

# The mediating role of perceived enjoyment among the relationship between psychological and social mobilizers and attitude toward activities sports in Iraq

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## Abstract

Youth is passionate about sports, and they want to win. The performance of the players is crucial to the team's success. The members of the team with mental and social issues function less effectively. As a result of their problems, the professionalism of the Iraqi footballers has declined. This study seeks to determine the role of perceived enjoyment as a mediator between psychological and social mobilizers and attitudes toward sports activities in Iraq. This study is predicated on the quantitative data acquired from Iraqi players from various teams. 800 questionnaires were issued for data collection, and the response rate was fifty percent. This study's findings are determined using the PLS structural and measurement models. This study aimed to improve Iraqi athletes' attitudes toward sporting activities. The study concludes that perceived enjoyment influences the relationship between psychological and social mobilizers and attitudes toward sports activities. The addition of the current model to the body of knowledge is substantial. This report also includes highly suggested recommendations for increasing players' performance in Iraq by fostering a good attitude about the game.

**Keywords.** Psychological mobilizers, social mobilizers, perceived enjoyment, sports attitude, sports performance

## 1. Introduction

Players' performance in any positional support is directly influenced by their mental approach to the game (Bishop et al., 2022). The players motivated to perform well have the correct perception of their thinking to achieve satisfactory results (Abdullah et al., 2016). On the other hand, players who are motivated to do well by society and team leaders are engaged in their performance (Lai et al., 2020). Indeed, no player performs up to par with the game's requirements (Pang et al., 2020). In this sense, Iraqi players in various sports do not meet the performance quality standards (Zhu et al., 2022). The purpose of the mentors is to comprehend the obstacles to players' effectiveness and assist them in developing their ideal approach to the game (Guy et al., 2015). Currently, it is vital for the team's leader and players to communicate to discuss issues that impede performance (Madigan et al., 2022). The squad leaders in Iraq are less concerned with the performance of their players, but they are recruiting fresh players without exceptional performance in the game (Bormann et al., 2016).

The larger impact of social life on the performance of athletes is because they are members of society (Lee et al., 2017; Seligman et al., 2022). As a human, a player cannot separate his perspective from the game (Jowett & Ntoumanis, 2004). Therefore, the emotional state of the players is crucial to their performance (Simons & Bird, 2022). The players that have excellent self-control and are personally driven to work adequately perform admirably for a decent level of output (Hoseini et al., 2022). Conversely, the role of society and social pressure also affect players' performances (Lumpkin & Favor, 2013). Society's perspective also influences the players' mindset (Aries et al., 2004). If society correctly perceives the athlete, the player's performance will be enhanced (Ramezani et al., 2022). On the contrary, negative societal commentary diminishes athletes' performance (Stephen, Habeeb, & Arthur, 2022). Manchester United football players think their performance is influenced by the community (Zhu et al., 2022).

Diverse scholars have investigated the literature on the relationship between reported enjoyment of the game and performance (Zhu et al., 2022). Earlier studies also discuss

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players' emotions and attitudes toward the game (Guy et al., 2015; Zhu et al., 2022). Madigan et al. (2022) note that a player's performance can be enhanced if he demonstrates self-control and a desire to win. Bormann et al. (2016) emphasized that Asian cricket players are performing well due to the impact of society on their performance. Jowett and Ntoumanis (2004) reported that players' performance might be enhanced by providing them with the necessary resources. Simons and Bird (2022) argued that players could perform well in any sport if they have a good attitude about their performance. Guy et al. (2015) emphasized that self-efficacy is crucial for players to improve their game performance. Seligman et al. (2022) argued that players in any sport should disregard negative fan feedback and focus on their performance instead.

Existing literature has contributed significantly to prior investigations (Bormann et al., 2016; Madigan et al., 2022), but there is a need to fill it. Indeed, player performance is essential for the success of any game. This study seeks to determine the role of perceived enjoyment as a mediator between psychological and social mobilizers and attitudes toward sports activities in Iraq. Therefore, this study is original since it incorporates novel and relevant variables. This study's framework includes psychological and social mobilizers as independent variables, felt enjoyment and attitude toward sports as mediating variables, and perceived enjoyment as the dependent variable. This study's theoretical implication substantially contributes to understanding the link between relevant variables and the explanatory literature. In addition, the road map to enhance the attitude of athletes towards sports is outlined in the study's practical implications.

## 2. Literature Review

Self-discipline is vital for the players because it is essential to their performance enhancement (Popoviciu et al., 2022). Any sport requires participants to have the self-control to moderate their conduct (Elrayah, 2022). Athletes who cannot successfully regulate their behavior are less productive in their performances (Sagone & De Caroli, 2014). Indeed, a player's performance depends on his attitude, and emotional intelligence is also required for players to improve their performance (Efendi, Indartono, & Sukidjo, 2019). The players with great emotional control believe they will win the game and have a positive outlook on their chances of success (Tayfur et al., 2022). Conversely, players with a poor attitude toward sports do not perform well because their achievement is predetermined to be unacceptable to society (Zhang et al., 2021). Self-empowerment is also crucial for players

because regulating their nervousness allows them to perform better (Sun, Zhang, & Meng, 2020). Indeed, Japanese hockey players have good emotional control and do not engage in pointless activities (Steele et al., 2009). Each player's performance depends on the team's performance, but each player's emotional management is also essential to the team's success (Sobhani et al., 2022). According to Hamid and Assad (2021), players' self-control enables them to celebrate their success. Simons and Bird (2022) argued that for a team to be enjoyable, the players must work well, and the coaches must positively stimulate the squad. Simons and Bird (2022) emphasized that a player's performance is heavily influenced by his desire to win the game since personal emotions play a significant role in performance. Leitner et al. (2022) stated that a player with high emotional control could defeat a formidable opponent with his game-playing confidence. Sun et al. (2020) stated that felt enjoyment enables players to perform well in the game and build the greatest mental skills for tricky performance. These are the developed hypotheses:

*H1. Psychological mobilizer has an impact on perceived enjoyment.*

*H2. Psychological mobilizer has an impact on attitude toward sports.*

Players' performance is also influenced by the assistance they receive from their families (Allahabadi, Gatto, & Pandya, 2022). Indeed, the family of every athlete influences their performance in several ways (Coutinho, Abade, et al., 2022). When the parents are supportive, and the players are not prevented from performing well and engaging in the game, the players feel pleased (Guy et al., 2015). The management of the family and friction within the family might result in mental exhaustion for players who wish to perform effectively (Lee et al., 2017). Before playing in the game, they must guarantee that their performance meets expectations and that they are not involved in any negative situations (Hamid & Assad, 2021). Racism and family-related social concerns significantly impact athletic performance (Seligman et al., 2022). Indeed, players' performance greatly impacts their willingness, but they do not develop a more positive attitude toward their performance when ignored (Jowett & Ntoumanis, 2004). The rejection of the squad and unfavorable remarks might diminish the mental satisfaction of players with their game performance (Poppendieck et al., 2013). It must be acknowledged that athletes in any sport should improve their performance by cultivating a more positive attitude toward sports (Allahabadi et al., 2022). However, society has a variety of disadvantages for players throughout playtime. According

to Fang et al. (2022), players' performance is affected by social difficulties that result in psychological issues. On the one hand, Coutinho, Gonçalves, et al. (2022) suggested that athletes of all sports should cultivate a more positive attitude toward their performance. On the other hand, Ilxomovich (2022) observed that the social pressure placed on athletes to perform well harmed their performance. Sun et al. (2022) stated that basketball players in the United States face racism because of their race and gender. According to Ehmann et al. (2022), racism in Spain has decreased the performance of domestic football players, which is unacceptable to society. The conclusion reached by Coutinho, Gonçalves, et al. (2022) is those social elements significantly impact the performance of players striving to play for their country and nation. Prien et al. (2020) also cited the influence of social variables on the performance of athletes. These are the developed hypotheses:

H3. Social mobilizer has an impact on perceived enjoyment.

H4. Social mobilizer has an impact on attitude toward sports.

According to Ehmann et al. (2022), athletes must be able to retain their egos to boost their performance. Wilczyńska, Abrahamsen, and Popławska-Boruc (2022) emphasized that all games need participants to retain their egos and exercise self-control. Ehmann et al. (2022) concluded that players who cannot adequately regulate their behavior are significantly less successful when competing. His team determines a player's performance, and empathy is essential for improving their game (Fang et

al., 2022). The study by Coutinho, Gonçalves, et al. (2022) revealed that athletes with superior self-regulation feel confident and optimistic about their chances of victory. Additionally, the motivation athletes receive from their families affects their performances (Gavanda et al., 2022). According to Gavanda et al. (2022), any team's relatives have various effects on his ability. According to Fang et al. (2022), if leaders encouraged their children to join in the sport and work hard, the participants would feel better. Supervision and pressure from the home may produce mental weariness in athletes who are very motivated to succeed (Sun et al., 2022). As the game begins, they must ensure that their conduct is appropriate and that they are not involved in any unpleasant circumstances (Gavanda et al., 2022). Discrimination and other relationship issues stemming from domestic issues substantially impact a player's performance (Ilxomovich, 2022). Wilczyńska et al. (2022) concluded that players' reported enjoyment is crucial for their optimal performance since it promotes a pleasant mood. According to Sun et al. (2022), perceived enjoyment drives players to perform well because it considerably impacts player performance. Figure 1 depicts an explanation of the hypothesis of this investigation. These are the developed hypotheses:

H5. Perceived enjoyment has an impact on attitude towards sports.

H6. Perceived enjoyment mediates the relationship between psychological mobilizers and attitude towards sports.

H7. Perceived enjoyment mediates the relationship between social mobilizers and attitude towards sports.

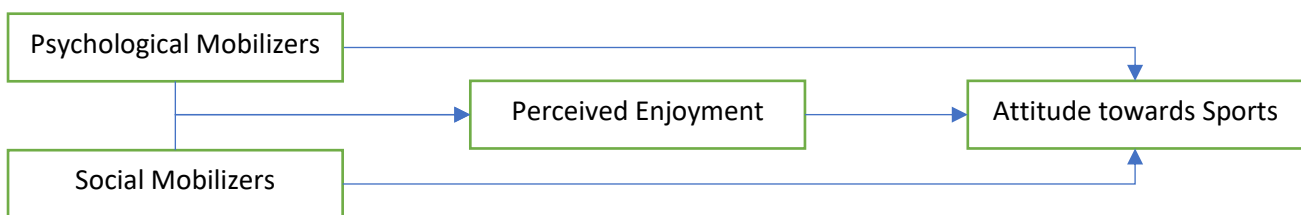


Figure 1. Conceptual Framework Describing Variables Relationship

### 3. Methodology

#### 3.1 Prepare Questionnaire

This study employed quantitative data to determine the hypotheses' validity. This study collects its primary data via a Likert scale questionnaire. The study utilized a five-point scale questionnaire since the participants felt comfortable with their responses. The questionnaire was designed by adapting measuring items from previous investigations. This research employed a measurement scale to examine the association between psychological mobilizers, social mobilizers, subjective enjoyment, and attitude toward sports. On a five-

point scale, the items adapted by Rodrigues et al. (2020) are included in this questionnaire for psychological mobilizers. On a five-point scale, the items developed by Burnkrant and Cousineau (1975) are employed in this questionnaire for social mobilizers. In addition, the items adapted by Aleksovska-Velickovska, Gontarev, and Ruzdija (2019) for measuring enjoyment on a five-point scale are included in this questionnaire. On a five-point scale, this questionnaire uses the items developed by Hagger, Chatzisarantis, and Biddle (2002) to measure the attitude toward sports. Experts in external research evaluated the validity of the items and incorporated them into the questionnaire.

### 3.2 Data Collection Process

Participants in this study were Iraqi nationals who played various games. It was simple to obtain information from domestic players, as international players lack time and are difficult to approach. This study's questionnaire was produced in 800 copies, and the players in Baghdad were targeted for data collection. The response rate to the questionnaire was 55%, which is acceptable for any study. In this sense, the sample size of this study is adequate because it comprised soccer, volleyball, swimming, and badminton athletes. Therefore, respondents were rewarded for their participation in the study.

## 4. Results

### 4.1 Measurement Model

For the reliability and validity of the scale items, this study employed a measuring model. The recommended factor loadings are 0.60, Cronbach's alpha is 0.70, composite reliability is 0.70, and the average variance extracted is 0.50. (Fornell & Larcker, 1981). In this investigation, the factor loadings, Cronbach's alpha, CR, and AVE values are above the required threshold. Table 1 of this study contains the measuring model's outcomes. In addition, Figure 2 provides a visual depiction of the measurement model.

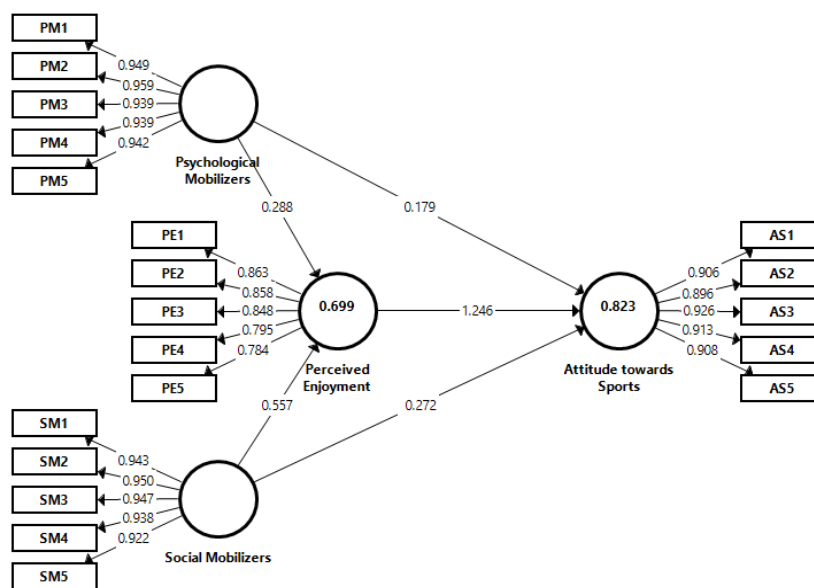


Figure 2. Measurement Model

Table 1

Measurement Model Description

Constructs	Items	Factor Loadings	A	rho_A	CR	AVE
Attitude towards Sports	AS1	0.906	0.948	0.948	0.960	0.828
	AS2	0.896				
	AS3	0.926				
	AS4	0.913				
	AS5	0.908				
Perceived Enjoyment	PE1	0.863	0.887	0.887	0.917	0.689
	PE2	0.858				
	PE3	0.848				
	PE4	0.795				
	PE5	0.784				
Psychological Mobilizers	PM1	0.949	0.970	0.971	0.977	0.894
	PM2	0.959				
	PM3	0.939				
	PM4	0.939				
	PM5	0.942				
Social Mobilizers	SM1	0.943	0.967	0.968	0.974	0.884
	SM2	0.950				
	SM3	0.947				
	SM4	0.938				
	SM5	0.922				

The outcomes of the measurement model are also used to estimate the discriminant validity values that demonstrate a significant distinction between study scale items. The findings of testing discriminant validity with the Heteritrait-Monotrait approach are presented

in Table 2. According to this procedure, the results should not exceed the 0.90 thresholds (Gold, Malhotra, & Segars, 2001). In this aspect, the study has a reasonable level of discriminant validity because its findings are noteworthy.

Table 2

Discriminant Validity

	Attitude towards Sports	Perceived Enjoyment	Psychological Mobilizers	Social Mobilizers
Attitude towards Sports				
Perceived Enjoyment		0.853		
Psychological Mobilizers		0.608	0.782	
Social Mobilizers		0.621	0.797	0.688

4.2 Structural Model

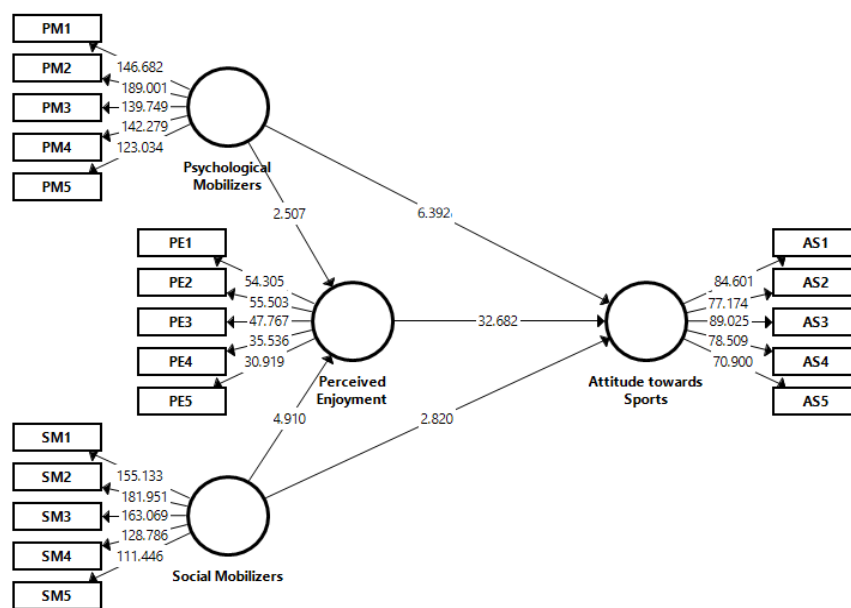


Figure 3. Structural Model

Table 3

Direct Path

Direct Path	$\beta$	SD	t	p
Psychological Mobilizers -> Perceived Enjoyment	0.288	0.115	2.507	0.013
Psychological Mobilizers -> Attitude towards Sports	0.179	0.028	6.392	0.000
Social Mobilizers -> Perceived Enjoyment	0.557	0.113	4.910	0.000
Social Mobilizers -> Attitude towards Sports	0.272	0.096	2.820	0.005
Perceived Enjoyment -> Attitude towards Sports	1.246	0.038	32.682	0.000

This study has used the structural model to determine the findings of the direct path. The results of hypothesis one ( $t = 2.507$  and  $p = 0.013$ ) determined the significant impact of psychological mobilizers on perceived enjoyment. Similarly, the results of hypothesis two ( $t = 6.392$  and  $p = 0.000$ ) determined the significant impact of psychological mobilizers on attitude toward sports. Furthermore, the results of hypothesis three ( $t = 4.910$  and  $p = 0.000$ )

determined the significant impact of social mobilizers on perceived enjoyment. Also, the results of hypothesis four ( $t = 2.820$  and  $p = 0.005$ ) determined the significant impact of social mobilizers on attitude towards support. Lastly, the results of hypothesis five ( $t = 32.682$  and  $p = 0.000$ ) determined the significant impact of perceived enjoyment on attitude towards support. The results of the direct path can be seen in Figure 3 and Table 3.



### 4.3 Mediation Effects

Furthermore, the structural model results are also used to check the findings of the indirect path (see Table 4). On the one hand, the results of hypothesis six ( $t = 2.550$  and  $p = 0.011$ ) determined the significant mediating impact of perceived enjoyment between psychological mobilizers on

attitude towards support. On the other hand, the results of hypothesis seven ( $t = 4.698$  and  $p = 0.000$ ) determined the significant mediating impact of perceived enjoyment between social mobilizers on attitude towards support. Therefore, the mediating hypotheses of this study are significant.

**Table 4**

*Indirect Path*

Indirect Path	$\beta$	SD	$t$	$p$
Psychological Mobilizers -> Perceived enjoyment -> Attitude towards Sports	0.359	0.141	2.550	0.011
Social Mobilizers -> Perceived enjoyment -> Attitude towards Sports	0.694	0.148	4.698	0.000

## 5. Discussion and Conclusions

Initially, the data demonstrated the significance of psychological mobilizers on reported enjoyment and attitude toward sports. These findings are consistent with past research demonstrating the significance of players' views toward sports (Allahabadi et al., 2022; Coutinho, Abade, et al., 2022). Diverse variables influence the attitude of athletes towards sports (Guy et al., 2015). The attitude of athletes toward their sport is crucial to their performance (Lee et al., 2017). The mental illness-afflicted players are less productive inside the squad (Hamid & Assad, 2021). Argentina's athletes have less mental trouble since they focus more on their sports (Seligman et al., 2022). It is vital to increase players' performance to provide them with the financial and social resources they need to survive (Lee, Kim, & Joon-Ho, 2013). Self-efficacy and good mental control are responsible for the performance of individuals in this regard (Jowett & Ntoumanis, 2004). Indeed, the sports board should coach the athletes most effectively to ensure they are well prepared for competition (Poppendieck et al., 2013). The research also indicated that self-control and player performance are significant. Similarly, the research explains that mental weariness hinders the performance of athletes (Gorzynski, Coyle, & Gibson, 2017). Moreover, human psychology is crucial for gaming and high-level competition performance (Nower et al., 2018). The conclusions of the first two hypotheses are supported by prior research.

The results also revealed the strong impact of social mobilizers on reported enjoyment and attitude toward sports. Moreover, this study demonstrates a substantial relationship between reported satisfaction and attitude toward sports (Allahabadi et al., 2022). The findings are comparable with prior studies, demonstrating the importance of a team's attitude toward sports (Coutinho, Abade, et al., 2022). A lot of conditions affect players' views about sports. Players' success is influenced by their

thoughts regarding their vocation (Lee et al., 2017). The performance of team members with mental disorders is diminished. Due to their focus on the game, Barcelona's athletes are less susceptible to mental problems (Hamid & Assad, 2021). To perform better, players must have access to the necessary material resources and social networks (Seligman et al., 2022). In this perspective, people's performance results from great self-esteem and willpower (Ramezani et al., 2022). To ensure that athletes are adequately prepared for their performances, the sports board should provide them with the most effective training (Allahabadi et al., 2022). The studies showed that self-control was vital to the participants' success (Coutinho, Abade, et al., 2022). Similarly, the research acknowledges how players' mental fatigue affects their production (Guy et al., 2015). In addition, an individual's personality significantly affects how well they perform in competitions and sports (Hamid & Assad, 2021). The outcomes of the third, fourth, and fifth hypotheses are valid when prior research is included.

Thirdly, the results of mediating hypotheses demonstrated that perceived enjoyment plays an important mediating function between psychological mobilizers, social mobilizers, and attitudes towards sports. These research hypotheses verified the findings of previous studies establishing the relationship between player attitudes (Coutinho, Gonçalves, et al., 2022; Fang et al., 2022). Sun et al. (2022) emphasized that players should consider their game success enjoyable. Conversely, Marzouki et al. (2022) demonstrated that players' performance in any game might be enhanced by sufficient practice. Prien et al. (2020) demonstrated that the performance of players and their attitude toward the game should be positive for them to perform well and receive the appropriate opportunity in the game. Ehmann et al. (2022) indicated that social and psychological issues decrease the quality of their game performance. Fang et al. (2022) noted that current players should not experience mental weariness but should enjoy

their game. Similarly, Coutinho, Gonçalves, et al. (2022) reported that players who love their performance in the game work more effectively to enhance their performance.

## 6. Implications

### 6.1 Theoretical Implications

The addition of the current model to the body of knowledge is substantial. The role of psychological and social mobilizers in enhancing the attitude of athletes was not addressed in earlier research. This study demonstrates that social mobilizers measured with social influence and family support considerably impact sports attitudes. Similarly, research has determined that psychological mobilizers such as self-efficacy and self-control significantly impact the attitude toward sports. These connections were not addressed in the previous study on the attitude of athletes towards sports.

Similarly, our study has uncovered and contributed to the major mediating function of perceived enjoyment in the link between psychological mobilizers and sports attitude. This mediating link is significant in the literature on player athletic performance. This study has also identified and contributed to the major mediating effect of perceived enjoyment in the link between social mobilizers and attitudes toward sports. Similarly, this contribution to the literature is noteworthy given that these links were not addressed in previous research. This study adds to the body of knowledge since it demonstrates a substantial mediating relationship between reported satisfaction and its variables. The mediating variable felt enjoyment is novel since it substantially contributes to the literature.

### 6.2 Practical Implications

This report also includes highly suggested recommendations for increasing players' performance in Iraq by fostering a good attitude about the game. The study uncovered a major mediation effect for perceived enjoyment; consequently, coaches and team leaders should emphasize the value of success enjoyment to their players to improve their performance. The team's coaches and captain can consult

with the players to encourage them to perform well and avoid all negative social media posts. Indeed, social media plays a crucial part in players' performance in the present era; consequently, players must remember to perform effectively by avoiding fan feedback on social media platforms. On the other hand, the parents and family members of the players should be aware that mental weariness can reduce players' performance and result in their removal from the squad. Therefore, there should be no pressure from the family on the athletes, but they must have a strong mental connection with the family. The government of Iraq should hire expert coaches for each game to boost the players' self-confidence through their approachable demeanor.

## 7. Limitations and Future Directions

Significantly, contemporary research demonstrates that perceived enjoyment modulates the link between psychological mobilizers, social mobilizers, and attitudes toward sports activities meaningfully. Moreover, adding the new model to the existing literature is substantial. In addition, this research provides highly suggested practical implications for enhancing players' performance in Iraq by fostering a favorable attitude toward the game. However, existing research contains limitations that future studies in this field must address. First, the study is based on cross-sectional data that is appropriate for this study, but these data are irrelevant for generalizing any study's findings. To generalize the findings, future research must include longitudinal data for research and investigate the relationship between diverse variables. Second, our study has modified the mediating function of perceived enjoyment, notwithstanding the significance of this link. However, researchers must determine the role of emotional intelligence as a mediator between psychological mobilizers, social mobilizers, and sports attitudes. Lastly, because this study's random sampling method has limitations, future research must collect data using cluster-based sampling to validate the outcomes of this study.

## References

- Abdullah, M. R., Musa, R. M., Maliki, A. B. H. M. B., Kosni, N. A., & Suppiah, P. K. (2016). Role of psychological factors on the performance of elite soccer players. *Journal of Physical Education and Sport*, 16(1), 170-176. <http://dx.doi.org/10.7752/jpes.2016.01027>
- Aleksovska-Velickovska, L., Gontarev, S., & Ruzdija, K. (2019). Students motivation for engaging in physical activity: Theory for self-determination. *Journal of Human Sport and Exercise*, 14(2), 325-334. <https://doi.org/10.14198/jhse.2019.142.06>
- Allahabadi, S., Gatto, A. P., & Pandya, N. K. (2022). ACL tears in the National Football League from 2013 to 2020: analysis of the 2020 season after delays and schedule changes from the early CoViD-19 pandemic relative to prior seasons. *Orthopaedic journal of sports medicine*, 10(2). <https://doi.org/10.1177/23259671221076045>

- Aries, E., McCarthy, D., Salovey, P., & Banaji, M. R. (2004). A comparison of athletes and non-athletes at highly selective colleges: Academic performance and personal development. *Research in higher education*, 45(6), 577-602. <https://doi.org/10.1023/B:RIHE.0000040264.76846.e9>
- Bishop, C., Abbott, W., Brashill, C., Loturco, I., Beato, M., & Turner, A. (2022). Seasonal Variation of Physical Performance, Bilateral Deficit, and Interlimb Asymmetry in Elite Academy Soccer Players: Which Metrics Are Sensitive to Change? *The Journal of Strength & Conditioning Research*, 10.1519. <https://doi.org/10.1519/JSC.0000000000004248>
- Bormann, K. C., Schulte-Coerne, P., Diebig, M., & Rowold, J. (2016). Athlete characteristics and team competitive performance as moderators for the relationship between coach transformational leadership and athlete performance. *Journal of sport and exercise psychology*, 38(3), 268-281. <https://doi.org/10.1123/jsep.2015-0182>
- Burnkrant, R. E., & Cousineau, A. (1975). Informational and normative social influence in buyer behavior. *Journal of Consumer research*, 2(3), 206-215. <https://doi.org/10.1086/208633>
- Coutinho, D., Abade, E., Gonçalves, B., Santos, S., Schöllhorn, W., & Sampaio, J. (2022). Acute effects from the half-squat performed using a repetition versus differential approach in youth soccer players. *BMC Sports Science, Medicine and Rehabilitation*, 14(1), 1-10. <https://doi.org/10.1186/s13102-022-00413-5>
- Coutinho, D., Gonçalves, B., Folgado, H., Travassos, B., Santos, S., & Sampaio, J. (2022). Amplifying perceptual demands: How changes in the colour vests affect youth players performance during medium-sided games. *Plos one*, 17(1), e0262245. <https://doi.org/10.1371/journal.pone.0262245>
- Efendi, R., Indartono, S., & Sukidjo, S. (2019). The mediation of economic literacy on the effect of self control on impulsive buying behaviour moderated by peers. *International Journal of Economics and Financial Issues*, 9(3), 98. <https://doi.org/10.32479/ijefi.7738>
- Ehmann, P., Beavan, A., Spielmann, J., Mayer, J., Altmann, S., Ruf, L., Rohrmann, S., Irmer, J. P., & Englert, C. (2022). Perceptual-cognitive performance of youth soccer players in a 360°-environment—Differences between age groups and performance levels. *Psychology of Sport and Exercise*, 59, 102120. <https://doi.org/10.1016/j.psychsport.2021.102120>
- Elrayah, M. (2022). Improving Teaching Professionals' Satisfaction through the Development of Self-efficacy, Engagement, and Stress Control: A Cross-sectional Study. *Educational Sciences: Theory & Practice*, 22(1), 1-12. <https://www.jestp.com/index.php/estp/article/view/1547>
- Fang, S.-H., Lu, C.-C., Lin, H.-W., Kuo, K.-C., Sun, C.-Y., Chen, Y.-Y., & Chang, W.-D. (2022). Acute Effects of Nicotine on Physiological Responses and Sport Performance in Healthy Baseball Players. *International Journal of Environmental Research and Public Health*, 19(1), 515. <https://doi.org/10.3390/ijerph19010515>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50. <https://doi.org/10.1177/002224378101800104>
- Gavanda, S., Hosang, T., Wagener, S., Sönmez, N., Kayser, I., & Knicker, A. (2022). The Influence of Relaxing and Self-Selected Stimulating Music on Vertical Jump Performance in Male Volleyball Players. *International Journal of Exercise Science*, 15(6), 15-24. <https://digitalcommons.wku.edu/ijes/vol15/iss6/2>
- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of management information systems*, 18(1), 185-214. <https://doi.org/10.1080/07421222.2001.11045669>
- Gorczyński, P. F., Coyle, M., & Gibson, K. (2017). Depressive symptoms in high-performance athletes and non-athletes: a comparative meta-analysis. *British Journal of Sports Medicine*, 51(18), 1348-1354. <https://doi.org/10.1136/bjsports-2016-096455>
- Guy, J. H., Deakin, G. B., Edwards, A. M., Miller, C. M., & Pyne, D. B. (2015). Adaptation to hot environmental conditions: an exploration of the performance basis, procedures and future directions to optimise opportunities for elite athletes. *Sports medicine*, 45(3), 303-311. <https://doi.org/10.1007/s40279-014-0277-4>
- Hagger, M. S., Chatzisarantis, N. L., & Biddle, S. J. (2002). The influence of autonomous and controlling motives on physical activity intentions within the Theory of Planned Behaviour. *British journal of health psychology*, 7(3), 283-297. <https://doi.org/10.1348/135910702760213689>
- Hamid, S. A., & Assad, D. K. (2021). Building a psychological resilience scale for teachers of the faculties of physical education and sports sciences in the universities of the Kurdistan Region–Iraq. *Sport culture*, 12(2 part 2). <https://www.iasj.net/iasj/article/224567>
- Hoseini, S. S., Gharayagh Zandi, H., Bagherzadeh, F., & Noferesti, A. (2022). Cognitive group behavioral therapy and its effectiveness on anxiety, depression and anger caused by trauma in injured athletes. *Journal of sports and Motor development and learning*. <https://dx.doi.org/10.22059/jmlm.2022.333519.1621>



- Ilxomovich, M. F. (2022). The analysis of the dynamics of the volume and quality of technical and tactical actions of young players' performance. *Web of Scientist: International Scientific Research Journal*, 3(1), 343-354. <https://doi.org/10.17605/OSF.IO/VGAUB>
- Jowett, S., & Ntoumanis, N. (2004). The coach-athlete relationship questionnaire (CART-Q): Development and initial validation. *Scandinavian journal of medicine & science in sports*, 14(4), 245-257. <https://doi.org/10.1111/j.1600-0838.2003.00338.x>
- Lai, C.-P., Hsieh, H.-H., Chang, C.-M., & Ni, F.-T. (2020). The role of psychological capital in athletic performance and career development of adolescent baseball players in Taiwan. *Sustainability*, 12(18), 7652. <https://doi.org/10.3390/su12187652>
- Lee, E. C., Fragala, M. S., Kavouras, S. A., Queen, R. M., Pryor, J. L., & Casa, D. J. (2017). Biomarkers in sports and exercise: tracking health, performance, and recovery in athletes. *Journal of strength and conditioning research*, 31(10), 2920. <https://doi.org/10.1519/JSC.0000000000002122>
- Lee, Y., Kim, S.-H., & Joon-Ho, K. (2013). Coach leadership effect on elite handball players' psychological empowerment and organizational citizenship behavior. *International Journal of Sports Science & Coaching*, 8(2), 327-342. <https://doi.org/10.1260/1747-9541.8.2.327>
- Leitner, M. C., Daumann, F., Follert, F., & Richlan, F. (2022). The cauldron has cooled down: a systematic literature review on home advantage in football during the COVID-19 pandemic from a socio-economic and psychological perspective. *Management Review Quarterly*, 1-29. <https://doi.org/10.1007/s11301-021-00254-5>
- Lumpkin, A., & Favor, J. (2013). Comparing the academic performance of high school athletes and non-athletes in Kansas 2008-2009. *Journal of Applied Sport Management*, 4(1), 31. <https://trace.tennessee.edu/jasm/vol4/iss1/31>
- Madigan, D. J., Olsson, L. F., Hill, A. P., & Curran, T. (2022). Athlete Burnout Symptoms Are Increasing: A Cross-Temporal Meta-Analysis of Average Levels From 1997 to 2019. *Journal of Sport and Exercise Psychology*, 1(aop), 1-16. <https://doi.org/10.1123/jsep.2020-0291>
- Marzouki, H., Ouergui, I., Cherni, B., Ben Ayed, K., & Bouhlel, E. (2022). Effects of different sprint training programs with ball on explosive, high-intensity and endurance-intensive performances in male young soccer players. *International Journal of Sports Science & Coaching*. <https://doi.org/10.1177/17479541211072225>
- Nower, L., Caler, K. R., Pickering, D., & Blaszczynski, A. (2018). Daily fantasy sports players: Gambling, addiction, and mental health problems. *Journal of gambling studies*, 34(3), 727-737. <https://doi.org/10.1007/s10899-018-9744-4>
- Pang, H., Li, W., Pu, K., & Huang, Z. (2020). Research on the Main Psychological Factors influencing basketball players' Athletic performance: the importance of psychological Quality. *Revista Argentina de Clínica Psicológica*, 29(5), 491. <https://doi.org/10.24205/03276716.2020.1046>
- Popoviciu, M. S., Marin, V. N., Vesa, C. M., Stefan, S. D., Stoica, R. A., Serafinceanu, C., Merlo, E. M., Rizvi, A. A., Rizzo, M., & Busnatu, S. (2022). Correlations between diabetes mellitus self-care activities and glycaemic control in the adult population: a cross-sectional study. In *Healthcare* (Vol. 10, pp. 174). MDPI. <https://doi.org/10.3390/healthcare10010174>
- Poppendieck, W., Faude, O., Wegmann, M., & Meyer, T. (2013). Cooling and performance recovery of trained athletes: a meta-analytical review. *International journal of sports physiology and performance*, 8(3), 227-242. <https://doi.org/10.1123/ijspp.8.3.227>
- Prien, A., Feddermann-Demont, N., Verhagen, E., Twisk, J., & Junge, A. (2020). Neurocognitive performance and mental health of retired female football players compared to non-contact sport athletes. *BMJ open sport & exercise medicine*, 6(1), e000952. <https://doi.org/10.1136/bmjsem-2020-000952>
- Ramezani, M., Kordi Yoosefinejad, A., Motealleh, A., & Ghofrani-Jahromi, M. (2022). Comparison of flexion relaxation phenomenon between female yogis and matched non-athlete group. *BMC Sports Science, Medicine and Rehabilitation*, 14(1), 1-7. <https://doi.org/10.1186/s13102-022-00406-4>
- Rodrigues, F., Macedo, R., Teixeira, D. S., Cid, L., & Monteiro, D. (2020). Motivation in sport and exercise: A comparison between the BRSQ and BREQ. *Quality & Quantity*, 54(4), 1335-1350. <https://doi.org/10.1007/s11135-020-00988-6>
- Sagone, E., & De Caroli, M. E. (2014). Locus of control and academic self-efficacy in university students: the effects of Self-concepts. *Procedia-Social and behavioral sciences*, 114, 222-228. <https://doi.org/10.1016/j.sbspro.2013.12.689>
- Seligman, E., Beasley, M. A., Christino, M. A., Miller, P. E., Kobelski, G., & Stracciolini, A. (2022). Changes in training patterns and confidence to return to sport in United States collegiate athletes during the COVID-19 pandemic. *The Physician and Sportsmedicine*, 1-6. <https://doi.org/10.1080/00913847.2022.2046957>

- Simons, E. E., & Bird, M. D. (2022). Coach-athlete relationship, social support, and sport-related psychological well-being in National Collegiate Athletic Association Division I student-athletes. *Journal for the Study of Sports and Athletes in Education*, 1-20. <https://doi.org/10.1080/19357397.2022.2060703>
- Sobhani, V., Rostamizadeh, M., Hosseini, S. M., Hashemi, S. E., Refoyo Román, I., & Mon-López, D. (2022). Anthropometric, Physiological, and Psychological Variables That Determine the Elite Pistol Performance of Women. *International Journal of Environmental Research and Public Health*, 19(3), 1102. <https://doi.org/10.3390/ijerph19031102>
- Steele, R. G., Legerski, J.-P., Nelson, T. D., & Phipps, S. (2009). The Anger Expression Scale for Children: Initial validation among healthy children and children with cancer. *Journal of pediatric psychology*, 34(1), 51-62. <https://doi.org/10.1093/jpepsy/jsn054>
- Stephen, S. A., Habeeb, C. M., & Arthur, C. A. (2022). Congruence of efficacy beliefs on the coach-athlete relationship and athlete anxiety: Athlete self-efficacy and coach estimation of athlete self-efficacy. *Psychology of Sport and Exercise*, 58, 102062. <https://doi.org/10.1016/j.psychsport.2021.102062>
- Sun, H., Zhang, L., & Meng, J. (2020). Alleviating knowledge contribution loafing among engineering designers by ethical leadership: the role of knowledge-based psychological ownership and emotion regulation strategies. *Journal of Knowledge Management*. <https://doi.org/10.1108/JKM-06-2019-0301>
- Sun, S., Zhang, S. X., Jahanshahi, A. A., & Jahanshahi, M. (2022). Drilling under the COVID-19 pandemic: A diary study of professional football players' mental health and workout performance. *Stress and Health*, 38(1), 3-18. <https://doi.org/10.1002/smi.3059>
- Tayfur, A., Sendil, A., Sezik, A., Jean-François, K., Sancho, I., Le Sant, G., Donmez, G., Duman, M., Tayfur, B., & Pawson, J. (2022). Self-reported bio-psycho-social factors partially distinguish patellar tendinopathy from other knee problems and explain severity in jumping athletes: A case-control study. *Physiotherapy*, 114, e105-e106. <https://doi.org/10.1016/j.physio.2021.12.052>
- Wilczyńska, D., Abrahamsen, F., & Popławska-Boruc, A. (2022). Level of anxiety and results of psychomotor tests in young soccer players of different performance levels. *Biol Sport*, 39(3), 571-577. <https://www.researchgate.net/publication/353452643>
- Zhang, R., Qiu, Z., Li, Y., Liu, L., & Zhi, S. (2021). Teacher support, peer support, and externalizing problems among left-behind children in rural China: Sequential mediation by self-esteem and self-control. *Children and Youth Services Review*, 121, 105824. <https://doi.org/10.1016/j.childyouth.2020.105824>
- Zhu, Y., Sun, F., Li, C., Huang, J., Hu, M., Wang, K., He, S., & Wu, J. (2022). Acute effects of mindfulness-based intervention on athlete cognitive function: An fNIRS investigation. *Journal of Exercise Science & Fitness*, 20(2), 90-99. <https://doi.org/10.1016/j.jesf.2022.01.003>