



THE MEDIATING EFFECT OF SPORT ORIENTATION ON THE RELATIONSHIP OF LEADER BEHAVIOR OF SPORTS OF COACHES AND MENTAL TOUGHNESS OF ATHLETES

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Abstract:

The study aimed to determine the mediating effect of sport orientation on the relationship between the leadership behavior of sports' coaches and the mental toughness of athletes among Special Program in Sports students in one of the public secondary schools in Malita, Province of Davao Occidental, Region XI using quantitative non-experimental descriptive-correlational research design. Results revealed a very high level of sport coaches' leadership behavior, a very high level of athletes' mental toughness, and very high level of sports orientation. The leadership behavior of sports' coaches does not significantly correlate with the mental toughness of athletes and sports orientation. Sports orientation does not significantly correlate with the mental toughness of athletes. The null hypothesis is accepted that sport orientation does not significantly mediate sport coaches' leadership behavior and athletes' mental toughness. More so, there is a partial mediating effect of sport orientation on the relationship between the leader behavior of sports coaches' and athletes' mental toughness. Other factors may affect the mental toughness leadership style and motivation of their coaches aside from sports orientation although studies show coaches are responsible for everything from mental adjustments, life counseling, and interpersonal relationships to gathering information about competitions. Furthermore, this approach might be used as a means of continuous improvement for enhancing in-service education, refining current educational programs, and conducting comprehensive assessments of educational tools and interventions.

Keywords: sports anxiety, friendship, confidence, college student-athletes, moderating effect, Philippines

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1. Introduction

Mental toughness (MT) plays a vital role in preventing emotional exhaustion (Li *et al.*, 2020) and measuring individual resilience and confidence that may predict success (Cohn, 2022). Liew *et al.* (2019) noted MT gives certainty needed to keep pushing forward despite the competitive situation; however, not all individuals possess MT, and athletes are no exception. Even though coaches wanted their athletes to be successful, athletes' success or failure is multi-factorial: attributed to physical, tactical, technical, and psychological, but Christensen and Smith (2016) and Ragab (2015) posited a lack of athletes' MT is one of the sources of stress making them more prone to have mental health problems because of the many kinds of tension they face like injuries, overtraining, monitoring of social media, and the constant pressure to perform well (Rice *et al.*, 2016). Moesch *et al.* (2018) corroborated this by including depression and suicide, anxiety, sleep, substance, adjustment, eating, and impulse disorders, and therapy is sought when out of control (Seeman, 2016). This problematic situation on athletes' MT can lead to poor athletic performances and less productivity.

Consequently, low MT can also result in athletes' losing their temper and being prone to violence (Lin *et al.*, 2017); low self-esteem and negative self-talk (St Clair-Thompson *et al.*, 2015); despair and fear (Mutz, 2017); lack of motivation and determination (Gucciardi *et al.*, 2015). Similarly, MT is important because sports need focus, and focus is a key part of being successful in sports. Concentrating is vital because it allows athletes to reach their objectives and goals (Hill *et al.*, 2016). In a study by Stamp *et al.* (2015), strong MT is associated with greater psychological well-being critical for achieving desirable life outcomes like self-acceptance, personal growth, purpose, positive relations with others, environmental mastery, and autonomy. MT is significant for athletes since it can mediate higher levels of motivation and lower levels of competition anxiety (Schaefer *et al.*, 2016). MT and motivation work hand in hand to contribute to greater emotional stability and positive outcomes in demanding situations. Meggs *et al.* (2014) identified critical traits of mentally tough people: motivation and emotional resilience. In the United States, athletes who have stronger positive self-concepts are more connected with control and confidence (Turner, 2018). Further, in Brazil and Australia, Hannan *et al.* (2015) disclosed that athletes with high MT had increased self-esteem, self-efficacy, competitiveness, and sports orientation. To be sport-oriented, they have low anxiety about errors, self-doubt, and high personal standards (Brand *et al.*, 2015).

Moreover, it is the desire and wants of every sports coach to have their trained athletes possess strong MT to be successful and become winners in any athletic events they may engage in; the reason why sports coaches utilize variegated leaders' behaviors in boosting athletes' skills and MT. Sports coaches may become strict with their practices, sensitive to their needs, or have father-modeled behavior since a mentally tough coach will be sensitive (Clough, 2022) and influential in determining sports success (Strycharczyk, 2022). Jowett and Arthur (2019) asserted that coaches' leadership characteristics help players perform better and be satisfied. Some universities and state

colleges in the Philippines consider coaches critical in athletes' career development (Arthur & Bastardoz, 2020) as coaches' leadership behaviors influence a variety of sports results (Berry & Fowler, 2021), accountable for the team's performance and are sport-oriented (Jones, 2020). In the Davao region, Magdato (2021) revealed that student-athletes faced obstacles like a lack of facilities and equipment, limited funding and incentives, inconsistent training schedules, and poor achievement. However, coaches have a keener awareness of the tensions and demands of work and life. In Juezan and Osorno (2022), sports performance anxiety is significantly associated with sports confidence, and friendship quality is positively linked. With MT and sport orientation, coaches can develop a winning mindset, self-mastery, commitment, and confidence (Spence, 2022). Nevertheless, some coaches need to improve despite these practices.

Many scholars suggested the importance of applying and reinforcing the leadership behavior of sports coaches in aiding athletes' mental toughness. As described by Chee *et al.* (2017), leaders' behaviors of sports coaches frequently entail calmness, focus, daring to see opportunity when others perceive danger, and conviction, while as detailed by Fouraki *et al.* (2020), in enhancing players' performance, coaches must foremost increase the level of satisfaction using appropriate leadership styles. As provided by different works of literature on the leadership behavior of sports coaches as it may impact and influence athletes' MT, another construct was identified: the mediating effects of sports orientation, such as competitiveness or the athletes' desires to strive for success in competition; a goal or the athletes' motivation to achieve a goal in sport and win or the athletes' desire to win interpersonal competitive sporting events. Sports coaches and athletes' MT are seen to be relative, and one can question if their sport orientation will influence it. Schinke *et al.* (2017) cited that sports orientation, particularly when athletes are competitive and goal-driven-to-win, places focus on mastering skills and improving oneself, and this is linked to the concept that sports should boost self-esteem and encourage individuals to strive their best, work together, and be good citizens. According to Foskett and Longstaff (2018), if one is sports-oriented, one should learn the importance of mastery and cooperation, how to be active and healthy in all aspects of one's life, how to be a good citizen, how to be competitive, how to get ahead in life, how to enhance one's self-esteem, and how to advance one's social standing. Hence, there is an urgency to conduct a study on the mediating effect of sports orientation on the relationship between the leader behavior of sports coaches and athletes' mental toughness.

Consequently, the study aims to ascertain how sports orientation influences the connection between coach leadership behavior and athletes' mental toughness. This study primarily describes the level of leadership behavior of sports coaches in the following areas: training and instruction (training behavior), autocratic behavior, democratic behavior, social support, and positive feedback (rewarding behavior). Secondly was to ascertain the level of athletes' mental toughness in terms of mental self-concept, stress minimization, personal bests, task focus, potential, perseverance, value, task familiarity, goal commitment, positivity, self-efficacy, and positive comparison.

Thirdly, to measure the level of sport orientation such as competitiveness, Goal, and win. Fourthly, to establish a significant relationship between the leader behavior of sports coaches and athletes' mental toughness, between the leader behavior of sports coaches and sport orientation, and between sport orientation and athletes' mental toughness. Lastly, to find out the mediating effect of sports orientation on the relationship between the leader behavior of sports coaches and athletes' mental toughness.

2. Review of Related Literature

This section presents various literature that served as proof and support to all the discussions sports orientation as it influences the connection between coach leadership behavior and athletes' mental toughness.

2.1 Leader Behavior of Sports Coaches

Various literature on leader behavior of sports coaches are evident positing that coaches spend significant time with their team members and whatever coaches do or say will always have an effect on their players' emotions, the team's morale, and the team's success and Competitiveness (Hill *et al.*, 2017; Steltenpohl *et al.*, 2019). Although studies have shown that coaches' leadership styles may affect athletes' contentment, the most prevalent leadership styles impacting athletes' satisfaction have not been identified (Henz & Schöllhorn, 2016; Goncalves *et al.*, 2016; Karim & Ismail, 2019; Santos *et al.*, 2016). Yusoff and Muhamad (2018) discovered that football players in Malaysia are most interested in democratic behavior leadership and least interested in autocratic behavior leadership while the autocratic coach adopts an authoritative tone, with athletes being "told" rather than "asked" (Adzhar *et al.*, 2019; Ronald & Slawomir, 2018). Lee *et al.* (2014) posited that coaches demonstrate how they want something done and then expect the athlete to practice a skill consistently. More so, the study of Chee *et al.* (2017) discovered that athletes favor leadership behaviors in training and teaching, followed by democratic, positive feedback, and social support behaviors. Similarly, autocratic conduct was rated as the least desirable (Strycharczyk, 2022). Furthermore, Calvo and Topa (2019) discovered that athletes appreciate training and teaching, as well as positive feedback, as leadership traits (Pitts *et al.*, 2018).

On the other hand, Cruz and Kim (2017) discovered that male athletes who work with female coaches have a greater preference for democratic conduct and social support than male athletes who work with male coaches. On the other hand, female players with male coaches value democratic conduct and social support more than female players with female coaches. According to Ignacio III *et al.* (2017), coaches who use effective training and education, as well as socially supportive leadership characteristics, and who provide recognition, prizes, and positive feedback generate highly pleased athletes.

Fransen *et al.* (2016) also hypothesized that athlete leaders affected athlete satisfaction. To increase sports performance, the coach may need to participate in coaching behaviors that the player is open to (Khun-Inkeeree *et al.*, 2021). Similarly,

coaches must be aware of their players' coaching preferences to give positive experiences and increase athletic performance. Giblin (2014) and Côté *et al.*, (2014) noted if a coach modifies their conduct to accommodate an athlete's preferred behavior, the athlete may be more receptive to repaying the coach with better performance. Seemingly, coaches are both leaders and listeners for their athletes and their partners (Mohammed *et al.*, 2017; Whitbourne, 2016).

2.2 Athletes' Mental Toughness

As mentioned by Cook *et al.* (2014), always having total self-belief that you will achieve success was found to be the top-ranked attribute of the mentally tough soccer player. There is a correlation between mental toughness and one's mental self-concept. Even under extreme stress, mentally tough athletes maintain their self-belief and confidence (Anthony *et al.*, 2016). Also, many studies have demonstrated the connection between goal orientations and personal characteristics such as the motivations for participating in sports, perceptions of one's accomplishments, and feelings of contentment with one's performance (McGannon & Schinke, 2015), as well as external factors like the climate of encouragement provided by one's coach and teammates (Slack, 2015). When mentally tough athletes are under pressure in their sport, they continue to believe in themselves (Cowden *et al.*, 2014).

2.3 Sports Orientation

An athlete's idea of achievement in sports can be determined by individual differences and standards (Peachey *et al.*, 2019; Yagodin, 2016). Goals are significant in sports because they allow athletes to develop their talents or change their training, which may boost intrinsic motivation by allowing them to advance, gain autonomy, and gain competence (Alekseev, 2018; Matveev, 2019). It is common knowledge that to get the most out of physical training or practice, one must put in maximum effort throughout the training and practice cycles.

In addition, athletes may create objectives around certain sports orientations, such as winning a tournament, fulfilling personal goals, or defeating an opponent, especially in sports (Yemiru, 2020) coaches regularly use intensive, effortful, and stressful sessions (Vojvodina, 2018). These features produce difficult-to-practice and training situations, allowing for psychological and physiological adaptations.

2.4 Correlation among Measures

Literature on mental toughness and the leadership behavior of sports coaches exists. Still, there is limited availability on the relationship between sport orientation and mental toughness, between sport orientation and the leadership behavior of sports coaches, and between the leadership behavior of sports coaches and athletes' mental toughness. Also, most studies are conducted abroad, and only some are contextualized. Theoretically speaking, when sports coaches use varied leadership behavior in training the athletes, athletes' MT differ depending on the sports orientations they have: to win, to be

competitive, or to reach their goals but in reality, not all athletes will be obedient to their coaches, some defy orders and instructions (Bauman, 2016), become deviants (Kang *et al.*, 2021) and even produced counterproductive work behavior such as absenteeism, time theft, and presenteeism (Gullu, 2018). Subsequently, there is a need to fill this research gap. Further, the result of this study may give insights into how the leaders' behavior of sports coaches helps sports organizations and athletes to boost performances and be successful. Also, this is another reference material for teachers, sports coaches, trainers, athletes, and sports enthusiasts.

3. Theoretical Framework

The research is anchored on Hodges's (2010) study, which posited that psychological capital has a positive relationship with mental toughness. He emphasized that the components of psychological capital, namely self-confidence, hope, optimism, and resiliency, greatly contribute to strengthening the mental toughness of one's individual. It has been supported by the supposition of Walumba *et al.* (2008) on Authentic Leadership theory, which pointed out the significant improvement in mental toughness that athletes' behavioral changes have something to do with the analysis of self-awareness employed by the coaches: the thorough understanding of personal strengths and weaknesses and how do they interact with the surrounding environment.

In the context of sport orientation and mental toughness, the Goal Perspective Theory (Nicholls *et al.*, 1989) explains the primordial role of the coach in striking a balance between task and ego orientation. With this, athletes can strengthen personal improvement, manage pressures, and outperform other athletes, thus harnessing their mental toughness. Concerning task-involved criteria, emphasis is placed on exerting effort, experiencing improvement, and witnessing mastery.

4. Conceptual Framework

The researcher observed that the thirst for success and motivation (sport orientation) can positively impact the mental toughness of the athletes. A conceptual paradigm was made from the theories the study used. The independent variable of the study is the leader behavior of sports coaches, which includes key indicators such as *training behavior* or instructing athletes in the skills, techniques, and tactics of their sport and organizing activities; *autocratic behavior* or the authority and independent decision-making of the coach; *democratic behavior* or the coach allows athletes to participate in important coaching decisions associated with group goals, practice methods, game tactics, and strategies; *social support* or coach's concern for the welfare of their athletes, creating a positive environment and interpersonal relationships with athletes; and *positive feedback* or coach's behavior of reinforcing athletes and recognizing and rewarding good performances. *Leader behavior of sports coaches* pertains to how coaches influence their athletes to achieve optimum performance.

Conversely, the dependent variable of the study is mental toughness with the following indicators as *mental self-concept* or viewing one's self as being mentally strong about dealing with adversity; *stress minimization* or the process of reducing one's emotional reaction to adversity; *personal bests* or an internal motivation or drive to pursue personal best performances; *task focus* or unshakeable concentration of mental processes on a task while excluding other distractions from concentration; *potential* or believing that one has the inherent ability or capacity for growth, development or coming into being; *perseverance* or remaining constant to a purpose and idea in the face of obstacles; and *task value* or the significance the successful completion of the task holds for the individual.

Also is *task familiarity* or having a good understanding and being well acquainted with the task or adversity; *goal commitment* or the act of binding oneself to a goal or a course of action; *positivity* or the process of being positive and remaining positive in the face of adversity or challenge; *self-efficacy* or belief in their ability to succeed in reaching a specific goal; and *positive comparison* or sensing that one is coping better with adversity and thus has a psychological and competitive advantage over one's opponent. *Mental toughness* refers to the psychological edge enabling one to cope better than opponents with the many demands (competition, training, and lifestyle) that sport places on the athlete.

Furthermore, a variable can act as a full mediator if it meets the following criteria: changes in the levels of the independent variable cause significant changes in the presumed mediator; changes in the presumed mediator cause significant changes in the dependent variable; and when both the independent and dependent variables are in the model, a previously significant relationship between the independent and dependent variables remains (Baron & Kenny, 1986). In this case, the mediating variable is the sport orientation, which is indicated by competitiveness or the athlete's desire to strive for success in competition; *a goal* or the motivation to achieve a goal in sport; and *win* or the desire to win interpersonal competitive sporting events. *Sport Orientation* pertains to the desire to win, achieve personal goals, and strive for success.

5. Significance of the Study

The study is significant globally as it addresses issues about how efficiently and effectively sports coaches can use their behavior to strengthen their athletes' mental toughness in the same way sports orientation influenced them. It would make coaches provide the best means of behavior to improve their athletes' performance, building mental toughness and sports focus. It would show how sports coaches can set students up for success by setting a clear direction and tone, investing in professional development, setting up mentorship relationships, giving the information they need to make good decisions, and making sports orientation a part of the school curriculum since best athletes are chosen from school intramurals to represent interschool competitions. Training would be hard and tiresome, but it would be a standard for comparing sports performance and effective and efficient training programs for athletes to reach their full

potential. Athletes would better understand how to look at what could affect their mental toughness and motivation and how a leader's acts affect their determination to compete, reach their goals, and win.

People in charge of sports and training could also learn something new from this study since they have been looking for new ways to improve sports training for a long time. The results of this study could help them make and change policies about sports development. Also, the study's results would make it easier for schools and the community to work together. It would allow everyone to take an active role in keeping morale high. Lastly, the results of this study could be used as a starting point for future research on factors that have yet to be glanced at in this study.

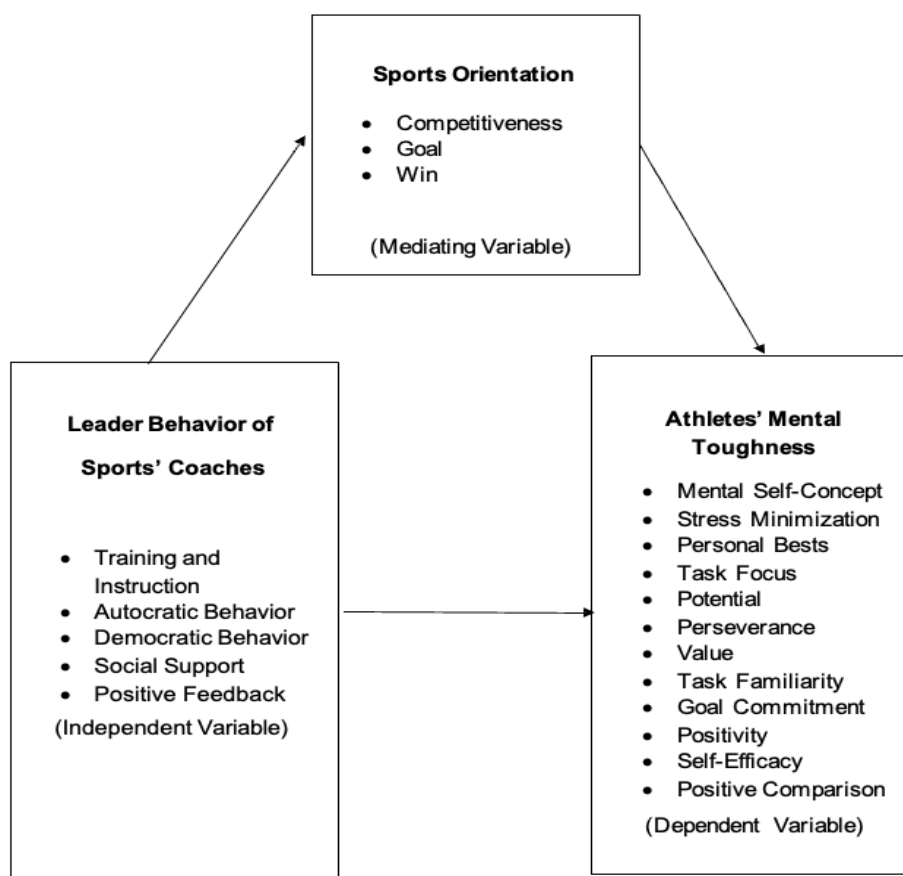


Figure 1: Conceptual framework showing the variables of the study

6. Definition of Terms

The following terminologies were operationally defined:

- **Leadership Behavior of Sports Coaches**, in this study, pertains to how the sports coach influences his/her athletes to achieve optimum performance. This includes indicators or domains like training and instruction (training behavior), autocratic and democratic behavior, social support, and positive feedback (rewarding behavior).

- **Mental Toughness** as used in the study refers to the psychological edge enabling one to cope better than opponents with the many demands (competition, training, and lifestyle) that sport places on a performer. This includes indicators or domains like mental self-concept, stress minimization, personal bests, task focus, potential, perseverance, value, task familiarity, goal commitment, positivity, self-efficacy, and positive comparison.
- **Sports Orientation** as used in the study, refers to the study pertains to the desire to win, achieve personal goals, and strive for success. This includes indicators or domains like competitiveness, goal, and win.

7. Method

This chapter deals with the different methods of the study including research design, research locale, population and sample, research instruments, data collection, statistical tools, and ethical considerations.

7.1 Research Design

A quantitative non-experimental descriptive-correlational research design was utilized to determine the mediating effect of sport orientation on the relationship between the leader behavior of sports coaches and the mental toughness of athletes for the school year 2022 to 2023.

7.2 Research Locale

The study was conducted in an identified public secondary school in Malita North District, Division of Davao Occidental, Region XI, Philippines for the school year 2021 to 2022 under the Special Program in Sports.

7.3 Population and Sample

A survey of 350 universal census or the entire population of Grade 7 to Grade 12 students who were officially enrolled in an identified public secondary school in Malita North District, Division of Davao Occidental, Region XI, Philippines for the school year 2021 to 2022 under the Special Program in Sports were the respondents. The school was established to provide curriculum-based quality and affordable education in the community. Because a complete population was chosen, computing the sample size was unnecessary.

7.4 Research Instrument

Standardized questionnaires were adapted from different authors: 40-item questions in the study of Vasu and Senkamalam (2015) for leader behavior of sports coaches, 108-item questions in the study of Griffiths (2004) for mental toughness; and 25-item questions in the study of Anankulladetch (2017) for sport orientation. The adapted questionnaires were modified to fit the research objectives and were further validated by the panel of

validators and experts. Asking for permission from the authors on the questionnaires lifted from the internet through e-mail was made. Following the validation, pilot testing was carried out. The gathered preliminary data were subjected to an internal consistency type of validity test using Cronbach's alpha and their respective scores were as follows: leader behavior of sports coaches (0.873), mental toughness (0.726), and sport orientation (0.745) which suggested an internal consistency of "Good" or low-stakes testing (Streiner, 2003). Similarly, the questionnaires were designed in a comprehensive form with the help of expert validators.

Moreover, five gradations of variables with a range of means, descriptions, and interpretation were utilized as follows: a range the mean of 4.20-5.00 would mean very high, which means that the specific measure item is always practiced; 3.40-4.19 would mean high, which suggested the specific measure item is oftentimes practiced; 2.60-3.39 means moderate, which suggested the specific measure item is sometimes practiced; 1.80-2.59 means the response is low which further explains that the specific item measure is seldom practiced and; a response of 1.00-1.79 means very low and the specific measure item is not practiced.

7.5 Data Collection

In the data collection process, first, the researcher presented a concept paper to his adviser. After a series of revisions, the survey instrument was initially drafted. Second, the survey instruments were validated through experts' opinions from notable research enthusiasts from different universities. Third, after the validation of the survey instruments was completed, the researcher decided to test them. Several respondents participated in the simulation of survey instruments. Fourth, the accomplished survey instruments were submitted to the statistician of the University of Mindanao for reliability testing utilizing Cronbach's alpha. Fifth, after completing the validation and reliability testing for the survey instruments, the researcher submitted the manuscript to the University of Mindanao Ethics Review Committee for review (UMERC). After approval from UMEREC, written permission and endorsement were obtained from the department.

Remarkably, the researcher was issued a certification after a thorough review by the UMEREC on his compliance with the ethical standards set. The researcher upheld honesty and integrity in writing the report as the author conducted the survey and cited sources to avoid plagiarism. The study was subjected to a plagiarism check via the software Turnitin.

Afterward, a letter was attached to the endorsements and then forwarded to the School Principal. As soon as the permission letter was granted, a schedule was made to distribute and retrieve the survey forms. Lastly, the researcher personally collected and gathered the questionnaires. After retrieving the questionnaires, the data were screened, encoded, tabulated, and analyzed.

7.6 Statistical Tools

For a more comprehensive translation and examination of the information, the following measurable instruments will be utilized.

- **Mean and Standard Deviation** were used to determine the level of leadership behavior of sports coaches, the level of athletes' mental toughness, and the level of sport orientation.
- **Pearson Product Moment Correlational** was utilized to determine if there exists a significant relationship between the leadership behavior of sports' coaches and athletes' mental toughness; between leadership behavior of sports' coaches and sport orientation; and between sport orientation and athletes' mental toughness.
- **Medgraph using Sobel z-test** was employed to measure if Sport orientation does significantly mediate leadership behavior of sports' coaches and athletes' mental toughness.

7.7 Ethical Considerations

This study was conducted with a strong adherence to the ethical protocols and guidelines set forth by the University of Mindanao Ethics Committee (UMERC). The researcher religiously requested and secured from key school officials the corresponding permission necessary to complete this research. Proper authorization and consent were also obtained from the sample of the study, in which they were assured that all their rights would be fully protected, specifically in handling the data such as, but not limited to:

- **Voluntary Participation.** Respondents in the research were the Special Program in Sports (SPS) students specifically Grades 7 to 12 who were officially enrolled in one of the identified schools in Malita North District, Division of Davao Occidental, Region XI, Philippines for the school year 2021 to 2022 regardless of their sex or gender orientation, ethnicity, and educational background if they fit the desired inclusion criteria provided by the researcher. They were given options to participate based on their own free will and voluntariness. They were informed that they were not subjected to any threats, intimidation, force, or pressure and that they would be able to withdraw their involvement at any moment throughout the study process. Only those who accepted the invitation to participate will be given survey questionnaires.
- **Privacy and Confidentiality.** Before administering the survey questionnaire, the respondents were informed that their responses were treated with privacy and confidentiality, and they would not be divulged or shared with anybody without their permission. There were laws like Data Privacy Act (DPA) that would strictly adhere to by the researcher and may limit what may be done in certain situations. Privacy was always maintained, and their responses were not identified, and they could leave blank any data or information that may put their identity at risk. More so, the gathered data were also encrypted like details of names, addresses, and contact numbers. Consent must be evidenced by writing or recorded means as could be manifested in the research instrument. The data were stored with

confidentiality and its research information was kept in locked files. Only the researcher could access the files. After the study was completed, the stored data were retained for at least three (3) years and deleted after the expiration of the data.

- **Informed Consent Process.** The survey questionnaires that were utilized in this study were made clear and comprehensible. It would be necessary to get consent and assent form if minors for authorization. Respondents were not coerced to participate; instead, were given the option to withdraw at any time during the research process.
- **Recruitment.** The researcher provided sets of criteria that would be the basis for respondents to qualify for the study. Also, respondents who do not agree to take part in the study would be left out.
- **Risks.** The study did not involve high-risk situations that the population may experience in physical, psychological, or socioeconomic concerns. It would protect and secure the rights of the individuals in the study.
- **Benefits.** It is important to take into consideration general standards while conducting the research; that it has social significance since its results may have an impact on society. The research would be valuable because it would examine issues on leadership behavior of sports coaches, mental toughness and sport orientation, and the causes for accepting or denying certain standards as requirements (criteria) for selecting what should be considered acceptable would be contained in values. This would produce useful and pertinent data that may be utilized in instructional strategies and would encourage to enhancement of sports performance. It would demonstrate how sports coaches and athletes can lay the groundwork for success by setting a clear direction and tone, investing in professional development, and establishing mentors. The researcher gave tokens to the respondents as an appreciation of their participation and cooperation during the study.
- **Plagiarism.** The researcher ensured that the proper and exact citation of ideas from other authors and experts will be followed to the letter. Turnitin software was used to check the study for plagiarism. The team of specialists reviewed and confirmed all the submitted material.
- **Fabrication.** As this study was based on several existing studies, the researcher made sure that he did not make any tale from his literature. Thus, all the information presented were carefully written and cited.
- **Falsification.** This research complied with the citation rules set forth of APA 7th edition citation format hence there would be no misrepresentation of work, or alterations of any data gathered in the study. The data and information obtained was presented in the most accurate way of writing.
- **Conflict of interest.** The respondents were informed that no personal judgments would be required for data interpretation and that they would not be subjected to

a personality diagnostic test. Respect for the dignity of study respondents would be given precedence.

- **Deceit.** The writings in this paper would not utilize any form of untruthfulness to harm the welfare of the respondents. All the information written was checked and validated by the panel of experts.
- **Permission from organization or location.** The researcher got a letter of consent from the school where the study was conducted, requesting authorization to administer the survey questionnaire to the planned respondents. The researcher also signed the letters, noted by the researcher's advisor, and the dean of the Professional Schools approved it. When obtaining formal authorization, the researcher spoke with the school principal and subject teachers to get approval and ensure that the activities were planned well in advance. The researcher needed to coordinate with the Office of the Professional Schools, and the Office of the Senior High School Department and ensure that the person with whom the researcher had interacted was the person with the power to provide the requested authorization.
- **Technology issues.** The researcher did not utilize online panels or gather data online, instead opted for a face-to-face interaction with necessary health precautions followed.
- **Authorship.** Clear authorship standards were established, and credit was given for significant contributions. The University of Mindanao Research Ethics Committee's (UMERC) ethical norms and requirements were rigorously observed. The researcher included the research adviser as a co-author since the research adviser paved the way and gave the author insights as to how to finish the study, its technicalities, and procedures.

8. Results

Results are presented in the following order: level of leader behavior of sports coaches, level of mental toughness, level of sport orientation, and significant relationship between leader behavior of sports coaches and mental toughness, between leader behavior of sports coaches and sport orientation, between sport orientation and athletes' mental toughness, and significance mediating effect of sport orientation on the relationship between leader behavior of sports coaches and athletes' mental toughness.

8.1 Level of Leader Behavior of Sport of Coaches

Table 1 revealed that the level of sport coaches' leader behavior was always manifested with a mean of 4.37 ($SD = 0.33$) and a verbal description of "Very High". More so, three out of the five domains have "Very High" verbal descriptions such as Training and Instruction (mean = 4.51; $SD = 0.39$), Democratic Behavior (mean = 4.46; $SD = 0.46$), and Positive Feedback (mean = 4.63; $SD = 0.42$) while two of its domains have "High" verbal

descriptions such as Autocratic Behavior (mean = 4.05; SD = 0.93) and the Social Support (mean = 4.18; SD = 0.65).

Table 1: Level of Leadership Behavior of Sport Coaches

Indicator	SD	Mean	Descriptive Level
Training and Instruction (Training Behavior)	0.39	4.51	Very High
Autocratic Behavior	0.93	4.05	High
Democratic Behavior	0.46	4.46	Very High
Social Support	0.65	4.18	High
Positive Feedback (Rewarding Behavior)	0.42	4.63	Very High
Overall	0.33	4.37	Very High

8.2 Level of Mental Toughness

Table 2 presents the level of mental toughness of the SPS students in one of the identified public secondary schools in Malita North District, Division of Davao Occidental, Region XI, Philippines.

Table 2: Level of Mental Toughness

Indicator	SD	Mean	Descriptive level
Mental Self-Concept	0.57	4.19	High
Stress Minimization	0.38	4.13	High
Personal Bests	0.41	4.45	Very High
Task Focus	0.54	4.04	High
Potential	0.56	4.14	High
Perseverance	0.47	4.25	Very High
Value	0.50	4.32	Very High
Task Familiarity	0.55	4.26	Very High
Goal Commitment	0.43	4.42	Very High
Positivity	0.47	4.36	Very High
Self-Efficacy	0.49	4.28	Very High
Positive Comparison	0.50	4.19	High
Overall	0.27	4.25	Very High

8.3 Level of Sport Orientation

Table 3 presents the level of sports orientation in the SPS students in one of the identified public secondary schools in Malita North District, Division of Davao Occidental, Region XI, Philippines.

Table 3: Level of Sports Orientation

Indicator	SD	Mean	Descriptive level
Competitiveness	0.42	4.49	Very High
Goal	0.48	4.34	Very High
Win	0.74	4.07	High
Overall	0.36	4.30	Very High

Since the level of the sports orientation has an overall mean score of 4.30 (SD = 0.36) with a verbal description of "Very High" which means that it was always manifested, it suggested that *Competitiveness* (mean = 4.49; SD = 0.42), and *Goal* (mean = 4.34; SD = 0.48) was always manifested while *Win* (mean = 4.07; SD= 0.36) was oftentimes manifested.

8.4 Significant Relationship between Leaders' Behavior of Sports Coaches and Mental Toughness of Athletes

Table 4 presents the significant relationship between the leader behavior of sports of coaches and the mental toughness of athletes in the SPS students in one of the identified public secondary schools in Malita North District, Division of Davao Occidental, Region XI, Philippines.

Based on the results, the overall leader behavior of sports coaches positively and significantly correlates with the overall mental toughness of athletes ($r = 0.172$) and the domain Mental Self-Concept ($r = 0.141$, $p < 0.05$) under the mental toughness of athletes. This is the same too with the overall mental toughness and the domains Democratic Behavior ($r = 0.140$, $p < 0.05$) and Positive Feedback ($r = 0.138$, $p < 0.05$) under the leadership behavior of sports coaches. Hence, the null hypothesis that there is no significant relationship between sports coaches' leader behavior and athletes' mental toughness is rejected. This suggested that Training and Instruction (Training Behavior), Autocratic Behavior, and Social Support have a relationship to mental toughness, particularly in Stress Minimization, Personal Bests, Task Focus, Potential, Perseverance, Value, Task Familiarity, Goal Commitment, Positivity, Self-efficacy, and Positive Comparison.

Table 4: Significant Relationship Between Leadership Behavior of Sports Coaches and Mental Toughness of Athletes

Leader Behavior	Mental Toughness												Overall
	A	B	C	D	E	F	G	H	I	J	K	L	
Training and Instruction	-.001 (.992)	.052 (.372)	.131* (.023)	-.033 (.572)	.044 (.447)	.151** (.009)	.137* (.017)	.272** (.000)	.170** (.003)	.153** (.008)	.029 (.615)	.083 (.150)	.174** (.002)
Autocratic Behavior	.072 (.212)	-.063 (.273)	-.067 (.248)	-.059 (.306)	.022 (.700)	-.026 (.650)	-.042 (.472)	.066 (.254)	.085 (.143)	.077 (.185)	.099 (.087)	.077 (.184)	.040 (.486)
Democratic Behavior	.035 (.542)	.062 (.285)	.107 (.063)	.022 (.707)	.071 (.222)	.150** (.009)	.121* (.036)	.198** (.001)	.030 (.608)	-.009 (.878)	.068 (.239)	.074 (.200)	.140* (.015)
Social Support	.223** (.000)	-.075 (.198)	-.082 (.155)	-.003 (.964)	.021 (.717)	-.092 (.110)	-.103 (.074)	.126* (.029)	.124* (.032)	.172** (.003)	.094 (.103)	.102 (.076)	.087 (.131)
Positive Feedback	.014 (.805)	.097 (.092)	.094 (.105)	.55 (.339)	.060 (.300)	.133* (.021)	.041 (.477)	-.005 (.926)	.060 (.302)	.022 (.708)	.187** (.001)	.190** (.001)	.138* (.016)
Overall	.141* (.014)	-.011 (.844)	.014 (.805)	-.023 (.698)	.066 (.254)	.060 (.301)	.012 (.833)	.205** (.000)	.160** (.006)	.151** (.009)	.166** (.004)	.171** (.003)	.172** (.003)

** significant @ .01 *significant @ .05

Legend:

- A. Mental Self-Concept D. Task Focus G. Value J. Positivity
- B. Stress Minimization E. Potential H. Task Familiarity K. Self-Efficacy
- C. Personal Bests F. Perseverance I. Goal Commitment L. Positive Comparison

8.5 Significant Relationship between Leader Behavior of Sports Coaches and Sport Orientation

Table 5 presents the significant relationship between the leader behavior of sports coaches and sports orientation in the SPS students in one of the identified public

secondary schools in Malita North District, Division of Davao Occidental, Region XI, Philippines.

Table 5: Significant Relationship Between Leadership Behavior of Sports Coaches and Sport Orientation

Leadership Behavior	Sports Orientation			
Behavior	Competitiveness	Goal	Win	Overall
Training and Instruction (Training Behavior)	.062 (.286)	.153** (.008)	.152** (.008)	.197** (.001)
Autocratic Behavior	.042 (.473)	.073 (.208)	.145* (.012)	.148* (.010)
Democratic Behavior	.051 (.376)	.154** (.008)	.080 (.167)	.144* (.013)
Social Support	.095 (.102)	.095 (.100)	.002 (.977)	.081 (.163)
Positive Feedback (Rewarding Behavior)	.092 (.112)	.027 (.644)	.044 (.445)	.078 (.177)
Overall	.113 (.050)	.163** (.005)	.152** (.009)	.221** (.000)

** significant @ .01 *significant @ .05

Based on the results, the overall leader behavior of sports coaches positively and significantly correlates with the overall sports orientation ($r = 0.221$) and the domains *Autocratic Behavior* ($r = 0.148$) and *Democratic Behavior* ($r = 0.144$) for leader behavior of sports coaches. Hence, the null hypothesis that there is no significant relationship between the leader behavior of sports coaches and sports orientation is rejected. It is suggested that *Training and Instruction (Training Behavior)*, *Social Support*, and *Positive Feedback (Rewarding Behavior)* are related to sport orientation, particularly in *Competitiveness*, *Goal*, and *Win*.

8.6 Significant Relationship between Sport Orientation and Athletes' Mental Toughness

Table 6 presents the significant relationship between sports orientation and athletes' mental toughness in the SPS students in one of the identified public secondary schools in Malita North District, Division of Davao Occidental, Region XI, Philippines.

Based on the results, overall sports orientation positively and significantly correlates with the overall athletes' mental toughness ($r = 0.232$) and the domains *Mental Self-Concept* ($r = 0.147$), *Goal Commitment* ($r = 0.121$), and *Positive Comparison* ($r = 0.143$) for athletes' mental toughness. The same with overall athletes' mental toughness and the domains *competitiveness* ($r = 0.142$) and *Win* ($r = 0.137$) for sports orientation. Hence, the null hypothesis that there is no significant relationship between sport orientation and athletes' mental toughness is rejected. It suggested that *Goal* has a significant relationship with mental toughness, particularly in stress minimization, personal bests, task focus, potential, perseverance, value, task familiarity, positivity, and self-efficacy.

Table 6: Significant Relationship between Sport Orientation and Athletes' Mental Toughness

Sports Orientation	Mental Toughness												Overall
	A	B	C	D	E	F	G	H	I	J	K	L	
Competitiveness	.066 (.254)	-.056 (.331)	.091 (.116)	.027 (.636)	.126* (.029)	.105 (.070)	.134* (.020)	.011 (.853)	.142* (.014)	.139* (.016)	.088 (.127)	.067 (.249)	.142* (.014)
Goal	.068 (.239)	.032 (.578)	.095 (.099)	.122* (.035)	.153** (.008)	.122* (.034)	.067 (.250)	.139* (.016)	.100 (.084)	.135* (.020)	.076 (.189)	.100 (.084)	.184** (.001)
Win	.133* (.021)	.055 (.343)	.050 (.388)	.030 (.603)	.089 (.124)	.100 (.085)	.116* (.045)	.030 (.603)	.029 (.614)	.108 (.062)	.065 (.264)	.106 (.067)	.137* (.017)
Overall	.147* (.011)	.031 (.598)	.112 (.052)	.086 (.136)	.179** (.002)	.164** (.004)	.162** (.005)	.087 (.131)	.121* (.037)	.190** (.001)	.113 (.050)	.143* (.013)	.232** (.000)

** significant @ .01 *significant @ .05

Legend:

- | | | | |
|------------------------|-----------------|---------------------|------------------------|
| A. Mental Self-Concept | D. Task Focus | G. Value | J. Positivity |
| B. Stress Minimization | E. Potential | H. Task Familiarity | K. Self-Efficacy |
| C. Personal Bests | F. Perseverance | I. Goal Commitment | L. Positive Comparison |

8.7 Mediating Effect of Sport Orientation on the Relationship between Leader Behavior of Sport Coaches and Athletes' Mental Toughness

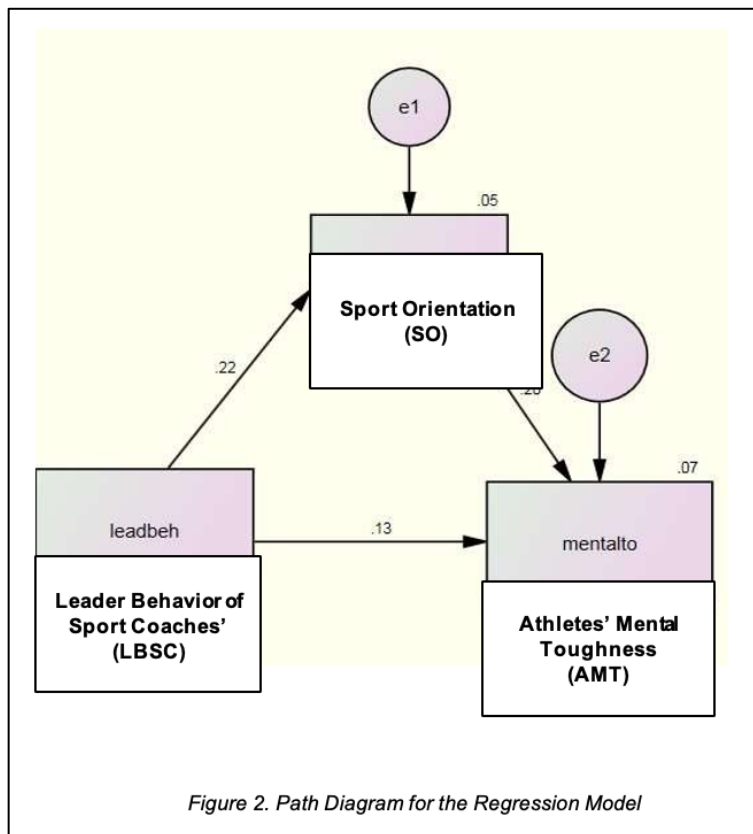
A Medgraph using Sobel Z-test was employed to prove the mediation and to strengthen the obtained result on the significant mediating effect of sport orientation (SO) on the relationship between leader behavior of sport coaches (LBSC) and athletes' mental toughness (AMT) in the SPS students in one of the identified public secondary schools in Malita North District, Division of Davao Occidental, Region XI, Philippines. Table 7.1 illustrates the mediating effect: path analysis and Table 7.2 on the variance.

Table 7.1: Mediating Effect: Path Analysis

		Estimate	S.E.	C.R.	P	Label
SO	<--- LBSC	0.238	0.061	3.926	***	par_1
AMT	<--- LBSC	0.104	0.047	2.218	0.027	par_2
AMT	<--- SO	0.156	0.044	3.570	***	par_3

Table 7.2 Variances: (Default Model)

	Estimate	S.E.	C.R.	P	Label
Leader Behavior	.110	.009	12.227	***	par_7
e1	.121	.010	12.227	***	par_8
e2	.069	.006	12.227	***	par_9



According to the Medgraph utilizing the Sobel z-test presented in Figure 3, the p-value for LBSC was 0.221, the p-value for SO and AMT was 0.204, and LBSC and AMT were 0.127. This data makes it possible to infer a partially meaningful association between variables. Its p-value is above the alpha (0.001), indicating that it failed to accept the null hypothesis. Further, the null hypothesis that SO does not significantly mediate LBSC and AMT is rejected. Additionally, the p-values for LBSC and AMT 0.127 were larger than the alpha 0.027, indicating that the null hypothesis could be rejected.

9. Discussion

9.1 Level of Leader Behavior of Sports of Coaches

Since the level of sport coaches' leader behavior was always manifested with a verbal description of "Very High", most respondents claimed their coach should ensure players are working to their ability, explain the sport's principles and strategies, give particular attention to rectifying athletes' faults, ensure collaboration is understood, train each athlete individually, and prepare ahead. They see their coach explain what should and should not be done, expect to finish tasks in detail, point out strengths and weaknesses, give specific instructions for every situation, coordinate efforts, explain how each athlete's contribution fits into the whole picture, and specify each athlete's expectations. Smith (2014) found that creativity and training inspire players to innovate the sport. Well-trained athletes may overcome game problems in a healthy, practical, surprising, and distinctive method by doing a single act or a collective action that helps the team win

(Moy *et al.*, 2016). This considers excellent leaders to motivate people to attain goals and manage successful sports teams where the coach's tasks always impact the players, team, performance, and competition. Hill *et al.* (2017) suggest that coaches affect players' feelings and team performance.

On the other hand, respondents indicated authoritarian coaches should be independent of players, not defend their actions, refuse to compromise, and communicate unquestionably. An authoritarian coach "tells" players to obey their ideas and demands a coaching approach (Young & Rogers, 2014). Coaches must guide players to success (Darren *et al.*, 2015). In democratic conduct, coaches should consult players about competitive plans, gain group consent before going ahead, and encourage athletes to develop practice methods. They should also advise their coaches on critical coaching decisions and practice independently. Yusoff and Muhamad (2018) found that sports coaches may need to do what athletes desire to improve and need specific training. In Giblin (2014) and Côté *et al.* (2014), sports coaches who adapt to athletes' preferences may boost performance.

Correspondingly, coaches helped athletes with personal concerns and disagreements, showed love, encouraged them to confide, and had tight, informal working relationships. Khun-Inkeeree *et al.* (2021) indicated that coaches must examine and advise players' mental and emotional conditions. Coaches should openly praise players for their successes. Mohammed *et al.* (2017) concluded that positive feedback and pleasure help athletes win. Athletes who are happy with their lives will work hard in competitions (Turner, 2018). Sports leaders must teach, create a culture that makes athletes happy, provide credit when deserved, and change players' perspectives (Uwayo, 2021).

9.2 Level of Mental Toughness

Since the level of mental toughness was always manifested with a verbal description of "Very High", it means that respondents thrive in athletics due to their mental strength, perseverance, and self-motivation. Anthony *et al.* (2016) revealed mentally tough athletes retain self-confidence under pressure. They refuse to let minor pressures derail their ambitions (Coulter *et al.*, 2016). Cowden *et al.* (2014) observed that athletes handle several stresses using stress-reduction techniques. Gucciardi *et al.* (2016) concluded that tournament stress management increases performance and health.

Correspondingly, respondents are most content when they know they have done their best, and attempting their best was the most important thing to them, so they are happy with their results, motivated to see how excellent their best is, and keep on target. Blodgett (2015) noted that cognitive skills—the ability to concentrate, focus, ponder, judge, and analyze—are essential. They expect a successful, satisfying sports career. They persevere until they understand, labor until the task is done, and refuse to give up when challenged. They value their sports achievements, and their experiences improve performance. They turn challenges into positives, see the good in everything, and stay optimistic in challenging circumstances. Slack (2015) believes that adequate emotional,

financial, and social support and encouragement assist players in managing school and athletics. This shows that goal orientations, personal traits, and external influences like coach and team support impact sports performance (McGannon & Schinke, 2015). Despite criticism and adversity, self-efficacy is present. Seeing the opposition's weaknesses and pressures improves their confidence. Mahoney (2014) and Hagig and Ali (2014) show that mentally strong athletes remain confident under pressure, work hard, and stay calm under pressure.

9.3 Level of Sport Orientation

Based on the result, it indicated that respondents are competitive, driven, and want to be the finest athletes possible. They also like competing against others and strive hard to succeed in sports, since competition is the greatest way to test their talents. Peachey *et al.* (2019) found that competitiveness is a personality attribute that may predict performance in a competitive scenario. In Van Kleef (2014), competitive athletes had stronger intrinsic drive while in Yagodin (2016), results—points, objectives, time, weight, and distance—measure efficiency in sports. Likewise, it was shown that when they compete, they set goals, work hardest when they have a goal, and fulfill important personal performance goals. Korchagin (2015) demonstrated that personal and environmental factors affect goal orientations, such as why someone plays a sport, how they define success, and how happy they are with the results. Alekseev (2018), Schulenkorf (2017), and Shavandina *et al.*, (2020) stressed that goals provide tasks meaning and purpose. Similarly, Voevodina (2018) noted that athletes might set tournament, personal, or opponent goals, whereas Malcata *et al.*, (2014) discovered that recognition and incentive goals demotivate people. Peachey *et al.* (2019) suggested setting self-set goals to build skills and a team to inspire athletes.

9.4 Significant Relationship between the Leader Behavior of Sports Coaches and the Mental Toughness of Athletes

Based on the result, it can be inferred that their coaches should ensure that athletes are working to their capacity, explain the techniques and tactics of the sport, pay special attention to correcting athletes' mistakes, make sure that being part of the team is understood, instruct every athlete individually in the skills of the sport and figure ahead on what should be done, explain to them what should and should not be done, point out each athlete's strength and weaknesses. This supports Liu *et al.*, (2016) and Pitts' (2018) results on basketball coaches' leadership styles, team cohesiveness, and achievement motivation.

9.5 Significant Relationship between Leader Behavior of Sports Coaches and Sport Orientation

Based on the results, the overall leader behavior of sports coaches positively and significantly correlates with the overall sports orientation and the domains *Autocratic Behavior* and *Democratic Behavior* for leader behavior of sports coaches. This means that

there is a significant relationship with their coach to explain what should and should not be done, expect to carry out assignments to the last detail, point out each strength and weakness, and give specific instructions as to what they should do in every situation to being competitive, trying their hardest to win, being determined competitors, wanting to be the best every competition, and being the best athlete possible. Wuff and Toole (2017) and Memmert (2015) found that coaches do many things and that leadership is vital as coaches are often responsible for results.

It is also suggested that there is a significant relationship that their coach should help them with their problems and settle conflicts, look out for their welfare, do personal favors to the athletes, express affection, encourage them to confide in him, have close and informal working relations, and set goals for themselves when they compete, most competitive when they try to achieve personal goals, try hardest when they have a specific goal. Chow *et al.* (2015) and Lai *et al.* (2014) pointed out that coaches are responsible for everything from technical training, physical improvement, and on-site guidance to mental adjustments, life counseling, and interpersonal relationships. Furthermore, there is a direct link between their coach complimenting the athletes in front of others, telling them when they do a particularly good job, seeing that athletes are rewarded and expressing appreciation for a good performance and winning, scoring more points than their opponents, hating losing, being satisfied when they win, and having the most fun when they win. According to Ohtonen *et al.* (2015), competitiveness, objective, and victory increase interest, mastery experience, and sports practice.

9.6 Significant Relationship between Sport Orientation and Athletes' Mental Toughness

Based on the results, overall sports orientation positively and significantly correlates with the overall athletes' mental toughness and the domains of *Mental Self-Concept*, *Goal Commitment*, and *Positive Comparison* for athletes' mental toughness. This suggested that a direct relationship exists between being competitive, trying their hardest to win, being determined competitors, wanting to be their best every time they compete, enjoying competing against others, and looking forward to the opportunity to test their skills in competition. The *Goal* is to be the best athlete possible and be good at keeping stress in perspective (Mathieu *et al.*, 2015), be most satisfied when they know they have done their best, and get absolute satisfaction (Karim & Ismail, 2019).

Likewise, there is an association between setting goals for themselves when they compete, being most competitive when they try to achieve personal goals (Shrivastava, 2015), try hardest when they have a specific goal, and reaching personal performance goals very important to them not to let stress get out of proportion or minimize the impact of stress and pressure on them (Pitts *et al.*, 2018), trying their best is what matters to them (Ismail *et al.*, 2020). They are satisfied when they win, losing upsets them and they have the most fun when they win to being wise about how to deal with stress (Schaefer *et al.*, 2016). What drives them is wanting to see how good their best. They need to achieve their best, focusing on the right thing at the right time and giving total attention and

unshakeable focus to the task at hand (Uwayo, 2021), persisting and working until the job is done (Malcata & Hopkins, 2014), and when faced with difficulty, they keep working at it. They would not accept defeat, are committed to achieving their goals, and stay positive in the face of difficulty (Knight, 2015).

9.7 Mediating Effect of Sport Orientation on the Relationship between Leader Behavior of Sport Coaches and Athletes' Mental Toughness

According to the Medgraph utilizing the Sobel z-test presented in Figure 3, the p-value for LBSC was 0.221, the p-value for SO and AMT was 0.204, and LBSC and AMT were 0.127. This means that sport orientation pertains to the desire to win, achieve personal goals, and strive for success with domains or indicators: Competitiveness, Goal, and win influenced and partially mediated the relationship between leader behavior of sports coaches or how the sports coach influence his/her athletes to achieve optimum performance with domains or indicators: training and instruction (training behavior), autocratic and democratic behavior, social support and positive feedback (rewarding behavior) and athletes' mental toughness or the psychological edge that lets them handle the many demands of competition, training, and lifestyle better than their opponents with domains or indicators: mental self-concept (Anthony *et al.*, 2016; Coulter *et al.*, 2016), stress minimization (Cowden *et al.*, 2014; Gucciardi *et al.*, 2016), personal bests (Côté & Vierimaa, 2014), task focus (Blodgett, 2015), potential (Barkley *et al.*, 2014; Jin & Wang, 2016), perseverance (Nascimento-Jnior *et al.*, 2018), value (Calvo & Topa, 2019), task familiarity (Anthony *et al.*, 2016; Longmuir *et al.*, 2015), goal commitment (McGannon & Schinke, 2015; McGeown *et al.*, 2016; Slack, 2015), positivity (Duncan & Lorean, 2021; Heil, 2018; Mohammed *et al.*, 2017; Uwayo, 2021), self-efficacy (Hagig & Ali, 2014; Mahoney, 2014), and positive comparison (Malcata & Hopkins, 2014).

10. Recommendations

Based on the results of the study, it is suggested that the Department of Education Region XI should have an intensive orientation program for the coaches-teachers about school-based management to enhance their coaching capacity and skills and broaden their knowledge of what school-based management is all about as to attaining quality athletes from the students. It can also be a basis for refining school plans, promulgating new programs and training, updating, and modifying approaches, explicit performance standards and measures, and the precise definition of goals and indicators of success. The department has already included the conduct of Learning Action Cells, In-Service Training, School Governing Council, Enhanced School Improvement Plan or Annual Implementation Plan with regards to how to improve the leader behavior of sports coaches, the mental toughness of athletes-students, and their sports orientation, particularly that every school has different learning environment adapted by differentiated learners highlighting immediate needs and concerns, coping mechanisms, and strategies responsive to the demands of the 21st century.

For the students, parents, and teachers, it is recommended that an awareness program or conference with them be made as there are a lot of possible hurdles to overcome when it comes to sports coaches' leadership behavior, mental toughness, and sports orientation. It will motivate and demonstrate how coaches and athletes can effectively lay the groundwork by establishing a clear direction and tone, investing in professional development, establishing mentor relationships, equipping others with the knowledge necessary to make critical decisions, and elevating the significance of the achievement.

The school may review its educational policies and models to better assist in meeting educational objectives. The school may create and strengthen partnerships with their parents and the community and support from the LGU. The school can have seminars, awareness or symposia, and specific means in answering the needs and concerns of the learners-athletes and teachers-coaches.

To improve the existing facilities in the school, it is recommended that a specific budget for the purchase of sports paraphernalia be allotted. This will provide a good image of the school and will attract more student-athletes to be motivated to perform their best in sports and other physical activities. In addition, through this, it will maintain the high or even increase the data result in sports confidence among student-athletes. Also, if funds warrant, the school may grant scholarships to deserving students or incentives and discounts to student-athletes who are performing well in their fields.

Local libraries in Davao Occidental can be furnished with copies of the study that promote social awareness and integration of a dynamic approach to sports orientation, leader behavior of sports coaches, and athletes' mental toughness.

11. Conclusion

Based on the findings generated in the study, it can be concluded that the SPS students in one of the identified public secondary schools in Malita North District, Division of Davao Occidental, Region XI, Philippines, have a *very high* level of leadership behavior in sports coaches, *very high* level of athletes' mental toughness and *very high* level of sports orientation. Sports coaches always manifested influence on their athletes in achieving optimum performance, coping better than their opponents with the many demands (competition, training, and lifestyle), and always manifested the desire to win, achieve personal goals, and strive for success. The study's findings supported Hodges's (2010) psychological capital stressing self-confidence, hope, optimism, and resilience; Walumba *et al.* (2008) Authentic Leadership theory that to be successful, sports coaches need to remain true to who they are as individuals and not strive to be someone else in the name of leadership; and Nicholls *et al.*, (1989) Goal Perspective Theory which asserted that an individual's objectives affect how they think, feel, and behave in an accomplishment setting like a competition. Athletes can use mental toughness to improve themselves, deal with pressure, and perform better.

It can be further concluded that what the coach does or says will always impact how the players feel, how the team feels, how well the team performs, and how competitive they are. Mentally tough athletes maintain self-belief and confidence even under pressure and appear to be heavily influenced by how athletes perceive themselves and their mental strength. Competitiveness can be used to judge how well someone does in a competitive situation.

More so, the leader behavior of sports coaches and mental toughness positively and significantly correlated; the leader behavior of sports coaches and sports orientation positively and significantly correlated; and there is a partial mediating effect of sport orientation on the relationship between leader behavior of sports coaches' and athletes' mental toughness. Other factors aside from sports orientation may affect the mental toughness, leadership style, and motivation of their coaches. However, studies show coaches are responsible for everything from mental adjustments, life counseling, and interpersonal relationships to gathering information about competitions.

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Conflict of Interest Statement

The authors declare no conflicts of interest.

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References

- Adzhar, R. J. I., Abd Aziz, S., Zakaria, J., Osman, N., & Azmi, S. H. (2019). Correlation between leadership style and athlete motivation among males and females' adolescents. *Malaysian Journal of Movement, Health & Exercise*, 8(2), 45-56. <https://doi.org/10.15282/mohe.v8i2.340>
- Alekseev, S.V. (2018). *Sports Law. Moscow. Russia*. YuNITI-DANA: Law and Justice
- Anthony D, Gucciardi D, Gordon S. (2016). A meta-study of qualitative research on mental toughness development. *Int Rev Sport Exerc Psychol*; 9: 160-90. [\[http://dx.doi.org/10.1080/1750984X.2016.1146787\]](http://dx.doi.org/10.1080/1750984X.2016.1146787)
- Arthur, C. A., & Bastardoz, N. (2020). Leadership in Sport. In Gershon Tenenbaum and Robert C. Eklund (eds.), *Handbook of Sport Psychology, (Fourth Edition)*, Volume I. pp. 344–371. doi:10.1002/9781119568124.ch16
- Bauman, N. J. (2016). The stigma of mental health in athletes: are mental toughness and mental health seen as contradictory in elite sport? *Br J Sports Med*. Feb;50(3):135-6.
- Berry, C. R., & Fowler, A. (2021). Leadership or luck? Randomization inference for leader effects in politics, business, and sports. *Science Advances*, 7 (4): eabe3404. DOI: 10.1126/sciadv.abe3404
- Blodgett A, Schinke R, McGannon K, Fisher L. (2015). Cultural sport psychology research: Conceptions, evolutions, and forecasts. *Int Rev Sport Exerc Psychol*, 8: 24-43. <http://dx.doi.org/10.1080/1750984X.2014.942345>
- Brand S., Kirov R., Kalak N., Gerber M., Pühse U., Lemola S., et al. (2015). Perfectionism related to self-reported insomnia severity, but not when controlled for stress and emotion regulation. *Neuropsychiatr. Dis. Treat.* 11 263–271. 10.2147/NDT.s74905
- Calvo, C., & Topa, G. (2019). Leadership and motivational climate: The relationship with objectives, commitment, and satisfaction in base soccer players. *Behavioral Science*, 9, 29; doi:10.3390/bs9030029
- Chee, H. K., Rasyid, N. M., Tengah, R. Y., & Low, J. F. L. (2017). Relationship between leadership style and performance of Perak SUKMA athletes and coaches. *Journal of Fundamental and Applied Sciences*. doi: <http://dx.doi.org/10.4314/jfas.v9i6s.97>
- Christensen, D. S., & Smith, R. E. (2016). Psychological coping skills as predictors of collegiate golf performance: Social desirability as a suppressor variable. *Sport, Exercise, and Performance. Psychology*, 5(1), 67–80. <https://doi.org/10.1037/spy0000049>.

- Chow J, Davids K, Button C, Renshaw I. (2015). *Nonlinear pedagogy in skill acquisition: An introduction*. Taylor & Francis Group.
- Clough, P. (2022). *Leadership and mental toughness*.
<https://www.learnevents.com/blog/2015/08/17/leadership-and-mental-toughness/>
- Cohn, P. (2022). *Two big problems that hurt mental toughness*. Retrieved from
<https://www.peaksports.com/sports-psychology-blog/two-big-problems-that-hurt-mental-toughness/>
- Cook C., Crust L., Littlewood M., Nesti M., & Allen-Collinson J. (2014). 'What it takes': perceptions of mental toughness and its development in an English Premier League Soccer Academy. *Qual Res Sports Exercise Health* 6: 329-47.
[\[http://dx.doi.org/10.1080/2159676X.2013.857708\]](http://dx.doi.org/10.1080/2159676X.2013.857708)
- Côté J, & Vierimaa M. (2014). The developmental model of sport participation: 15 years after its first conceptualization. *Sci Sports*. 29:S63–S9.
- Coulter T, Mallett C, Singer J. (2016). A subculture of mental toughness in an Australian Football League club. *Psychol Sport Exerc*; 22: 98-113.
<http://dx.doi.org/10.1016/j.psychsport.2015.06.007>
- Cowden R. G., Fuller D. K., Anshel M. H. (2014). Psychological predictors of mental toughness in elite tennis: an exploratory study in learned resourcefulness and competitive trait anxiety. *Percept Mot Skills* 119(3): 661-78.
<http://dx.doi.org/10.2466/30.PMS.119c27z0> [PMID: 25387038]
- Cruz, A. B., & Kim, H. D. (2017). Leadership preferences of adolescent players in sport: Influence of coach gender. *Journal of Sports Science and Medicine*, 16, 172-179
- Darren P, Gabbett T., & Nassis G. (2015). Agility in team sports: Testing, training, and factors affecting performance. *Sports Med*. 1–22.
- Duncan, N., & Lorena, T. (2021). NSCA's essentials of sports science. USA: *Human Kinetics*.
- Foskett R. L., & Longstaff F. (2018). The mental health of elite athletes in the United Kingdom. *J Sci Med Sport*. Aug; 21(8):765-770.
- Fouraki, V., Stavrou, N. A. M., Apostolidis, N., & Psychountaki, M. (2020). Coach and athlete leadership behaviors: Examining their role in athlete's satisfaction. *Journal of Physical Education & Sport*, 20, 3212-3220.
- Fransen, K., Decroos, S., Broek, G., & Boen, F. (2016). Leading from the top or leading from within? A comparison between coaches' and athletes' leadership as predictors of team identification, team confidence, and team cohesion. *International Journal of Sports Science & Coaching*, 11 (6), 757- 771.
- Giblin S, Collins D, Button C. (2014). Physical literacy: Importance, assessment, and future directions. *Sports Med*. 44(9):1177–84. pmid:24898813
- Gucciardi D. F., Hanton S., Gordon S., Mallett C. J., Temby P. (2015). The concept of mental toughness: tests of dimensionality, nomological network, and traits. *J. Pers*. 83 26–44. 10.1111/jopy.12079

- Gullu, S. (2018). Counterproductive behaviors: A case study of a private sports business. *International Journal of Social Sciences and Education Research*, 4(2). <https://www.researchgate.net/publication/327183219>
- Hagig H, Ali M. (2014). The relationship between mental toughness and results of the Egyptian fencing team at the 9th All-Africa Games. *Sci Mov Health*.14: 85-90.
- Hannan T. E., Moffitt R. L., Neumann D. L., Thomas P. R. (2015). Applying the theory of planned behavior to physical activity: the moderating role of mental toughness. *J. Sport Exerc. Psychol.* 37 514–522. 10.1123/jsep.2015-0074
- Henz D., & Schöllhorn W.I. (2016). Differential training facilitates early consolidation in motor learning. *Front Behav Neurosci.* 10:199. pmid:27818627
- Hill A, MacNamara A, Collins D & Rodgers S. (2016). Examining the Role of Mental Health and Clinical Issues within Talent Development. *Front Psychol.* Jan 11;6:2042.
- Hodges, T. D. (2010). An Experimental Study of the Impact of Psychological Capital on Performance, Engagement, and the Contagion Effect. *Dissertations, Theses, and Student Research from the College of Business.* 7. <https://digitalcommons.unl.edu/businessdiss/7>
- Ignacio III, R. A., Montecalbo-Ignacio, R. C., & Cardenas, R. C. (2017). The relationship between perceived coach leadership behaviors and athletes' satisfaction. *International Journal of Sports Science*, 7(5): 196-202. DOI: 10.5923/j.sports.20170705.04
- Ismail, E., Razak, M. R. A., Bakar, A. Y. A., & Mahmood, H. N. (2020). The leadership style among football coaches in Iraqi's public universities. *International Journal of Academic Research in Business and Social Sciences*, 10(8), 153–161
- Jones, M. I. (2020). Does mental toughness predict physical endurance? A replication and extension of Crust and Clough (2005). *Sport, Exercise, and Performance Psychology*, 9(3), 461–470. <https://doi.org/10.1037/spy0000177>
- Jowett, S., & Arthur, C. (2019). Effective coaching: The links between coach leadership and coach-athlete relationship - From theory to research to practice. In M. H. Anshel, T. A. Petrie, & J. A. Steinfeldt (Eds.), *APA handbook of sport and exercise psychology*, Vol. 1. *Sport psychology* (pp. 419–449). American Psychological Association.
- Juezan, G. I. & Osorno, R. (2022). Sports performance anxiety and sports confidence among college athletes: The moderating effect of friendship quality. *European Journal of Physical Education and Sports Science.* 8:1. <https://oapub.org/edu/index.php/ejep/article/view/4170>
- Kang S., Kim I. & Lee K. (2021). Predicting Deviant Behaviors in Sports Using the Extended Theory of Planned Behavior. *Front. Psychol.* 12:678948. doi: 10.3389/fpsyg.2021.678948
- Karim, Z. A., & Ismail, F. H. (2019). Common coaching leadership style and leadership practice differences between team athletes in Kuala Lumpur School Sports Council (MSSWPKL). *International Journal of Academic Research in Business and Social Sciences*, 9(7), 700–713

- Khun-Inkeeree, H., Luckhana Pimjan, L., & Ayotunde Adetola Adelaja, A. A. (2021). Moderating effect of Thai teachers' perspective on the relationship between teaching perspectives, and students' engagement. *International Journal of Instruction*, 14(1), 631- 646. <https://doi.org/10.29333/iji.2021.14138a>
- Korchagin, E.V. (2015). The legal status of a sports federation as a self-regulatory organization in terms of changes in civil legislation on legal entities. *Lawyer*.18. 36-4.
- Knight, J. L. (2015). *Until they know you care: The influence of coach servant leadership on motivational climate and athlete psychosocial outcomes* (Doctoral dissertation). Moscow, ID: University of Idaho. Pro Quest Information and Learning. (2015-99060-475)
- Lai S. K., Costigan S., Morgan P., Lubans D., Stodden D., Salmon J. (2014). Do school-based interventions focusing on physical activity, fitness, or fundamental movement skill competency produce a sustained impact on these outcomes in children and adolescents? A systematic review of follow-up studies. *Sports Med*. 44(1):67–79. pmid:24122775
- Li, C., Zhang, Y., Randhawa, A. K., Madigan, D. J. (2020). *Emotional exhaustion and sleep problems in university students: Does mental toughness matter?* <https://doi.org/10.1016/j.paid.2020.110046>
- Liew, G. C., Kuan, G., Chin, N. S. & Hashim, H. A. (2019). Mental toughness in sport. *Ger J Exerc Sport Res* 49, 381–394. <https://doi.org/10.1007/s12662-019-00603-3>
- Lin, Y., Mutz, J., Clough, P. J., & Papageorgiou, K. A. (2017). Mental Toughness and Individual Differences in Learning, Educational and Work Performance, Psychological Well-being, and Personality: A Systematic Review. *Frontiers in Psychology*, 8, 1345. <https://doi.org/10.3389/fpsyg.2017.01345>
- Longmuir P, Boyer C, Lloyd M, Yang Y, Boiarskaia E, Zhu W. (2015). The Canadian assessment of physical literacy: Methods for children in grades 4 to 6 (8 to 12 years). *BMC Public Health*. 15(1):767.
- Mahoney J. W., Gucciardi D. F., Ntoumanis N., Mallett C. J. (2014). Mental toughness in sport: motivational antecedents and associations with performance and psychological health. *J Sport Exerc Psychol* 36(3): 281-92. [\[http://dx.doi.org/10.1123/jsep.2013-0260\]](http://dx.doi.org/10.1123/jsep.2013-0260) [PMID: 24918311]
- Malcata, R. M., Hopkins, W. G. (2014) Variability of Competitive Performance of Elite Athletes: A Systematic Review. *Sports Med* 44, 1763–1774. <https://doi.org/10.1007/s40279-014-0239-x>
- Magdato, E. P. (2021). Sports performance and challenges of student-athletes in a catholic school. *Technium Social Sciences Journal*, 22:255-268
- Mathieu, J. E., Kukenberger, M. R., D'Innocenzo, L., & Reilly, G. (2015). Modeling reciprocal team cohesion-performance relationships as impacted by shared leadership and members' competence. *Journal of Applied Psychology*, 100(3),713-732.
- Matveev, L. P. (2019). *The general theory of sports and its applied aspects*. Moscow. Russia. "Sport" Publishing House.

- McGannon K., Schinke R. (2015). Situating the subculture of sport, physical activity, and critical approaches. In: Schinke R, McGannon K, Eds. *The psychology of sub-culture in sport and physical activity: Critical perspectives*. New York: Routledge 2015; pp. 3-15.
- Meggs J., Ditzfeld C., Golby J. (2014). Self-concept organization and mental toughness in sport. *J. Sports Sci.* 32 101–109. 10.1080/02640414.2013.812230
- Memmert D. (2015). *Teaching tactical creativity in sport: Research and practice*: Routledge.
- Moesch K., Kentta G., Kleinert J., Quignon-Fleuret C., Cecil S., & Bertollo M. (2018). FEPSAC position statement: Mental health disorders in elite athletes and models of service provision. *Psychol Sport Exerc.* Sep 38: 61 -71
- Mohammed, M., Hasan, A., Abd Alhmed, Y., & Ali, A. (2017). Construction measure of psychological satisfaction for the athletes. *Physical Education College's Journal*, 27, 269-208.
- Moy B, Renshaw I, Davids K. (2015). The impact of nonlinear pedagogy on physical education teacher education students' intrinsic motivation. *Phys Educ Sport Pedagog.* 1–22.
- Mutz J., Clough P. J., Papageorgiou K. A. (2017). Do individual differences in emotion regulation mediate the relationship between mental toughness and symptoms of depression? *J. Individ. Differ.* 38 71–8210.1027/1614-0001/a000224
- Nascimento-Júnior, J. R. A., Vissoci, J. R. N., Codonhato, R., Fortes, L. S., Oliveira, D.V., Oliveira, L. P.; Nascimento, J. V.; & Fiorese, L. (2018). Effect of the coaches' leadership style perceived by athletes on team cohesion among elite Brazilian futsal players. *Cuadernos de Psicología del Deporte*, 18(3), 252-267.
- Ohtonen, O., Ruotsalainen, K., Mikkonen, P., Heikkinen, T., Hakkarainen, A., Leppävuori, A., Linnamo, V. (2015). The online feedback system for athletes and coaches. *3rd International Congress on Science and Nordic Skiing*. Vuokatti, Finland. Vuokatti Sports Institute.
- Peachey, J. W., Schulenkorf, N., Hil, P. (2019). Sport-for-development: A comprehensive analysis of theoretical and conceptual advancements. *Sport Management Review*. <https://doi.org/10.1016/j.smr.2019.11.002>
- Pitts, T. D., Nyambane, G., & Butler, S. L. (2018). Preferred leadership styles of student-athletes in a Midwest NAIA Conference. *The Sport Journal*, 21, 1 – 22.
- Ragab, M. (2015). The effects of mental toughness training on athletic coping skills and shooting effectiveness for national handball players. *Science, Movement and Health*, 15(2), 431–435.
- Rice, S. M., Purcell, R., De Silva, S., Mawren, D., McGorry, P. D., & Parker, A. G. (2016). The Mental Health of Elite Athletes: A Narrative Systematic Review. *Sports Med.* Sep;46(9):1333-53.
- Ronald, B., & Slawomir, C. (2018). The impact of head coaches leadership styles on players' motivation – empirical evidence from Germany's leading youth soccer academies. *Advances in Management*, 11(3), 35-54.

- Schaefer J., Vella S. A., Allen M. S., Magee C. A. (2016). Competition anxiety, motivation, and mental toughness in golf. *J. Appl. Sport Psychol.* 28 309–320. 10.1080/10413200.2016.1162219
- Schinke, R., Stambulova, N. G., & Moore, Z. (2017). International society of sport psychology position stand: Athletes' mental health, performance, and development. *Int J Sport Exerc Psychol.* (4)8
- Schulenkorf, N. (2017). Managing sport-for-development: Reflections and outlook. *Sport Management Review.*20.243-251. <https://doi.org/10.1016/j.smr.2016.11.003>
- Seeman, G. (2016). *The Psychology of Mental Toughness*. Retrieved from <https://psychcentral.com/lib/the-psychology-of-mental-toughness#1>
- Shavandina, O. A., Kovalenko, E. Y., & Pratsiuk, N. I. (2020). The improvement of athletes' competitiveness assessment as an element of sports-legal regulation in the Russian Federation. *Journal of Human Sport and Exercise*, 15(3proc), S856-S868. doi: <https://doi.org/10.14198/jhse.2020.15.Proc3.37>
- Slack L, Maynard I, Butt J, Olusoga P. (2015). An evaluation of a mental toughness education and training program for early-career English football league referees. *Sport Psychol*; 29: 237-57. <http://dx.doi.org/10.1123/tsp.2014-0015>
- Smith W. (2014). Fundamental movement skills and fundamental game skills are complementary pairs and should be taught in complementary ways at all stages of skill development. *Sport Educ Soc.* 1–12
- Spence, F. (2022). *Why Every Leader Needs Mental Toughness*. <https://www.floydspence.com/blog/why-every-leader-needs-mental-toughness>
- St Clair-Thompson H., Bugler M., Robinson J., Clough P., McGeown S. P., Perry J. (2015). Mental toughness in education: exploring relationships with attainment, attendance, behavior, and peer relationships. *Educ. Psychol.* 35 886–907. 10.1080/01443410.2014.895294
- Stamp E., Crust L., Swann C., Perry J., Clough P., Marchant D. (2015). Relationships between mental toughness and psychological well-being in undergraduate students. *Pers. Individ. Dif.* 75 170–174. 10.1016/j.paid.2014.11.038
- Steltenpohl, C. N., Shuster, M., Peist, E., Pham, A., & Mikels, J. A. (2019) Me Time, or We Time? Age Differences in Motivation for Exercise. *The Gerontologist* 59:4, 709-717.
- Strycharczyk, D. (2022). *Developing mental toughness in leadership and why it matters*. <https://social.hays.com/2021/10/08/developing-mental-toughness/>
- Turner, K. A. (2018). *The relationship between sports leadership behavior, athlete satisfaction, and group cohesion of division 1 female soccer players: A correlational study*. Doctor of Philosophy Dissertation. Grand Canyon University, Phoenix, Arizona.
- Uwayo, F. (2021). Players' perception of coaches' leadership behavior as the key to active contribution to team's achievement: A case study of Rwanda handball league. *Journal of Global Research in Education and Social Science*, 15(3): 8-17.
- Van Kleef, R. (2014) The legal status of disciplinary regulations in sport. *Int Sports Law J* 14, 24–45

- Voevodina, S. S. (2018). Management aspects of athletes' competitiveness improvement. *Resources of athletes' competitiveness: the theory and practice of implementation* 1, 53-55.
- Wuff, G., & Toole, T. (2017). Physical assistance devices in complex motor skill learning: benefits of a self-controlled practice schedule. *Research Quarterly for Exercise and Sport*, 70 (3), 265-274.
- Yagodin, V. V. (2016). *Fundamentals of sports ethics*. Yekaterinburg, Russia. Publishing House of Ural University.
- Yemiru, Z. G. (2020). The effect of coach leadership style on athletes' performance of athletics club of Addis Ababa. *International Journal of Sports Science and Medicine*, 4(1): 022-025.
- Young W., & Rogers N. (2014). Effects of the small-sided game and change-of- direction training on reactive agility and change-of-direction speed. *J Sports Sci.* 32(4):307–14.
- Yusoff, M. R. F., & Muhamad, T. A. (2018). The leadership approaches by football coaches are favored by professional football players in Malaysia. *Creative Education*, 9, 2341-2349. doi.org/10.4236/ce.2018.91

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