

# Effects of psychological factors on players' performance with the mediation role of player's satisfaction

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## Abstract

Nowadays, most of the players from China are unable to perform outstandingly because of the effects of psychological factors which limit them and it is very common that these factors even don't allow the players to perform accordingly. Hence, the primary objective of the current study is to investigate the role of psychological factors which affect a player's performance particularly with the mediation role of the player's satisfaction. To obtain the outcomes of the current study, a quantitative research approach was adopted. 760 football players who were the respondents of the current study were surveyed for the collection of primary data. Partial Least Square (PLS) was used to evaluate the final outcomes from the primary data. From the outcomes of the current study, it is obvious that a player's psychological factors such as punctuality, mood, competition, and commitment have a positive effect on the player's satisfaction and performance. The current study is helpful for the players particularly from China to boost their performances and satisfaction level. Moreover, the current study also helps the sports industry of China to increase players' performances.

**Keywords:** Punctuality, mood commitment, competition, player's satisfaction, player's performance

## 1. Introduction

Unfortunately, at present, it is very common particularly in China that most of the players are unable to produce performances that are expected from them. This is a serious fact that a huge number of players, despite good physical health, are not able to produce notable performances. The players are struggling to produce performances despite all kinds of external support from their corresponding coaches, staff, and management bodies (Manley & Williams, 2019). According to the current study, the players are unable to produce prominent performances because they don't understand well the effects of psychological factors which directly influence their performance and satisfaction level.

Hence, the core objective of the current study is to investigate the effects of psychological factors such as punctuality, mood, competition, and commitment on a player's performance. There is a significant role of these psychological factors on a player's performance (Durak, 2019). Moreover, several other psychological factors directly influence a player's performance however, the current research study is proposed to examine the effects of punctuality, mood, competition, and commitment. Furthermore, the mediation role of a player's satisfaction is also described in the current study which explores the relationship between the psychological factors and a player's performance.

Besides other quantitative studies, the current study also has a significance that helps to enhance a player's performance and satisfaction. Moreover, with the help of the current study, the players are able to figure out the psychological factors which directly influence their performances. Most of the time, players don't have sufficient knowledge and training to know about a real cause behind their issues especially psychological issues (Servant-Miklos, 2019), hence the current study enables the players as well as the corresponding bodies of the sports industry of China to

understand the relationship between a player's performance, satisfaction and the psychological factors such as punctuality, mood, competition, and commitment.

The literature already has multiple studies on a player's performance, however, some studies which explore the relationship between psychological factors and a player's performance are also available. Nonetheless, the current study is a unique study that explores the effects of psychological factors such as punctuality, mood, competition, and commitment of a player which directly influence the player's performance and satisfaction. Moreover, literature is missing to investigate the effects of psychological factors on a player from China hence, the current research study is a particular study that describes the effects of the psychological factors which have a relationship with a player's performance and satisfaction especially for a player who lives in China.

Likewise, in other studies, the theoretical perspective of the current study is very important. The current study describes that a player's performance is affected by the effect of psychological factors which have enough capacity to give a shape of undesired or desired achievement of his/her performances. Hence, these psychological factors have a direct relationship with a player's performance and his/her satisfaction level. According to the current study, the increased value of psychological factors such as punctuality, mood, competition, and commitment cause an increase in the satisfaction and performance of a player. On the other hand, a decrease in the values of these psychological factors also causes a decrease in player's satisfaction and performance.

The current study was aimed to describe the effects of psychological factors which have a direct relationship with a player's performance, hence, there are several psychological factors that have a direct relationship with a player's performance. Apart from these psychological factors; punctuality, mood, competition,

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and commitment, other psychological factors such as laziness, sadness, motivation, and personality of a player are the factors that also have a direct relationship with the player's performance. Moreover, there is also

a strong need to explore the effects of psychological factors on the relationship between a player, a coach, and management bodies. Theoretical framework of the study is given in Figure 1.

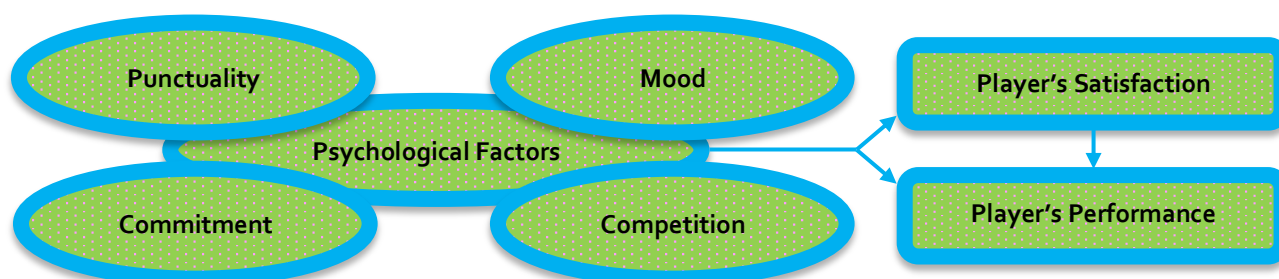


Figure 1. The theoretical framework of the study shows the relationship between punctuality, mood, competition, commitment, player's satisfaction, and player's performance.

## 2. Literature Review

### 2.1 Punctuality and Player's Satisfaction

The punctuality of a player shows that the player is dependable, reliable, and respectable (Westera, 2019). According to a past study, the punctuality of a player demonstrates that the player is found at his/her role, position, and status by carrying out his/her corresponding duties especially those which are needful for a specific time (Domi, 2020). Therefore, the role of punctuality of a player is very influential specifically for his/her satisfaction. Hence, being punctual for a player helps him for an increase in his/her satisfaction. Being punctual makes a player more professional which ultimately helps the player to achieve the next level of satisfaction (Vázquez-Diz et al., 2019). While a player who is not punctual remains unsatisfied even when he/she has performed well. Hence, it is hypothesized that;

**H1:** The punctuality of a player has a positive effect on the player's satisfaction.

### 2.2 Punctuality and Player's Performance

The punctuality of a player helps the player to stand out as a trustworthy and reliable player (Amini-Philips & Omodibo, 2019). Being punctual helps a player to establish his/her reputation as a consistent and dependable player (Begum & Saikia, 2020; Nebot, 2020). Other teammates know about a punctual player that he/she will be there at any cost for all kinds of reasonable objectives. However, the punctuality of a player helps the player to be available for every opportunity that knocks at his/her door. In this way, a punctual player is entertained with most of the opportunities hence, his/her performance ultimately increases. While a player is not punctual his/her performance also remains weak because he/she often misses the opportunities around to perform. Hence, it is hypothesized that;

**H2:** The punctuality of a player has a positive effect on the player's performance.

### 2.3 Mood and Player's Satisfaction

The mood is a dynamic and impressive factor that has a vigorous potential to affect the logical reasoning of a

player (Lathlean et al., 2019). Hence, it is mandatory to be able particularly for a player to control his/her mood. It is clear from the results that a bad mood of a player conceivably shuts down the player's brain functionalities and he/she stop listening. Hence, in such critical situations, a player's satisfaction level also decreases. On the other hand, a player with a pleasant mood comes up with the qualities that are likely to give agreeable, pleasure, and comfort to others. Furthermore, the mood of a player directly affects the behavior, manners, and appearance of the player (Stavropoulos et al., 2020). When the player has a good or a pleasant mood his/her satisfaction level is also increased. While a slightly bad mood of a player is enough to decrease his/her level of satisfaction. Therefore, it is hypothesized that;

**H3:** Mood of a player has a positive effect on the player's satisfaction.

### 2.4 Mood and Player's Performance

Several factors directly influence the mood of a player such as an environment, others' behavior, and financial conditions; however, mood directly impacts the player's performance. It is the mood of a player which can deviate the player from a good performance towards the worst performance (Saidi et al., 2020) or vice versa immediately. According to a past study, swings in the mood of a player are considered bad because due to the swings in the mood of the player, his/her performances don't remain permanent (Lamb, 2019; Wu & Xin, 2019). Therefore, it is necessary for a player to keep his mood permanently positive and need him/her to take steps that help to make his/her mood as good as possible.

**H4:** Mood of a player has a positive effect on the player's performance.

### 2.5 Competition and Player's Satisfaction

Achievement of a goal that is not sharable always creates competition among two or more players that try to achieve that goal (Ribeiro et al., 2019). However, it is the competition that enables a player to apply his/her best to achieve a greater level of satisfaction. Hence, the role of the competition has a significant value for a player's satisfaction. Being competitive teaches a player a different way through which the player gets satisfaction. Besides

goal setting, competition also provides an environment that creates opportunities for a player to obtain a definite level of satisfaction (Harenberg et al., 2019). While without real competition, mostly, players don't have opportunities to grow their satisfaction. According to the results of the current study, a player without taking part in the competition is less satisfied compared with a player who regularly takes part in competitions. Therefore, competition has numerous effects on the satisfaction of a player. Hence, it is encapsulated that;

**H5:** Competition of a player has a positive effect on a player's satisfaction.

## 2.6 Competition and Player's Performance

It is the competition that helps a player to increase efficiency (Harper, Carling, & Kiely, 2019). Data in previous studies show that a player's performance is directly influenced by the efficiency of the player. Moreover, literature also shows that one of the major benefits of competition is that it adds value to the quality of the current skill set of a player. According to the current study, a player who frequently remains in the competition gets fine performances regularly. Being in competition demands a player to enhance his/her performance (McCosker et al., 2021). Therefore, the role of competition for a player is very crucial. Results of the current study show that a player's performance becomes prominent when he/she gets more chances to get involved in a competition. While a player who is not interested in competition or shows less attention for a competition, usually fails to produce prominent performances. Normally, such kinds of players always struggle to produce notable performances. Therefore, it is hypothesized that;

**H6:** Competition of a player has a positive effect on a player's performance.

## 2.7 Commitment and Player's Satisfaction

According to the literature, commitment means firm dedication towards the accomplishment, achievement, or completion of a set goal, target, or ambition (Goes et al., 2020). However, the commitment of a person can also be towards another person instead of a cause. Nevertheless, it is obvious that it is only the commitment that obligates a player to do something. A player making a commitment dedicates himself/herself to achieve satisfaction (Koo et al., 2020). Hence, commitment has a significant role in a player's satisfaction. According to a previous study, it is the commitment that enables a player to meet his/her set targets. While with the completion of the set target a player enjoys maximum satisfaction. On the other hand, a player who doesn't make a commitment or goes for the achievement of his/her target without a commitment always faces failure due to that the player does not enjoy satisfaction. Hence, it is encapsulated that;

**H7:** The commitment of a player has a positive effect on the player's satisfaction.

## 2.8 Commitment and Player's Performance

Players are selected based on their performances. Hence, a player's performance has a significant role in the career of a player. Therefore, one of the major purposes of a player

is to perform prominently. Hence, the player can be recognized distinguishably and enjoy a status because of his/her performance. According to the current research, commitment plays a vital role in the achievement of outstanding performance for a player. Results of the current research explore that without making a commitment, a player is absolutely unable to perform exceptionally. In most cases, without making a commitment, a player fails even to maintain his/her traditional performances. According to a past study, a player's performance is influenced by psychological factors (Conti et al., 2019). While a player showing inflexible commitment for his locked target, goal or action, mostly comes back with the outstanding performance. Therefore, the commitment of a player has a very influential impact on a player's performance. Hence, it is hypothesized that;

**H8:** The commitment of a player has a positive effect on the player's performance.

## 2.9 Player's Satisfaction and Player's Performance

Satisfaction for a player is a pleased or happy feeling because of achieving outstanding performance (Arif, Zainudin, & Hamid, 2019). A player is most satisfied when he/she becomes successful to provide desired performance. In other words, a player's satisfaction is an act of satisfying a desire or a need. According to the previous literature, a player's satisfaction involves the successful completion of his/her target. However, there is a strong relationship between a player's satisfaction and his/her performance. A player is ready to perform more exceptionally when he/she is satisfied with the available environment (Khudhair et al., 2019). Satisfaction of a player for the environment and his/her personal approaches is mandatory because, without the satisfaction, a player is not capable to perform prominently. While a player with great value of his/her satisfaction level, mostly succeeded to perform as per the need or desire. Therefore, a player's satisfaction has a significant role in a player's performance. Hence, it is capsulated that;

**H9:** A player's satisfaction has a positive effect on the player's performance.

**H10:** A player's satisfaction mediates between the relationship of punctuality of a player and his/her performance.

**H11:** A player's satisfaction mediates between the relationship of the mood of a player and his/her performance.

**H12:** A player's satisfaction mediates between the relationship of competition of a player and his/her performance.

**H13:** A player's satisfaction mediates between the relationship of commitment of a player and his/her performance.

## 3. Research Methodology

For the current study, the type of data of the questions that need to be answered was quantitative, hence, the current study selected a quantitative research method. Moreover, the current study has a wider population hence, for the generalization of the results, the quantitative research method was preferred instead of qualitative and mixed methods. After the selection of the quantitative research method, a questionnaire was created which was divided

into three major portions. In the first portion of the questionnaire, questions were asked about the demographic information of the respondents. The second portion of the questionnaire contains 45 questions related to the key variables of the current study such as punctuality, mood, competition, commitment, player's satisfaction, and player's performance. While in the last portion of the questionnaire, a 5-point Likert Scale starting from "1" as "Strongly Agree" to "5" as "Strongly Disagree", was used consisted of 10 questions aimed to explore the preferences about the specific attributes of the key variables of the current study.

When there is a wider area under consideration, then the area cluster sampling approach is used. As respondents of the current study belong to various parts of China which is a wider area. Hence, the country was divided into clusters then a various number of football players from those clusters were selected then contact information of the respondents was collected from their corresponding management units. Initially, all the management units were briefly explained about the objectives of the current study. Hence, a list of 1000 football players from various parts of the country, was created according to the sample size of the current study. As per the previous studies, 1000 sample size is considered as a very good sample size. The list contains basic contact information of the football players such as their name, address, email address, cell number, and gender. In the next step, an email was created explaining

the objective of the current study with a note; all the collected data from the respondents will only be used for the current study and will remain confidential. The questionnaire was attached to the email. Hence the email was sent to every respondent individually. After 45 days of the email sent there were 800 responses received from the respondents. However, 40 responses were excluded because these 40 responses were partially filled. Hence, 760 responses in total are considered as primary data of the current study. Then PLS was used to analyze the primary data for the accomplishment of the end results of the current study. All the scales and measures were related to the prior researches.

#### 4. Data Analysis

This study employed Partial Least Square (PLS) for data analysis. PLS considered for this study because this is most important and popular data analysis software as reported in the several previous investigations (Hair et al., 2010; Hair, Ringle, & Sarstedt, 2011; Hair, Ringle, & Sarstedt, 2013; Hair Jr et al., 2014; Hameed, Nisar, & Wu, 2020). In this direction, in very first part of data analysis, factor loadings were examined which is shown in Figure 2 and Table 1. All the scale items have factor loadings above 0.5.

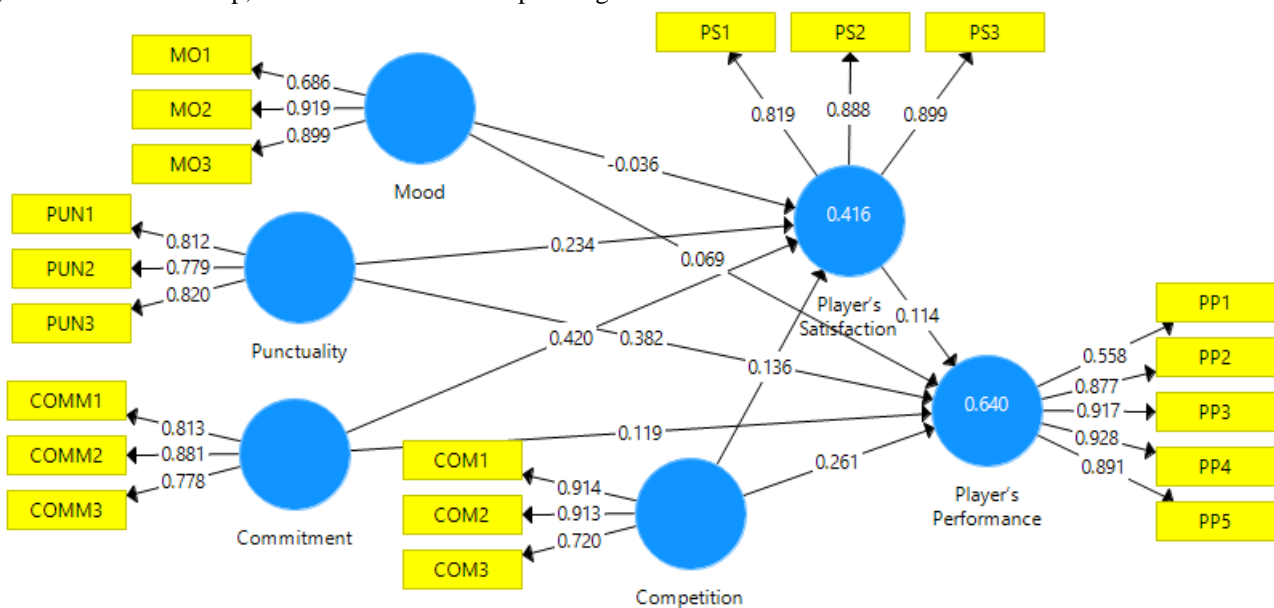


Figure 3. Measurement Model

Table 1

Factor Loadings

	Commitment	Competition	Mood	Player's Performance	Player's Satisfaction	Punctuality
COM1		0.914				
COM2		0.913				
COM3		0.72				
COMM1	0.813					
COMM2	0.881					

COMM3	0.778		
MO1		0.686	
MO2		0.919	
MO3		0.899	
PP1			0.558
PP2			0.877
PP3			0.917
PP4			0.928
PP5			0.891
PS1			0.819
PS2			0.888
PS3			0.899
PUN1			0.812
PUN2			0.779
PUN3			0.82

Factor loadings is not sufficient to achieve certain level of quality to proceed further for data analysis. Therefore, further this study examined the convergent validity by examining the average variance extracted (AVE). Composite reliability (CR) was also examined in this study. It is shown in Table 2, CR and AVE is reported.

According to Hair et al. (2017) values for CR should be above 0.7 and for AVE it should be above 0.5. All the values achieved the minimum level. Finally, discriminant validity is given in Table 3 which is achieved through HTMT criteria.

**Table 2**

*Reliability and Convergent Validity*

	Cronbach's Alpha	rho_A	Composite Reliability	(AVE)
Commitment	0.764	0.776	0.864	0.68
Competition	0.809	0.83	0.889	0.729
Mood	0.785	0.807	0.878	0.708
Player's Performance	0.891	0.899	0.924	0.715
Player's Satisfaction	0.84	0.864	0.903	0.756
Punctuality	0.73	0.741	0.846	0.647

**Table 3**

*HTMT*

	Commitment	Competition	Mood	Player's Performance	Player's Satisfaction	Punctuality
Commitment						
Competition	0.66					
Mood	0.775	0.558				
Player's Performance	0.679	0.829	0.825			
Player's Satisfaction	0.715	0.593	0.608	0.624		
Punctuality	0.665	0.608	0.677	0.5	0.643	

Moreover, hypotheses testing results are reported in Table 4 and Table 5. Direct hypotheses results are given in Table 4 in which nine hypotheses are proposed. All the hypotheses are supported as the T-value is above 1.64 which is minimum criteria of acceptance. In this study, all

the direct hypotheses are support. Furthermore, beta value is also positive for all the relationships which shows that all the relationships are positive. In addition to this, all indirect effects are also supported by the current study as shown in Table 5.

**Table 4**

*Direct Effect Results*

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV)	P Values
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Commitment -> Player's Performance	0.119	0.116	0.066	1.814	0.035
Commitment -> Player's Satisfaction	0.42	0.422	0.074	5.688	0
Competition -> Player's Performance	0.261	0.264	0.072	3.612	0
Competition -> Player's Satisfaction	0.136	0.141	0.04	3.4	0
Mood -> Player's Performance	0.069	0.066	0.018	3.822	0
Mood -> Player's Satisfaction	0.036	0.038	0.01	3.599	0
Player's Satisfaction -> Player's Performance	0.114	0.111	0.06	1.897	0.029
Punctuality -> Player's Performance	0.382	0.384	0.076	5.025	0
Punctuality -> Player's Satisfaction	0.234	0.234	0.099	2.365	0.009

**Table 5***Indirect Effect Results*

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Commitment -> Player's Satisfaction -> Player's Performance	0.048	0.047	0.027	1.735	0.042
Competition -> Player's Satisfaction -> Player's Performance	0.015	0.016	0.007	2.13	0.01
Mood -> Player's Satisfaction -> Player's Performance	0.004	0.006	0.001	3.99	0
Punctuality -> Player's Satisfaction -> Player's Performance	0.027	0.027	0.013	2.06	0.013

**5. Discussion**

“Punctuality of a player has a positive effect on the player's satisfaction” is the first hypothesis of the current research. When the acquisition of a desired piece of work is granted within a set time frame and allocated resources, is known as punctuality. A previous study says that punctuality is an attribute of a personality that enables a person to complete a required piece of work within the time period allocated for that piece of work (Haw, Nisbet, & Caldicott, 2021). Hence, when the desired job is fulfilled before or at a designated time, it causes an increase in the level of satisfaction. Therefore, punctuality is very important for a player's satisfaction.

“Punctuality of a player has a positive effect on the player's performance” is the second hypothesis of the current research. The performance of a player is directly influenced by a number of factors, however, the role of punctuality in the performances of a player is very vital. Previous research shows that players with lower performance are not punctual while the players with the habit of punctuality are unique in their performances (Lukonaitienė et al., 2020). Hence, there is a strong relationship between punctuality and a player's performance. A punctual player response on time hence he/she turned things in his/her favor quickly that ultimately causes a prominent increase in his/her performance.

“Mood of a player has a positive effect on the player's satisfaction” is the third hypothesis of the current research. Mood swings are very common among personalities however, mood swings always cause serious kinds of issues especially regarding the satisfaction level of the personalities (Rey, Extremera, & Sánchez-Álvarez, 2019). According to the current research, mood plays a vital role in the satisfaction level of a player. Generally, mood depends upon the emotions of a player. Emotions like disgust, surprise, anger, sadness, happiness, and fear affect differently on the mood of a player. Hence, mood with its value cause for change in the level of satisfaction of a

player.

“Mood of a player has a positive effect on the player's performance” is the fourth hypothesis of the current research. According to the past literature, mood evokes certain vibes or feelings in a player through descriptions and words (Siles et al., 2019). Usually, the mood is a kind of inner atmosphere of a person or a player that surrounds his/her actions. However, mood has a direct relationship with performance. Abundant evidence from the results of past studies shows a measurable effect on athletic performance. A negative mood that causes frustration, fear, anger, and stress which have deeply harmful effects on the physical abilities of a player that ultimately result in bad performance.

“Competition of a player has a positive effect on a player's satisfaction” is the fifth hypothesis of the current research. There are several reasons which make competition good for a player. However, competition in a player possesses him/her of the following reasons:

Seek higher quality performance for every opportunity.

Awareness about the position in the ranking table.

Increases efficiency.

According to the past literature, players' competition is compulsory because it teaches the player to be successful in his/her life (York, 2019). Without competition, there is no interest in doing anything. Hence, no competition means no successes that ultimately fulfill a player's satisfaction.

“Competition of a player has a positive effect on a player's performance” is the sixth hypothesis of the current research. A player's performance is directly impacted by the value of competition that a player possessed. When a player comes with no competition, it is altogether difficult for the player to produce a notable performance (Vestberg et al., 2020). While possession of competition makes a player ready for producing prominent performance every time when the player gets an opportunity. Moreover, it is the competition that increases the level of interest of a player that again results in higher performances by the player.

“Commitment of a player has a positive effect on the player’s satisfaction” is the seventh hypothesis of the current research. Sometimes it is quite impossible to complete a job without a commitment. Hence, commitment is very important in life, especially for a player. In some cases, the amount of commitments matters instead of time for a commitment. A player is only satisfied when the player has a large amount of commitment during his/her game. According to a prior study, commitment is very important for a player. When a player comes with commitment with his/her set goals, results come which boost satisfaction of the player.

“Commitment of a player has a positive effect on the player’s performance” is the eighth hypothesis of the current research. Commitment never ends with the decision, sometimes already taken decisions don’t work hence, it requires further decision which is more effective for the achievement of the desired goal by a player hence increasing the performance. According to a past study, commitment has three types; affective, continuance, and normative commitment (Mousa & Puhakka, 2019). However, at a time a player has on the type of commitment from the aforementioned types of commitment. Commitment has a significant role for a player who is fully committed to achieving his/her goals.

“A player’s satisfaction has a positive effect on the player’s performance” is the ninth hypothesis of the current study. According to a prior study, pleased feelings of a player cause for prominent outcomes such as remarkable performances (Harborth & Pape, 2020). It is evident from the data of past literature that happy or pleased feelings increase the level of satisfaction in a person. Hence, a player with an increased level of satisfaction mostly ends up his/her game with prominent performances. It is also noticed that a player is more productive when the environment is set to enhance the level of satisfaction of the player. According to the last four hypotheses of the current study; a player’s satisfaction mediates between the relationship of a player’s performance and punctuality, mood, competition, and commitment respectively.

## 6. Conclusion

According to the outcomes of the current study, a player’s performance is directly influenced by psychological factors such as punctuality, mood, competition, and commitment. It is clear from the results that a punctual

player ends up his/her game with the desired results to meet his/her satisfaction and needed performance. A positive mood helps a player to perform distinguishably among his/her competitors. competition triggers a player to have a focus on his/her set targets that finally help to accomplish locked goals by the player. While committing for a reason or ambition by a player enables him/her to win and perform exceptionally. With the increased value of punctuality, mood, competition, and commitment, a player’s performance always increases. While a decrease in the values of punctuality, mood, competition, and commitment also causes a decrease in the performance of a player. Moreover, it is concluded from the results of the current research that there are several psychological factors due to which a player’s performance is affected. However, a player’s satisfaction also has a very important role in a player’s performance.

## 7. Future Directions

The current study explores the effects of psychological factors such as punctuality, mood, competition, and commitment on a player’s satisfaction and performance. However, there is a strong need to investigate the role of personality, motivation, knowledge, and skill set of a player on his/her performance. A player’s performance is directly influenced by several psychological factors. However, the personality motivation, knowledge, and skill set of a player also have a critical role in his/her career. Moreover, the role of the environment, especially when players do practices is also very important regarding the performance of the player. Therefore, it is necessary for future directions to explore the relationship between personality, motivation, knowledge, and skill set with the mediation role of the environment for the player’s satisfaction and performance. Furthermore, it is also recommended to explore the dimensions of the relationship between teammates which also has an influential impact on a player’s performances.

## Acknowledgements

This work was supported by National Social Science Foundation of China in 2020: Research on the Construction and Practice of Physical Education Curriculum System from the Perspective of Teachers’ Professional Certification (Project number: 20BTY064)

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