding with coaches, personal and social growth, and emotional experiences were important to athletes, but competition level and potentially gender differences were found when it came to the antecedents of these important outcomes.

**Discussion**

The purpose of this study was to examine the relationships between youth athletes’ views of their coaches, coaching climates, and athlete personal/social growth need supporting as well as its impact on these athletes’ experiences. This study utilized a mixed methods approach to explore four youth soccer teams and the relationships between the coaching climate and their social and emotional outcomes in the sport. Furthermore, this study explored factors that lead to positive and negative personal development among youth sport participants, together with some of the psychological and social implications of being involved in sporting experiences. Also, this study considered the role of a coach in athletes’ psychological well-being and the impact it has on athletes’ personal and social growth. Lastly, this study looked at the importance of utilizing a humanistic approach to coaching in addition to developing task-mastery climate.

Multiple regression analyses found a great significance of team and coach relationships. All four groups reported, regardless of sport outcomes, that the coaches’ character and behavior can impact athlete’s perceptions of personal and social development. However, the results showed a distinction between boys and girls recognition of coach/team relationship. Boys teams indicated great significance in having a good/strong/leader-coach, what it means for their growth, how it challenges them, and why it motivates and drives them forward. Differently, girls teams
look more on to the positive emotional coaching, and positive and kind personality traits of their coach.

Another significant finding was that even though male and female teams placed great importance on emotional experiences, they still had different personal/social/emotional priorities. A positive emotional experience such as enjoyment, turned out to be the biggest predictor of positive personal-social experience for athletes of both genders and grade spans. However, while boys teams positively highlighted competitive nature of sport as a place for an individual improvement, this study showed that continuous competition and ego may negatively impact boy’s teams. Comparably, both girls teams gave an emphasis to emotional experiences, but with the greater focus on personal-social aspects of sport and less specific to the team or winning. In addition, connection between enjoyment and burnout reveals that youth athletes continue to compete and participate in sport even after they have stopped to enjoy it. In other words, emotional experiences are a key contributor for both male and female youth athletes motivation, eagerness, and readiness to play.

In addition, all four teams indicated team bonding/team commitment as an important element and one of the major contributors to positive sporting experiences. At this instance, ego-driven climates were reported as the biggest negative predictor of team commitment, which means that the motivational climate (mastery or ego), has substantial effects on youth athletes enjoyment and pleasure while participating in sport. This data may align with survey data in suggesting that the ego-performance reports by boys may cause them to value winning and competition more, which may be problematic for their continuation and growth over time. This also could suggest positive implications (they are happy when they win) but could also be negative (when they lose). Also, this could indicate that the girls’ coaches are doing a better job
of facilitating personal and social success and cohesion than boys coaches, or simply, that female athletes see the coach as a major factor to their experience but in different ways. Nevertheless, due to a smaller sample size and one group, more research is needed as a lead into the qualitative findings, because it can provide more in-depth answers and add on the survey findings.

**Limitations and Future Research**

There are several limitations of this study. For instance, small sample size potentially means that multiple regression analysis perhaps did not succeed in identifying important connections within the data set. Therefore, other researchers need to conduct further investigation on a larger sample size to potentially identify other relationships. Another limitation is the homogenous participant sample, as the athletes were mostly white and from one geographical area. Further research would need to consider providing more balanced, representative, and broad scope of participants, with contributors from a larger geographical area. Third limitation is that the data collection relied on self-reported data as opposed to gathering observational or objective data on athlete or coaching behaviors during the program. Thus, more objective approaches to athlete-coach interactions are warranted. In terms of future research, in addition to exploring actual and genuine coaching behavior, these constructs would also be beneficial if administered longitudinally among coaches, perhaps throughout the season. Lastly, investigating individual coaching interventions to train coaches about humanistic and task-mastery approaches in conjunction with teaching coaches how to weight the personal, social, and emotional aspects of their athlete’s experiences more intentionally needs to be explored.
Conclusion

This research suggests that sporting experiences can have tremendous impact on students physical, social, and psychological growth. At the same time, this research recognizes that the psychological, emotional, and motivational aspects of youth-athletes’ development can be encouraged through the motivational climate created by the coaches. Also, this research justifies how coaching climates and youth sport positive/negative emotions may impact their personal and social growth in addition to their commitment to their team and to the sport, which could shape their future behaviors and self-beliefs. Furthermore, this study acknowledges coaching characteristics, emotional and social connections, and team goals can have positive and negative impact on youth athlete’s social and emotional experience in the sport. Lastly, this study distinguishes the importance of utilizing a humanistic approach to coaching in addition to developing task-mastery climate as an intentional way to influence non-sport related youth outcomes.
References


https://doi.org/10.1080/02701367.2009.10599575

https://doi.org/10.1080/10573560500242184

https://doi.org/10.1123/jcsp.2021-0022


Eccles, J. S., & Barber, B. L. (1999). Student council, volunteering, basketball, or marching


Eklund, R. C., & DeFreese, J. D. (2015). Athlete burnout: What we know, what we could know, and how we can find out more. IJASS(International Journal of Applied Sports Sciences), 27(2), 63–75. https://doi.org/10.24985/ijass.2015.27.2.63


https://doi.org/10.1037//0003-066x.56.3.218


Table 1.

Descriptive Statistics, Correlations Estimates, and Cronbach Alpha Coefficients.

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M 3.89    2.64 4.13 2.64 1.55 2.94 2.36 4.62
SD 0.733 0.927 0.655 0.911 0.644 0.551 0.563 0.419
Scale 1-5 1-5 1-5 1-5 1-5 1-5 1-5 1-5
α .764 .833 .700 .753 .790 .858 .772 .704

Note. EGO= Ego; MAS=Mastery; ENJ=Enjoyment; ANG= Anger; ANX= Anxiety; PSS=Personal Social Skills; BO=Burnout; COMM= Team Commitment; α= Cronbach alpha estimates of internal consistency; ** p<.001, *p<.01.
Table 2.
Summary of hierarchical regression models to each of the three outcome variables.

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*Note.* EGO= Ego; MAS=Mastery; ENJ=Enjoyment; ANG= Anger; ANX= Anxiety; PSS=Personal Social Skills; BO=Burnout; COMM= Team Commitment. $b$ (SE)= Unstandardized regression coefficient and standard error; $β$= Standardized regression coefficient; t= t-score; $R^2$= variance accounted for; $ΔR^2$= change in variance accounted for. **$p$<.001; * $p$< .01
Study 2: Athletes with dyslexia and their experience within the inclusive sport: What is the influence of the coach?

Students and youth athletes can develop important lifelong attributes such as confidence and positive attitudes towards being active and social as a result of enjoyable experiences in environments like Physical Education (PE) and sport (Gaspar et al., 2021; Schneider et al., 2020). Fostering positive student and youth athlete experiences and promoting greater involvement and motivation for sport activities is commonly related to the motivational climate developed in the sporting environment (Sierra-Díaz et al., 2019). Social and contextual factors that define the motivational climate are originated by the different social catalysts such as peers, family, or teachers/coaches (Cervelló et al., 2004). Furthermore, motivational climates can vary and based on their influence can result in success and/or failure for the young athlete. Often, climates are categorized as ego-oriented or task-mastery oriented (Ames, 1992). For instance, in an ego-oriented environment, the teacher or coach regulates a great deal of class dynamics and nuances, rewards more athletically skilled students, fosters social and personal competition between peers, as well as provides public and open appraisal and judgement. As an alternative, a task-mastery oriented learning environment is comprised of the teacher urging and supporting independence, individual problem solving, mastery of the task, self-guidance, and involvement (Cervelló & Santos Rosa, 2001; Nicholls, 1989; Roberts, 2001). And, while research on the motivational climate in youth sport is still emerging a strong need for the relationship between the motivation climate and attending to needs of all athletes, with and without disabilities, is warranted.

Given the prevalence of disability in youth (14% in total public school population or an estimated 7.3 million; National Center for Educational Statistics, 2021), and the push for a fully inclusive learning environment where many youth athletes with a range of physical/mental
learning differences and disabilities are participating in inclusive sport and physical education experiences alongside typically developing peers, the role of motivational climate, role of the coach/teacher and the athlete’s perception is timely. Put simply, many youth athletes participate alongside general population youth athletes, but they may require unique and individual attention to assist in their success that is different from the general group of athletes (Spaaij et al., 2014). In this case, a “one size fits all” approach (Tomlinson et al., 2003) for coaching and personal/social/emotional development of these youth athletes is not ideal. This is primarily due to the evidence that students in differentiated learning environments achieve better outcomes than those with a more uniform approach to instruction in study habits, social interactions with peers and general attitudes toward school and learning (Schuelka & Lapham, 2019). And, given that most youth sporting experiences are fully inclusive it is practically a pre-requisite in the 21st century for coaches and instructors to be trained to meet students with varying needs and disabilities. Specified instructional practices for teachers are needed to assist these students in reaching their physical and social potential.

Quality teaching practices required for fully inclusive environments that target individual needs, relationships, and growth provide appropriate environments for all students, of all physical/cognitive ability levels is the ultimate goal. To achieve this, it is important to recognize that additional teaching techniques and awareness on learning differences are needed for effective instruction to occur. In fact, although there is a plethora of research that examines instructional strategies for several learning disabilities (Sherrill & Pyfer, 1985; Kohli et al., 2018; Wong et al., 2003; Gerber, 2005; Archer & Hughes, 2011; Kameenui & Carnine, 2018), there continues to be need for research and training as it relates to those with disabilities participating in physical dominant environments like PE and youth sport. Youth sporting environments are
highly related to the youth PE inclusive experiences, and it is likely that strategies and considerations for coaches can be learned from training techniques offered to PE teachers. Specifically, research regarding the approaches for coaching and teaching youth athletes with “hidden” disabilities/differences in sport needs particularly attention. Hidden disabilities are often considered learning and intellectual differences that coaches and teachers can not overtly see and thus, may not even realize they are present and need consideration. Without consideration, it is likely that coaches cannot help these youth athletes improve and cannot promote positive personal social growth.

One of the hidden disabilities that is not easily observed, yet highly prevalent, includes that of dyslexia. There is a very strong need for understanding athletes and students in this area as dyslexia affects about 30% percent of the population in the United States (National Center for Educational Statistics, 2021), and it comprises the majority of all learning disabilities conditions (Cortiella et al., 2014). Existing literature is limited when investigating everyday learning experiences of students with dyslexia although it is the most common learning disability. Previous research shows that students with dyslexia experience difficulties with social stigma and access to reasonable adjustments (MacCullagh et al., 2016; Stoeger & Rountree, 2020; Riddell & Weedon, 2006; Ryder & Norwich, 2018). It has to be said though, that a considerable amount of literature has explored overall school day overall school experiences of students with a broad range of disabilities (including some data regarding students with dyslexia). However, the focus for students with dyslexia is predominantly on improving educational understanding and performance. However, there is a very limited research that explores student athletes with dyslexia and their experience within the inclusive sport or physical education setting.
In other words, dyslexia is much more common than other hidden learning disabilities and it is extremely likely that coaches will be working with students who are dyslexic multiple times in their career. Dyslexia, and other learning and intellectual differences/disabilities, can impact athlete’s physical and mental/social development in sport and they are difficult to treat as they are mostly “invisible” to coaches (Vargas et al., 2019). If coaches are unaware of these special needs and they implement a highly direct and ego-performance climate, it is likely that these athletes may experience sport burnout, limited physical development, and ultimately experience negative personal and social connections to the sport/team. Even though existing literature provides reviews of the intrapersonal correlates of motivational climate perceptions in sport and physical activity (Harwood et al., 2015), and coaching climate with burnout in school and sports (Into et al., 2019), the understanding of fully inclusive coach experiences of students-athletes with dyslexia is needed as well.

Furthermore, youth sport represents an important tool in the development of significant peer relationships (Herbison et al., 2018). In sport, peers, teammates, or co-players have a number of psycho-social roles which can impact children’s’ socio-moral growth and emotional experiences (Ommundsen et al., 2005; Boixados et al., 2004). The importance and influence of peers’ relationships and positive personal development for student-athletes with dyslexia cannot be overstated enough because they tend to develop lower levels of self-esteem and have negative emotions/experiences when it comes to social relations (Terras et al., 2009), self-perception (Burden, 2008), and peer and family relationships (Ghisi et al., 2016). Specifically, students with dyslexia experience problems with having the ability to adapt to different situations, behaviors, and personality which may result in low self-confidence. Unfortunately, this prevalence of anxiety and depression in children with dyslexia is extraordinary, with more negative and
increased antisocial behaviors, and higher suicide rates (Huang et al., 2020). With this in mind, coaches need additional tools to meet the needs of all student athletes as youth sports are a tool that can provide successful interactions that transfer over to other aspects of these athletes' lives. In a motivational climate, where there are positive experiences, these athletes may be more willing to actively participate, or seek new challenges involving others and as a result become more confident (Beyer et al., 2009). For instance, previous research on the relationship between the perceived motivational climate, achievement goals, and peer relationships in young soccer players demonstrated a systematic relationship with peer acceptance and friendship in male and female youth soccer players (Ommundsen et al., 2005). In addition to promoting an environment of peer acceptance and support, these results suggested that individual movement pursuits and exploration may help athlete’s with hidden disabilities such as dyslexia. These are important outcomes, and they could be essential for students with dyslexia. In other words, youth sport and all of its benefits can help youth grow and advance, and potentially, could also be a great opportunity for students with disabilities to reap the same benefits as the general student population. However, it is still undetermined if sporting experience really accomplishes that for students with disabilities like it does for those students who do not have disabilities. Building stronger and inclusive climates as suggested by Beyer et al., (2009), will create environments which will not only reduce problem behaviors, but would also offer more choices and opportunities for success and challenge, instead of competing against others as the main source of fulfillment. However, this environmental benefit may not be feasible for youth athletes if coaches lack awareness and training. And, more than likely, the possibility of success would be enhanced while lessening the athlete's frustration.
Although students with dyslexia face challenges on a daily basis, they also bring unique qualities of concentration, focus, and nonlinear styles of thinking. Consequently, relations between youth athletes with dyslexia and a coach/teacher is a serious matter to understand for them to flourish. The influence of a coach can play an important role in the life of athletes with dyslexia, specifically as it relates to offering specified multi-dimensional instruction, meeting individual needs, and in prioritizing the person as well as the athlete. More athlete-centered instruction, planning, and feedback is likely needed to meet these athlete’s needs. Additionally, assisting these athletes’ growth and development in their physical skills as well as their mental, emotional, and social growth needs to be considered as they likely require non-traditional considerations as well. Furthermore, existing literature rationalizes how enjoyment is believed to be one of the most significant motivational elements in youth sports because it has been positively associated with adaptive motivation and continued involvement (Fraser-Thomas et al., 2008; Wall & Cote, 2008) and inversely with dropout and burnout (Butcher et al., 2002; Strachan et al., 2009). Emotional growth and considerations for their personal and social development of all athletes is important, but the positive impact of youth sport on students with disabilities may be even more meaningful as it relates to building confidence and self-esteem. However, little to no literature on this topic with student-athletes with dyslexia has been explored. Because dyslexia is multidimensional and multifaceted and sometimes reaching appropriate academic levels tends to be a complex, difficult, and stressful task, students with dyslexia see sports as a positive escape from hard schoolwork and bad grades (Feeney, 2018). Often, participating in sports, stabilizes their school experience, allowing them to feel and be like other students. In addition, being an athlete, heightens self-awareness, which again, could be some of the most powerful tools they have as individuals. At the same time, part of such experience involves the
role of a coach and his/her relationship with a student athlete with dyslexia. Most definitely, a coaches impact is very significant and needs to be taken into consideration. A compelling question arises to coaching practices when instructing those with dyslexia, as to the degree those practices are motivating and supporting, or do they fall short? The same could be asked about the coaching climate and its influence on personal/social development of student athletes with dyslexia. Therefore, it is important to explore athletes with dyslexia and their experience within the inclusive sport, just like it is significant to find out what is the influence of the coach, and how much coach, coaching climate impacts social/personal development of these athletes.

Consequently, the need for research, education, and awareness for coaches about “best practices” when working with youth athletes with dyslexia in sports is critically needed. Therefore, exploring relationships between youth coaches and athletes with dyslexia focusing on their emotions, motivational climate, and personal/social development is needed. This study will describe the aspects of coaching and youth sport environments on the emotional and personal experiences of athletes with dyslexia of varying abilities and ages. This study targets fully inclusive environments in both school and sports as way to capture more common and traditional coaching behaviors in addition to exploring how athletes with different skill ability and learning differences grow in these youth sporting experiences. In sum, gaining confidence, enjoyment for physical activity, and making lasting relationships with peers and adults is critically important for youth athletes’ with dyslexia. This study, sought to evaluate perceptions of their coaches, coaching climates, and their reports of personal/social development, which embodies foundation for creating positive experiences and enjoyment for these athletes, and thus enhances their motivation and desire to continue to play.
Purpose

The purpose of this study was to utilize a qualitative approach to explore the relationships between youth athletes’ with dyslexia and their perceptions of their coaches, coaching climates, and their report of personal/social development. Specifically, this study targeted athlete emotional experiences when in sport and the coaching behaviors they perceived to accommodate (or failed to do so) their disability and their personal development. This investigation targeted a social ecological approach to the sporting experience and the relationships between the athletes and the coaches. This included exploring aspects of the environmental, personal, and emotional experiences of youth athletes with dyslexia in hope to identify help for coaches that work with these students to integrate psychological skills (leadership, positive aspirations, goal setting, self-awareness, visualization, etc.) in their coaching practice. The following research questions guided this study:

1. How do youth athlete’s with dyslexia perceive their inclusive sporting experience?
2. What type of support do youth athletes with dyslexia receive from their coaches?
3. How do coaches support their learning disability when it comes to stimulating self-confidence, motivation, and enjoyment?
4. What strategies did athletes perceive as the most influential coaching reinforcements for support and growth?

Methods

Procedures and Participants

After receiving Institutional Review Board, IRB, approval from the university, a local elementary school that specializes in teaching student with dyslexia was targeted to recruit upper elementary student participants for this study. Specifically, students who have dyslexia that participate in fully inclusive recreational sport outside of school. Following administration
approval, the researchers conducted one-on-one interviews with athletes. This cross-sectional research utilized a qualitative interview approach and explored how youth athletes perceive their inclusive sporting experience and how coaches support their dyslexia when it comes to strengthening self-confidence and physical skills, as well as the motivation and physical activity enjoyment. This study also evaluated student’s perceptions of their coach’s ability to provide needs support, mastery climate, and positive emotional awareness.

In particular, youth athletes with dyslexia were interviewed to share their experiences as it relates to their coaches ability to help, support, accommodate, and modify for their needs. Athletes were asked how their coach and teammates make them feel and what things their coaches do that have the most positive and negative impact on how they feel when participating in their sport. Lastly, athletes with dyslexia were asked about their perceptions of sports through their emotions, goal orientations, perceptions of social relationships, and feelings of being capable.

Participants and target population in this study were youth student-athletes with dyslexia (N= 12; six male and six female youth athletes in upper elementary school) who participate in fully inclusive youth sport outside of school with a local club or organization (see Appendix with descriptive information on the participants). Sampling method was based on convenience and accessibility. The average age of the participants was 12.5 years old (SD=0.52). They participated in recreational soccer, basketball, baseball, football, and cheer. The participants reported the average number of years they participated in their sport as 2.91 years (SD=0.9).

Data Analysis

Interview data was collected using one-on-one interviews (see Appendix with interview questions) with each of the twelve participants. All interviews were transcribed verbatim and
analyzed using a thematic approach evaluating both the perceptions and the emotional experience of the athletes. Both inductive and deductive analysis techniques were used. First, all data was coded line by line and given labels developed into a codebook. From there, data was read again, and codes were compared to explore common themes both within each individual and across groups. Codes that share relationships were linked using constant comparison techniques (Lincoln & Guba, 1985) and were used to create themes and subthemes to represent the key findings (Patton, 2015). Main themes were those that emerged most often from connecting subthemes and those of which that provided detailed explanation to the various patterns from the quantitative analysis and the theoretical backgrounds of the variables of interest (Creswell, 2015). Reliability and trustworthiness of the data were demonstrated by the multiple reviews of the interview data and comparison methods used for creating the codebook.

**Results**

Qualitative analysis resulted in three major developments reported by the student athletes with dyslexia included: (a) Hidden disabilities tend to stay hidden, (b) Caring is coaching, and (c) Social emotional experiences. Following analysis, these three reoccurring outcomes were suggested to have the most impact on the athletes’ involvement.

**Outcome 1: Hidden disabilities tend to stay hidden**

In all the reports, there were few topics that were important to student athletes with dyslexia. However, the two main things that we heard from students were, (a) they tried to keep their dyslexia anonymous and (b) they really feel like they are playing catch-up all the time. To address the first subtheme, these students explained how keeping their dyslexia undisclosed was extremely important because either they feel embarrassed, anxious, or they did not want to feel any different from any other athletes on the team. Hailey mentioned how she feels
“embarrassed when having to explain what dyslexia is and how it feels different to have it”.

Therefore, Hailey chooses purposefully to hide her disability, because she does not want to stand out or, she does not want to be known in the negative context as a “special athlete”.

Nathaniel explained that he did not want to be treated differently from others on his team and he did not want to take away everyone’s time, “because we are a team, and we are all even, and there is not time to deal with more problems from players”. In other words, this student feels like he is placing unnecessary problems on his team by discussing his disability. Sense of fitting in with the others on a team tends to be critical, and these student athletes do not want their disability to obstruct and interfere. Also, sense of embarrassment and shame is very strong and has tendency to prevail. In addition, second significant subtheme is that these students feel like they are trying to make up and catch up all the time. In other words, most of the time they do not know what is going on and they do not tell anybody (their coach, their friends/teammates, or their parents). Sense of being lost, late, or confused is something that all of them explain as an ongoing feeling. For example, John says that,

“when coach is explaining the basketball tactics, he uses these “big words” and he talks fast and I don’t want to tell him that I don’t understand him because he will yell, and I don’t like when he yells at players”.

Due to the fact that such situation is uncomfortable for this particular athlete, he tends to avoid conflict with his coach (avoid yelling) and makes up, adjusts, or improvises. Furthermore, Kira said that “I don’t want to tell anyone that I am confused because half of the time I don’t understand what is going on and I just follow what everyone else is doing on a team and get by”. She does not want to stand out negatively because she does not want for “my friends to think that I am stupid and that we will lose our game because of me”. In other words, these athletes
reported that it was important for these to them that their hidden disability stays hidden due to feelings of shame, embarrassment, or simply because they do not want to be labeled as different or to stand out in a negative way. Implications of such attitude for student athletes with dyslexia can potentially be psychologically and socially very harmful and destructive.

**Outcome 2: Caring is coaching**

Another the most notably reported theme by all student athletes with dyslexia was that of the team/coach relationship. In all of the reports, regardless of the type of sport, it was evident that the coaches’ character and behavior can impact athlete’s perceptions of personal and social development. These students emphasize positive coaching climate and enjoyable feelings when they participate and play. Phoebe noted that her coach is “so supportive and welcoming and because he is nice to all the girls, we all want to play for him, and we all want to win”. She further explains how,

“he never gives up on us, he always encourages us and speaks calmly, and we just love his calm voice. When he talks, he looks at me and he is direct, and it is easy for me to understand him”.

This girl also mentioned that this coach knew about dyslexia because his daughter also was diagnosed with it, and therefore, he knew how to instruct and guide in a positive way.

Compartmentalizing instruction, guiding prompts, and using simple language and terminology, generated positive coaching climate which produced positive feelings and sense of belonging to this particular athlete. On the other hand, Eli described how his baseball coach is almost always angry and does not show patience, which is why “his players are scared of him, especially when he gets super competitive, which then makes us very nervous”. Negative coaching climate in this instance creates sense of frustration and anxiety, and like this athlete explained, “half of the team
is looking for other team to play ball”. When asked if their coach knows about this students’ learning disability, the student explained that he just “does not want to tell him because he will not understand”. Unenthusiastic relationships, and lack of knowledge and understanding for one another, leads to negative coaching climate which is usually followed with bad experiences for all participants. In other words, training and educating coaches, specifically about nuanced implications of dyslexia, would allow positive developments for both student athletes and coaches. Caring for athletes, rather than caring about athletes and taking time to interact, and using conversation to develop a relationship (Jones, 2009), would be of tremendous importance especially for student athletes with dyslexia.

**Outcome 3: Social-emotional experiences**

The third theme, the importance of social-emotional experiences, was also reported as an important component for all participants. In this case, positive emotional experiences in practices and games proved to be the biggest predictor of positive personal-social experience for athletes with dyslexia of both genders and grade spans. For example, Avery said,

“I love soccer and to play on a same team with my friends, and I love when we score a goal and then celebrate. We came up with our own goal celebration when we all dance kind of funny and we just laugh. That is my most favorite thing ever!”

Specifically, being active in sport, playing on a same team with friends, and enjoying special moments of celebration, are most important for this athlete, and her motivation and desire to be there, draws upon these experiences. In other words, these students report identical reasons for wanting to be involved in youth sport as their non-dyslexic counterparts. Same could be said about negative emotional experiences, in a similar structure of both genders and grade spans. In a different way, for instance, Alice stated that her best friends family “had to move out of town,
and my friend is not there anymore, and I do not feel like playing for the same team, because I
don’t have friends there anymore on that team”. This could be an example of negative social-
emotional experience because there is an affirmative connection between high level of self-
estem and healthy social relations (and vice-versa) in children with dyslexia (Shehu et al.,
2015). Similarly, there is a significant affirmative connection between reading/writing/language
disability and interpersonal relationships and socio-emotional disability (Habib & Naz, 2015).
Ultimately, these students’ feelings of insecurity due to her dyslexia and her poor social skills,
were the main factors that hindered the development of close friendships with other peers.
Moreover, Bob reported that “baseball is boring, and my dad is making me play”, while Beth
explained how her “coach sometimes yells at us if we don’t stay in shape (tactical soccer
shape/formation on the field)”. All of these reports are examples of negative social emotional
experiences which can be detrimental, and these student athletes are able to recognize and
acknowledge it and make a distinction in whether or not they want to stay active and play. In
other words, Bob wanted to play no matter what, but negative coaching (coach making practices
monotonous), lead him to boredom and to stop being motivated or wanting to play. Beth’s
negative experience on the other hand, comes out of the fact that she does not understand her
coaches tactics and formation, which is why she is not able to perform like the others or to make
connections with others on the team. Due to Beth’s dyslexia, and her inability to process coded
information, this interrupts “normality”, uncovering otherwise hidden experience, imposing the
difficult task of her adjusting to the coaches tactics.

**Discussion**

The purpose of this study was to investigate the environmental, personal, and emotional
experiences of youth athletes with dyslexia. In this study, youth athletes were asked to share their
experiences as it relates to their coaches ability to help, support, accommodate, and modify for their needs. Athletes were asked how their coach and teammates make them feel and what things their coaches do that have the most positive and negative impact on how they feel when participating in their sport. Also, this study’s aim was to further understand the perceived experiences of youth athletes with dyslexia and their perceptions of their personal and social development through sports.

The first outcome found in this research is that hidden disabilities tend to stay hidden. For various reasons, student athletes with dyslexia have a tendency to keep their disability hidden. These athletes choose not to be open about their struggles and will not come forward with their difficulties and setbacks. They are likely going to suppress their dyslexia because they feel embarrassed, anxious, or they did not want to feel any different from any other athletes on the team. Reports from this research showed that these student athletes do not want to stand out or, do not want to be known in the negative context as a “special athlete”.

Therefore, recommendations for coaches could be to develop and enhance knowledge, attentiveness, and awareness about dyslexia among young athletes, which might be the first steps in making adjustments. Perhaps, being aware and understanding what dyslexia is, and how it affects student athletes, will allow coach to diversify his/her coaching, and by doing that, best meet the needs of a student athlete with dyslexia. In addition, previous literature unveils that nearly 90% of dyslexics describe their thinking as looking beyond information to achieve a strategic (big picture) perspective of the subject/problem (Casanova et al., 2009). For that reason, coaches that work with student athletes with dyslexia should know that they have unique neurological pathways that make it easier for them to understand big-picture ideas and skills.
This means that it is likely they will progress on details much slower, and at times, coaches need to weigh which details are actually needed.

Second major outcome of this research, caring is coaching, adds on to the first outcome. This study showed that it also very important not to force student athletes with dyslexia to move on, if they have not mastered some of the refinements and extensions of a skill or task, as this may cause overload for these athletes. Clearly, this can have a major impact in performing tasks, accomplishing goals, or completing obligations as externally determined by the coaches goals. Consequently, preparation, pre-planning, and organization are definitely a cornerstone of supporting the needs of student athletes with dyslexia. These athletes prefer positive, supporting, and welcoming coach, one that speaks directly, and that is easy to understand. Simple and clear terminology, without unnecessary details that tend to overwhelm them, are a better model than negative coaching. Shortening instruction and brief guiding stimuli, will produce positive coaching climate which furthermore will develop positive feelings and sense of belonging for student athletes with dyslexia. This means that although the coach provides information, it is up to the athletes rate of understanding and practice that dictates the speed of progression. Learner-centered or player-centered approaches like this, improve skill development, game playing ability, motivation, and provide positive affective experiences of learning (Kirk, 2005; Pope, 2005). In addition to taking a player-centered approach, it is essential to understand that modifications will be needed to meet players where they are and to get them where they need to be. In other words, this research unveils that caring for athletes, rather than caring about athletes and taking time to know them, understand them, and interact with them, would be of tremendous positive importance for student athletes with dyslexia.
Third outcome this research underlines as essential belongs to positive social-emotional experiences. Specifically, these types of emotional experiences in practices and games proved to be the biggest predictor of positive personal-social experience for athletes with dyslexia of both genders and grade spans. For instance, these athletes love being active in sport and playing on a same team with their friends. This develops high level of self-esteem and healthy social relations, great motivation and willingness to play. On another hand, negative social-emotional experience tends to develop negative interpersonal relationships and socio-emotional state of mind for student athletes with dyslexia. Such negative environment only increases their frustration, feeling of being overwhelmed which often links to students’ perceptions of being less than. Therefore, emotional aspects of uncertainty and overload resulting from dyslexia are extremely important. Coaches and coaching training needs to be very observant to the fact that student athletes with dyslexia could potentially be very sensitive. Therefore, this research found beneficial positive peer talk time to raise student athlete with dyslexia confidence via their peers, celebrating small wins and triumphs, while concentrating less on remedying their mistakes, and always finding positive task negotiations/modifications when practicing and playing with other students. Such approaches will be undoubtedly enhancing the development of stronger self-esteem and lead to positive learning outcomes.

Limitations and future studies

There are several limitations of this study. For instance, participants were predominantly Caucasian students from a small, private, independent school. Sample size was small, and further exploration requires big enough group of participants (experience, and diverse school population (i.e., demographics, size, etc.) to ensure results are accurate and the data collected is sufficient. A sample size of 12 students is not enough to show a reliable picture of how students athletes with
dyslexia view their experience within the inclusive sport, their view of coach and coaching climate. Small sample size limitation adds on to the fact that research findings of this study cannot be generalized, and further investigation should include increased representation, diversified student athlete population that for example attend larger school. Furthermore, lack of previous research studies on the topic is also a limitation of this study, simply because those would provide the theoretical foundations for investigated research questions. This limitation actually represent an important opportunity that signifies literature gap and presents the need for further development in the area of study. At the same time, there is a great potential for information gathered from this study. It can better inform teacher education programs and other physical activity community programs about the potential impact of the motivational climate and the importance of cultivating a positive emotional experience for student athletes with dyslexia. The influence of a coach or a teacher can play an important role in athletes with dyslexia lives, specifically as it relates to offering specified multi-dimensional instruction, meeting individual needs, and in prioritizing the person as well as the athlete.

Conclusion

This research suggests that sporting experiences can have tremendous impact on student athletes with dyslexia social, physical, and psychological growth. This research also suggests perceived shame and burden that students reported feeling as a results of their dyslexia in their sport. At the same time, this research recognizes that the psychological, emotional, and motivational aspects of youth-athletes’ with dyslexia development can be encouraged through the motivational climate created by the coaches. Furthermore, this study acknowledges athletes emotional experiences when in sport and the coaching behaviors they felt accommodated (or fail to do so) their disability and their personal development. This included exploring aspects of the
environmental, personal, and emotional experiences of youth athletes with dyslexia in hope to identify help for coaches that work with these students to integrate psychological skills (leadership, positive aspirations, goal setting, self-awareness, visualization, etc.) in their coaching practice. This research also unveiled that participant student athletes with dyslexia generally speaking, did not understand what was going on and that they would rather not say anything and look incompetent in front of their friends and coaches, instead of asking for help or clarification. Lastly, this study distinguishes the importance of utilizing a humanistic approach to coaching in addition to developing task-mastery climate as an intentional way to influence non-sport related youth outcomes.
References


[https://doi.org/10.1080/10413200490517977](https://doi.org/10.1080/10413200490517977)


https://doi.org/10.1080/07303084.2013.757191

https://doi.org/10.3389/fpsyg.2019.02115


https://doi.org/10.1002/dys.1666


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https://doi.org/10.1177/016235320302700203


Table 3.

Descriptive information on the 12 participants with dyslexia

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<th>Grades</th>
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Appendix A

Interview Questions: Semi-structured Design

1. Tell me about sport you plan and how long you’ve been playing?

2. What do you like the most about participating in your sport? What do you like the least?

3. Can you tell me more about what you like/dislike?

4. Tell me about what your coach is like, the good and maybe not so good.

5. What are some of the things that your coach does that have the most positive influence on how you feel when participating in your sport?

6. What things your coach does that have the most negative influence on how you feel when participating in your sport?

7. Does your coach ever do anything different to help you or support your needs with dyslexia, at practice?

8. In what ways do you think practice and your coach help you become a better athlete?

9. In what ways does your coach help you at practice? Does your coach help you become better in things outside of sports?

10. Describe what you usually feel like most at practice?

11. What causes you to feel that way?

12. Does having dyslexia make you feel different at practice or in games?

13. Does your coach provide you any help like you get at school, for example?

14. What things could your coach do that make you want to come back next year and what things could happen that wouldn’t make you want to come back next year?
Appendix B

Consent for Research Participation

<table>
<thead>
<tr>
<th>Title</th>
<th>Investigating youth coaching climates and techniques: Perceptions of personal and emotional growth from athletes with dyslexia.</th>
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| Researcher(s) | Marko Pavlovic, University of Memphis  
Laura Casey, PhD, University of Memphis  
Luanne Davis, PhD, University of Memphis  
William Hunter, PhD, University of Memphis |
| Researchers Contact Information | 901-754-1800 (mpvlovic@memphis.edu) |

Your student is being asked to volunteer for a research study. The box below highlights key information for you and your students to consider when deciding if you want to participate. More detailed information is provided below the box. Please ask the researcher(s) any questions about the study before you make your decision. If you volunteer, you will be one of about 8 people to do so.

<table>
<thead>
<tr>
<th>Key Information for You to Consider</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Voluntary Consent:</strong> Your student is being asked to volunteer for a research study. It is up to you and your student whether you choose to participate or not. There will be no penalty or loss of benefit to which you are otherwise entitled if you choose not to participate or discontinue participation.</td>
</tr>
<tr>
<td><strong>Purpose:</strong> The purpose of this study is to further understand the experiences of youth athletes with dyslexia and their perceptions of their personal and social development. This study will investigate the environmental, personal, and emotional experiences of youth athletes with dyslexia. Specially, youth athletes will be asked to share their experiences as it relates to their coaches ability to help, support, accommodate, and modify for their needs. Lastly, athletes with dyslexia will be asked about their perceptions of sports through their emotions, goal orientations, perceptions of social relationships, and feelings of being capable.</td>
</tr>
<tr>
<td><strong>Duration:</strong> It is expected that your students participation will last throughout the Fall semester. Interviews will be given at the end of each PE unit delivered by the teacher. Each interview will take approximately 20-30 minutes to complete.</td>
</tr>
<tr>
<td><strong>Procedures and Activities:</strong> Your student will be asked to complete the interview regarding their beliefs about their competence and emotions in sports and intention to do the activity outside of PE.</td>
</tr>
<tr>
<td><strong>Risk:</strong> There are no forseeable risks for taking the interview. Additionally, all interview transcripts will remain anonymous to maintain privacy. We will not collect any personally...</td>
</tr>
</tbody>
</table>
identifying information. Students will not be sharing or evaluating each others’ work.

**Benefits:** There are no direct benefits to participants but information will help inform physical education teachers, coaches, and academic research about identifying effective strategies that promote positive climate and culture when working with youth athletes with dyslexia.

**Alternatives:** Participation is voluntary, if your student chooses not to participate they will be given a teacher assigned task during interviews.

**Who is conducting this research?**
The persons in charge of this study are Dr. Laura Casey, Dr. Luanne Davis, and Dr. William Hunter from the University of Memphis, from the Instruction and Curriculum Leadership department at the University of Memphis. They will be assisted by graduate student researcher Marko Pavlovic during the duration of the study. There are no significant financial or conflicts of interest to report in this study.

**What happens if my student agrees to participate in this Research?**
If you and your student agree to participate they will be asked to complete a short interview, at the end of each PE content unit delivered by the teacher, regarding their affective experiences and intentions for doing the sporting activity outside of school.

**What happens to the information collected for this research?**
Information collected for this research will be used to analyze students’ emotions (positive & negative) connected to different topics in sports. Your students name and program will not be used in any reports or conference presentations. Although we may publish the results, no identifiable information is available to report. The only individuals that will see the data will be members of the research team.

**How will my students’ privacy and data confidentiality be protected?**
We promise to protect your students’ privacy and security of your personal information as best we can. Although you need to know about some limits to this promise. Measures we will take include: no identifying information will be collected, so all participations will be anonymous. All data and consent forms collected by the researcher, will be stored in a secure ICL department office at the University of Memphis, with no access to any persons outside of the research team. All the data will be recorded and transcribed to be saved on a computer for analysis. All the data remains anonymous, and for any potential names or places mentioned pseudonyms will be used. No information will be able to be used to identify the student directly. The computer will be password protected and can only be accessed by the investigators. The data will be stored in the investigator’s office in a secure place and will be kept for one year from the date the first data was obtained. All evidence will be destroyed at the end of that one-year period. Individuals and organizations that monitor this research may be permitted access to inspect the research records. These individual and organization include: Institutional Review Board.

**What if my student wants to stop participating in this research?**
It is up to you and your student to decide whether they want to volunteer for this study. It is also okay to decide to end their participation at any time. There is no penalty or loss of benefits to which they are otherwise entitled if they decided to withdraw from participation. Their decision
about participating will not affect their relationship with the researcher(s) or the University of Memphis.

Will it cost me or my student money to take part in this research?  
There are no costs associated with participation in this research study.

Will my student receive any compensation or reward for participating in this research?  
You or your student will not be compensated for taking part in this research.

Who can answer my questions about this research?  
Before you decide to volunteer for this study, please ask any questions that might come to mind.  
Later, if you have questions, suggestions, concerns, or complaints about the study, you can contact the investigator, Marko Pavlovic at 901-754-1800 (mpvlovic@memphis.edu). If you have any questions about your rights as a volunteer in this research, contact the Institutional Review Board staff at the University of Memphis at 901-678-2705 or email irb@memphis.edu. We will give you a signed copy of this consent to take with you.

STATEMENT OF CONSENT

I have had the opportunity to consider the information in this document. I have asked any questions needed for me to decide about my students participation. I understand that I or my student can ask additional questions throughout the study.

By signing below, I am allowing my son/daughter to volunteer to participate in this research. I understand that I am not waiving any legal rights. I have been given a copy of this consent document. I understand that if my ability to consent for myself changes, my legal representative or I may be asked to consent again prior to my continued participation.

<table>
<thead>
<tr>
<th>Name of Youth Participant</th>
<th>Signature of Adult/Guardian</th>
<th>Date</th>
</tr>
</thead>
</table>

Researcher Signature (To be completed at the time of Informed Consent)

I have explained the research to the participant and answered all of his/her questions. I believe that he/she understand the information described in this consent and freely consent to participate.

<table>
<thead>
<tr>
<th>Name of Research Team Member</th>
<th>Signature of Research Team Member</th>
<th>Date</th>
</tr>
</thead>
</table>
Appendix C

Interview questions

1. Tell me about sport you plan and how long you’ve been playing?

2. What do you like the most about participating in your sport? What do you like the least?

3. Can you tell me more about what you like/dislike?

4. Tell me about what your coach is like, the good and maybe not so good.

5. What are some of the things that your coach does that have the most positive influence on how you feel when participating in your sport?

6. What things your coach does that have the most negative influence on how you feel when participating in your sport?

7. Does your coach ever do anything different to help you or support your needs with dyslexia, at practice?

8. In what ways do you think practice and your coach help you become a better athlete?

9. In what ways does your coach help you at practice? Does your coach help you become better in things outside of sports??

10. Describe what you usually feel like most at practice?

11. What causes you to feel that way?

12. Does having dyslexia make you feel different at practice or in games?

13. Does your coach provide you any help like you get at school, for example?

14. What things could your coach do that make you want to come back next year and what things could happen that wouldn’t make you want to come back next year?
Appendix D
IRB Approval

IRB #: PRO-FY2022-73
Title: Investigating youth coaching climates and techniques: Perceptions of personal and emotional growth from athletes with dyslexia. Creation Date: 8-31-2021 End Date:
Status: Approved
Principal Investigator: Marko Pavlovic
Review Board: University of Memphis
Sponsor:

Study History

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<th>Submission Type</th>
<th>Review Type</th>
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Key Study Contacts

<table>
<thead>
<tr>
<th>Member</th>
<th>Role</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laura Casey</td>
<td>Co-Principal Investigator</td>
<td><a href="mailto:lpcasey@memphis.edu">lpcasey@memphis.edu</a></td>
</tr>
<tr>
<td>Marko Pavlovic</td>
<td>Principal Investigator</td>
<td><a href="mailto:mpvlovic@memphis.edu">mpvlovic@memphis.edu</a></td>
</tr>
<tr>
<td>Marko Pavlovic</td>
<td>Primary Contact</td>
<td><a href="mailto:mpvlovic@memphis.edu">mpvlovic@memphis.edu</a></td>
</tr>
</tbody>
</table>
Appendix E

Institutional Review Board
315 Administration Bldg.
Memphis, TN 38152-3370
Office: 901.678.2705
Fax: 901.678.2219

Recruiting Script

Hello, my name is Marko Pavlovic. I am a graduate student at the University of Memphis in the Instruction and Curriculum Leadership Department. I am conducting a research on athletes with dyslexia who play a competitive fully inclusive sport outside of school. I am inviting you to participate because you play a competitive sport outside of school.

Participation in this research includes a one-time one-on-one interview about your views toward your inclusive sporting experience and how coaches support your dyslexia, especially when it comes to strengthening self-confidence and physical skills, as well as the motivation and physical activity enjoyment. As a participant, you will be asked about your coach’s ability to provide support, mastery climate, and positive emotional understanding. Lastly, in this interview, you will be asked about your view of sports through your emotions, goal orientations, perceptions of social relationships, and feelings of being capable, which will take approximately 20-30 minutes.

The participation is completely voluntary. You can skip any questions if you do not feel comfortable answering. You have the option to stop participating in the study at any time as well. All the data remains anonymous, and for any potential names or places mentioned pseudonyms will be used. No information will be able to be used to identify you the participant directly.

Do you have any questions before we start? If you have questions later, please contact me at mpvlovic@memphis.edu or you may contact the ICL department at the University of Memphis at 901.678.2365.
## Appendix F

Table 3.

Descriptive information on the 12 participants with dyslexia

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Gender</th>
<th>Age</th>
<th>Years of playing</th>
<th>Grades</th>
<th>Sports</th>
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<tbody>
<tr>
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<td>Female</td>
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<td>3</td>
<td>5th</td>
<td>Soccer</td>
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<tr>
<td>Kira</td>
<td>Female</td>
<td>12</td>
<td>4</td>
<td>5th</td>
<td>Soccer</td>
</tr>
<tr>
<td>Avery</td>
<td>Female</td>
<td>13</td>
<td>3</td>
<td>6th</td>
<td>Basketball</td>
</tr>
<tr>
<td>Hailey</td>
<td>Female</td>
<td>13</td>
<td>2</td>
<td>6th</td>
<td>Cheer</td>
</tr>
<tr>
<td>Jack</td>
<td>Male</td>
<td>12</td>
<td>4</td>
<td>5th</td>
<td>Football</td>
</tr>
<tr>
<td>John</td>
<td>Male</td>
<td>12</td>
<td>3</td>
<td>5th</td>
<td>Basketball</td>
</tr>
<tr>
<td>Nathaniel</td>
<td>Male</td>
<td>13</td>
<td>3</td>
<td>6th</td>
<td>Soccer</td>
</tr>
<tr>
<td>Alice</td>
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<td>13</td>
<td>3</td>
<td>6th</td>
<td>Cheer</td>
</tr>
<tr>
<td>Beth</td>
<td>Female</td>
<td>12</td>
<td>3</td>
<td>5th</td>
<td>Soccer</td>
</tr>
<tr>
<td>Eli</td>
<td>Male</td>
<td>13</td>
<td>4</td>
<td>6th</td>
<td>Baseball</td>
</tr>
<tr>
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<td>2</td>
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</tr>
<tr>
<td>Pete</td>
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<td>12</td>
<td>1</td>
<td>5th</td>
<td>Baseball</td>
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