
Comprehensive Performance Measurement System (CPMS) and Satisfaction of Malaysian Football Players: A Mediating Role of Reward

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ABSTRACT

This paper aims to examine the relationship between Comprehensive Performance Measurement (CPMS) and football player satisfaction mediated by the role of reward. Structural Equation Model (SEM) through the PLS Smart Modeling verifies the construct and tests the hypothesis. There were 330 professional football players from the Super League and Malaysia Premier League involved in this study. The study findings showed the reward acts as a social factor of an extrinsic motivator was fully internalised towards intrinsic motivation has a positive and significant impact on the relationship between CPMS and the football players' satisfaction. It is based on the self-determination theory, comprising three basic psychological needs: autonomy, relatedness, and competence that can influence players' satisfaction and enhance performance. This study was conducted in a football sports setting that adds to the knowledge of CPMS in performance evaluation based on self-determination theory. The CPMS, as a source of reference, can use to improve documentation from the aspects of setting skills standard, physical fitness, regulations, and strategies. It can increase the quality and performance of the players as well as the football team in Malaysia, all at once giving high levels of satisfaction

Keywords Comprehensive Performance Measurement System, Football Player Satisfaction, Reward, Self-Determination Theory

INTRODUCTION

The effectiveness of the Performance Measurement System (PMS) is one of the critical factors that carry an organization's success. PMS is a set of processes and mechanisms used by an organisation to identify the main objectives and support implementing the action, planning, measurements, control, rewards, and learning [20]. PMS plays two main roles which are (i) as an instrument for strategic implementation and to ensure the planned actions are concurrent with the organisation's goal achievements [3][12] and (ii) as a motivation control tool to affect the individual's peak behaviour, which will ease the organisation's goal achievement [11][27][34]. PMS is widely used in the industrial, service, and government sectors and has shown that it impacts not only the organisation's performance [2][36][60] and even influences individual worker's performance [1][27][61]. However, in the sports sector, empirical PMS research is minimal also though there is a high level of need, especially for football.

In this research, the high demand for PMS in football is motivated by the uncertain performance factor that is related to the various emotions of the player, such as worry, frustration, pressure, and feeling unmotivated, which affect individual performance [50], which leads to influencing the entire team's performance during competition. PMS is seen as necessary in an unpredictable environment to reduce uncertainty in decision-making [12]. PMS usage helps managers control behavior, communicate, and motivation so that there is an effort to maintain peak form [54]. As a motivational control tool, PMS can influence the football players' behavior to strive for the best and, consequently, ease their success. The uncertain performance of Malaysian players filled with weak players, precarious team position, frequent changing of coaches, emotions, and pressure due to pay backlog where some not even paid. These are seen as signs that player dissatisfaction contributes towards the decline of players' performance. CPMS saw as a system capable of providing performance information based on the football players' behavior and needs. The CPMS characterised by the basic psychological needs of autonomy, competence, and relatedness can raise the player's self-determination (intrinsically motivated). These needs are fulfilled concurrently with more comprehensive performance information. It encourages the increase of the happiness and satisfaction of the players. Self-determination theory and the integrated motivational approach such as the proposed model by Vallerand and Losier [57] is used in this research to explain the relationship between CPMS and the football player's satisfaction which is also influenced by the mediating variable, which is the social factor of reward.

Self-determination Theory

The self-determination theory asserts that humans have the natural tendency towards intrinsic growth and motivation, where this intrinsic motivation and well-being require the fulfillment of three basic psychological needs, namely (i) autonomy (ii) competency and (iii) relatedness [17][24][25]. Players' well-being in this study measured with a positive effect and satisfaction in sports, which is player satisfaction. When CPMS containing

comprehensive information of players' performance characterising needs of autonomy, competency, and relatedness is used more comprehensively, the players' self-determination increases in line with the fulfillment of the needs. Next, it encourages the players' increased satisfaction. Thus, it is expected that there is a direct relationship between CPMS and player satisfaction.

The self-determination theory also states that intrinsic motivation can be increased (or weakened) by social factors (which is the environmental variable) encouraging all three needs [17]. In this study, the environmental variable is a reward that influences extrinsic motivation. Based on the integrated motivation approach, Vallerand and Losier [57] state that this social factor can facilitate the organismistic integration process (the continuum of extrinsic motivation internalisation to intrinsic motivation) towards increasing self-determination and satisfaction of the basic psychological needs of autonomy, competency, and relatedness are fulfilled. The reward categorised as an external regulation where players' behavior is supervised when achieving a performance target. It can also increase self-determination as the outcome of full internalisation towards intrinsic motivation. In this vein, the self-determination with the comprehensive performance information based on basic psychological needs in CPMS can be increased with the environmental variable through the internalisation process. It makes the external behavior (for example, extrinsic motivation) more autonomous (intrinsic motivation), leading to player satisfaction while achieving the best performance. Thus, it is expected that the reward becomes the mediating variable between CPMS and player satisfaction.

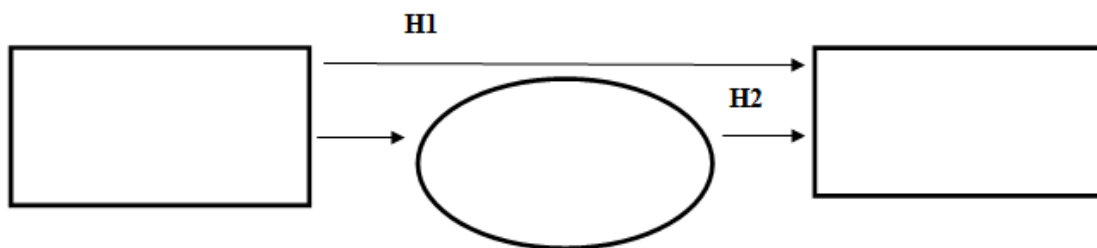


Figure 1: Conceptual Framework and Hypothesis

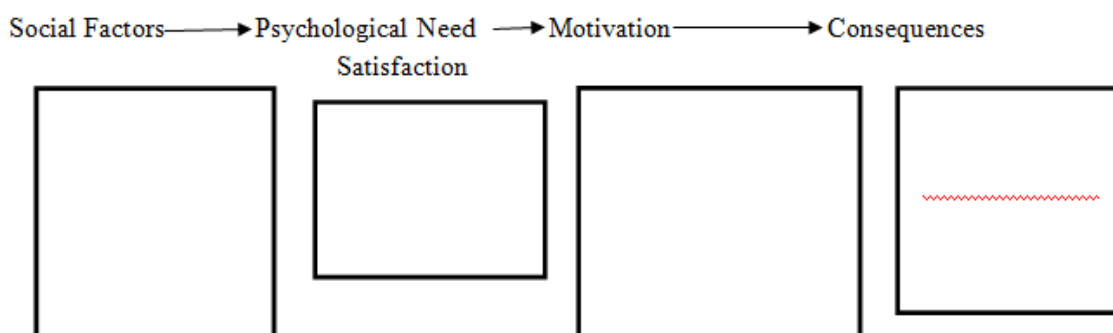


Figure 2: Model of Integrated Motivation based on Self-Determination Theory

Sources: Vallerand and Losier (1999)

CPMS and Player Satisfaction

Player satisfaction is closely linked with their performance. According to Fraser [22], the players' level of satisfaction influences their involvement in sports. Players are more satisfied with the entire experience and the performance that is less likely to be eliminated from the competitions. According to Chelladurai [10], performance is the most crucial resource to player satisfaction, where the standard performance will be different according to their level of satisfaction. Extensive studies on the satisfaction of the athletes have shown that there is a high correlation between players' satisfaction and performance. Amongst, Cranny [15] measures players' satisfaction related to excellent performance and effective organisational management. Also, Lorimer [37] shows a significant relationship between player satisfaction and performance. Eichas [18] states that player satisfaction is found to be linked with effort, willingness and performance, and Riemer [46] maintains that the primary beneficiary of sports organisations is the athletes/players, and their satisfaction seen as the prerequisite that displays higher performance.

Various football sports industry issues have been a topic for heated debate among the people in society. Mainly, related to the abandoned players' welfare, lack of compatibility and cooperation among the team players also the coaching aspect. These become distracting causes for the performance uncertainty, further leading to them failing to display the best actions. The failure to fulfill the players' needs is the precursor for the dissatisfaction, which affects performance. According to Chalofsky [9], the satisfaction level will decline when emotional disturbances come into the picture, such as the management's threat – this steals the fun or enthusiasm for the players to perform well. Thus, players must strive to have positive emotions like happiness and calm in increasing their satisfaction to achieve optimal performance, rather than having negative emotions leading to dissatisfaction or weak performance [31]. Players who are happy with the acknowledgment, progress, responsibility, hospitality, coach and teammates' support, and work environment are likely to work harder and improve the performance. Happy players will also reduce their absence from training, fatigue, and surrender.

To date, there has yet a study that sees the use of PMS on athletes' or players' satisfaction. Only empirical studies involving PMS and job satisfaction have been carried out where PMS preparation with feedback and complete information has given a positive impact on every individual's motivation and satisfaction at work [1][32][33]. Lau and Martin-Sardesai [32] show that the CPMS through the Balance Score Card (BSC) and the additional dimension covering all critical aspects in business have increased job satisfaction and main motivation prerequisite in the increased work performance. CPMS used has helped enhance the employees' efforts and reduce uncontrollable situations that can influence the satisfaction and performance of the employees in achieving organisational goals. The study by Lau and Sholihin [34] also proves that PMS based on financial and non-financial measurements is equally essential to job satisfaction. The right

PMS and complete preparation of information can positively impact every individual's work motivation and satisfaction.

Based on the previous findings of the above studies involving individual employees, PMS in the sports sector as the tool of performance evaluation is expected to motivate individual players and help them achieve satisfaction and excellence in sports. The formation of CPMS based on the definition by Hall [27] is seen to suit the studies done in the sports sector. CPMS in football prepares comprehensive information in the performance evaluation that can increase the players' self-motivation of autonomy, competency, and relatedness. The readiness of the performance information is more comprehensive in PMS. Its use in the performance evaluation can encourage footballers to behave and become motivated, which increases satisfaction.

CPMS characterising needs of autonomy, competency, and relatedness. When the information is more comprehensive, it can fulfill the basic needs and further increase the players' self-determination, leading to increased satisfaction. Thus the following hypothesis is formed:

H1: There is a positive relationship between CPMS and football players' satisfaction

CPMS, Reward and Player Satisfaction

Reward-giving based on performance achievement is one of the main ways to motivate employees to effectively perform [42][55]. Lawler [35] concludes that the performance measurement system (PMS) is more effective when there is a relationship between the system's outcome and the reward system. Ullrich and Tuttle [56] find that managers give more time to assess and be given the reward. Empirical evidence shows that the relationship between PMS and reward can increase the performance of the organisation [49], the work quality of individual employees [30], manager performance [28], and operational employees [5]. Nevertheless, some studies find that PMS, through the incentive scheme, has created some dissatisfaction among employees causing PMS to lose credibility [40]. An extrinsic reward like salary, bonus, and other benefits is often used in the performance evaluation to increase employees' satisfaction or performance [6]. Besides extrinsic reward, intrinsic reward comprising work safety, acknowledgment, promotion and autonomy, and appreciation also play a role in PMS formation [48]. Both of these rewards have a positive effect on individual performance [38].

The reward is the primary catalyst for the athletes to strive to show the best performance to achieve high satisfaction during the match. Dada [16] states that valuable incentives would generally encourage athletes to double their effort and performance during the game. Torgler and Schmidt [52] prove that salary-giving also influences football players' satisfaction and performance in Germany. Gafor [23] believes that sports involvement is

motivated by a combination of internal satisfaction and related to external rewards obtained through sports. The reward is classified as a social factor under the category of match and victory [58]. Due to the self-determination theory, the reward is the extrinsic motivation of the external regulation that influences the lowest self-determination level. It is because extrinsic motivation controls human behavior to fulfill their requests by offering various kinds of reward.

However, a reward can enhance self-determination through the internalisation process towards intrinsic motivation. Ryan and Deci [47] explain that the relationship between reward and intrinsic motivation (the highest level of self-determination) can be determined based on athletes' interpretation of the reward either as a tool of control/coercion or information for self-development (self-reward). As a control tool, the reward will function as the external regulation's extrinsic motivation to assuage self-determination. Still, the internalisation process towards intrinsic motivation will increase self-determination if the comes in the form of information. The reduced self-determination will lead to a lack of competency and further reduces the level of performance. Its means that if the athlete already has the intrinsic motivation, reward-giving as extrinsic motivation will further enhance the self-determination by forming desired behavior and achieving goals and self-satisfaction. This supported by Tapps [51] states that athletes with high intrinsic motivation will enjoy it more and will be more satisfied internally and reap many benefits when they participate in sports activities.

In the self-determination theory, the psychology of basic needs autonomous, competency, and relatedness is expected to increase self-determination and football player satisfaction further. They are presented with extrinsic motivation such as gifts, bonuses, incentives, acknowledgment, appreciation, and promotion to achieve victory. Eisenberger and Rhoades [19] study show that performance-unexpected reward heightens the employees' competency and creativity by getting good performance feedback. Rynes [48] also find that reward increases the performance and basic needs of individual employees' autonomy when allowed to make decisions and give ideas to strengthen the firm's strategy. Goleman [26] in a tourism business, states that reward influences the intrinsic motivation through the relationship where managers work hard in training, giving support, and helping their employees improve their performance. In sports, the basic needs of autonomy and competency are seen as intrinsic motivation. Fun and satisfaction can enhance when players are rewarded with the chance to show some creativity, delivering good ideas in terms of game tactics or techniques, given a bonus and good pay when they achieve the target and demonstrate team excellence. The reward value can also be felt and can increase the players' intrinsic motivation when there is a basic need for relationship and support from the management, supporters, and the community. The support and care from the external community and the management become the motivator towards stronger satisfaction and performance CPMS based on the basic psychological needs of autonomy,

competency, and relatedness, are expected to control the behaviour and motivate the players alongside the extrinsic motivation of reward, which will help increase the self-determination and satisfaction until they can perform excellently. The reward is found to be internalised fully by fulfilling the players' basic psychological needs towards the intrinsic motivation that increases the self-determination level and further increases their satisfaction. This is because the comprehensive performance information from CPMS may help the footballers motivate themselves and a fair distribution of acquisitions like salary, bonus, award, and appreciation based on the quality and skills can increase their satisfaction. It will automatically prevent bribery and fraud among players, leading to poor performance and the destruction of their careers. Thus, the following hypothesis is formed:

H2: Reward mediate the positive relationship between CPMS and football players' satisfaction

RESEARCH METHODOLOGY

Research Design

The study design was a survey research design and quantitative methods of analysis for cross-sectional data. The survey approach was adopted to obtain an accurate explanation of individual characteristics in a group that was involved directly or indirectly in the sports-related activity. Data gathered through the questionnaire. Football players from clubs or state associations which compete in Super League and Premier League were chosen as research respondents. Both leagues are the top professional football leagues playing in Malaysia. Every football league has 12 teams that have to undergo a process involving players' professionalism and infrastructure facilities to ensure that the competing teams display professional standard game patterns. Seeing the Super League and Premier League are the leading football leagues in Malaysia, there is a need for PMS to provide comprehensive information to ensure that each team succeeds in giving their best performance through the control and motivation given to the football players. Furthermore, professional players from the club or state association that compete are under a payroll, making their performance evaluation a control mechanism using PMS as an example for critical and expected to utilize fully.

Table 1 shows the frequency distribution of respondents of the football club and state associations that competed in Super League and Premier League. Every club/state association has a total of 25 registered players that encompass main and reserve players. There are 11 main players and 14 reserves. Therefore, it estimated that there is a total of 600 football players when taking into account both main and reserve players. From this total, 330 football players have responded to the questionnaire that distributed, all together getting 55% rate of response. Each player given 45 minutes to complete the survey and the researcher ensured that each player returned the completed questionnaire.

Table 1 : List of Super League and Premiere League football teams

No	<i>Super League</i>	<i>Premiere League</i>
1.	Pahang FA	Polis Diraja Malaysia (PDRM) FA
2.	Selangor FA	KL Felda United FC
3.	Johor Darul Ta'zim FC	Negeri Sembilan FA
4.	Terengganu FA	Kedah FA
5.	Perak FA	Johor Darul Ta'zim II FC
6.	Sarawak FA	Sabah FA
7.	KL Sime Darby FC	KL S.P.A PutraJaya FC
8.	Kelantan FA	KL DRB-Hicom FC
9.	Selangor PKNS FC	UiTM FC
10.	Terengganu PBDKT/ T-Team FC	Perlis FA
11.	Angkatan Tentera Malaysia FA	Pulau Pinang FA
12.	Lions XII FC	Pulau Pinang PBAPP FC

Instrument

The CPMS instrument in this research sees how far the PMS used performance information concerning essential aspects needed to increase motivation and behavioral control towards the football players. The items used in this instrument adapted to the sports field by using CPMS instrumentation [27] include elements of basic psychological needs for a player to increase his self-determination towards a better performance. The autonomy needs to provide an autonomous performance measurement such as muscle endurance test, flexibility, speed, and mental strength to ensure the player's peak performance. The player's competency is measured through monitoring and constant comparison, recorded from time to time during the player's performance to reach the predetermined set level and objective. Excellent and positive relatedness between players, coaches, and management staff by providing basic living necessities and sufficient training infrastructure will help players be more focused and increase their performance. The CPMS items that adapted to the sports industry measured using a Likert scale between 1 (not at all) to 5 (to a great extent) where respondents will provide their views when considering performance evaluation.

The player's satisfaction is measured using an instrument that was developed by Riemer and Chelladurai [45]. Known as the Athlete Satisfaction Questionnaire (ASQ), this is an established instrument and is widely used for research in the sports field and sports management [4]. This instrument measures the respondent's satisfaction with 42 items covering 11 dimensions using the 5-point Likert scale, which is 1 (very dissatisfied) until 5 (very satisfied). However, after running exploratory analysis factors on the players' satisfaction, this research used only five dimensions: ability utilisation and individual

performance, team performance, personal treatment and training instruction, team task contribution, and personal dedication.

Rewards in sports can be defined as an incentive that motivates players to produce the behaviors intended. Rewards become meaningful when given at the right time by showing excellent performance [59]. According to Beer and Walton [8], reward comprises two categories: extrinsic and intrinsic rewards. The extrinsic rewards come from organisations, including bonuses, incentives, and various benefits. Intrinsic rewards involve of self-development, acknowledgement, personal achievement, appreciation, social life and satisfaction in completing tasks. Reward giving can be rewarded as the stimulant or motivator that can increase athletes' performance, determination and excellence.

The reward is measured using Clifford instrument [13] comprising extrinsic and intrinsic rewards with 11 items. Respondents have to answer every question using the Five Likert Scale between 1 (not important at all) and 5 (extremely important) on the 11 items of reward in accessing their performance.

Data Analysis

The data received was analysed using Statistical Package for Social Sciences (SPSS) version 17 and SmartPLS version 3.0. The research hypothesis was tested using SmartPLS software using a measurement model and study the structuring model. The measurement model aims to strengthen and confirm measurements and the relationship between the variables made of confirmatory analysis, convergent and discriminant, validity and reliability test. These tests are carried out at different stages of the measurement model. The structural model was implemented to determine the significant difference for every path coefficient between the independent variables and the dependent variables using the research hypothesis.

Findings

The demographic representation of the respondents shown in Table 2. A total of 330 football players from 18 clubs and state associations returned the questionnaire, making the return rate at 73.33%. Players' ages between 21 and 25 and, between 26 and 30 shown to have almost similar percentages, each at 39.4% and 40.3%. Players over the age of 30 were at 14.2%, and those below the age of 20 were at 6.1%. The majority of the players were between the ages of 21 and 30 (79.7%), which seems to be the typical age range of professional football players. The education level shows that the majority of the respondents finished high school, at 78.2%. Diploma holders were at 13.0%, 7.9% shown to be degree holders, and 0.9% held masters degrees. The player category indicated that most of the respondents are local players at 95.2%, with only 4.8% being imported players. The massive percentage gap between local and imported players is due to the limitation imposed whereby each team is allowed only four imported players.

Table 2 shows that from a player position aspect, defenders have the highest rate at 37%. Mid-fielders follow with 29.7%; attack at 20.9%, and goalkeepers 12.4%. This percentage distribution between players' positions is almost similar to using the tactical dimension system 4-4-2 to determine each player's playing position where four defenders, four midfielders, and two attackers are needed.

Demographic characteristics	Category	No (n)	Percentage (%)
Age [Mean (SD) = 2.63 (0.801)]	≤20 years	20	6.1
	21 – 25 years	130	39.4
	26 – 30 years	133	40.3
	≥ 30 years	47	14.2
Level Of education [Mean (SD) = 1.32 (0.6550)]	School	258	78.2
	Diploma	43	13.0
	Bachelor Degree	26	7.9
	Master Degree	3	0.9
Player Category	Local	314	95.2
	Import	16	4.8
Player position	Striker	69	20.9
	Defender	122	37.0
	Midfielder	98	29.7
	Goalkeeper	41	12.4
The number of years playing football [Mean (SD) = 2.07 (0.726)]	≤ 5 years	63	19.1
	6 – 11 years	194	58.8
	12 – 17 years	60	18.2
	≥ 18 years	13	3.9
The number of years playing with current team [Mean (SD) = 1.61 (0.829)]	≤ 2 years	186	56.4
	3 – 4 years	102	30.9
	5 – 6 years	26	7.9
	≥ 7 years	16	4.8
Game status	Main player	134	40.6
	Injured player	19	5.8
	Reserve	138	41.8

	Others (Replacement player)	39	11.8
Total number of training hours per day	≤ 2 hours	204	61.8
	3 – 4 hours	126	38.2
[Mean (SD) = 1.38 (0.487)]			
Chief coach experience	≤ 5 years	22	6.7
	6 – 11 years	131	39.7
	12 – 17 years	65	19.7
	≥ 18 years	112	33.9
[Mean (SD) = 2.81 (0.985)]			

H1: There is a positive relationship between CPMS and football players' satisfaction					
Model	Path	Path Coefficient	Standard Error	t-value	R ²
Model 1	CPMS → Personal Treatment & Training Instruction Satisfaction	0.384	0.052	7.336***	0.147
	CPMS → Ability Utilization & Individual Performance Satisfaction	0.188	0.045	4.149***	0.035
	CPMS → Team Performance Satisfaction	0.284	0.051	5.588***	0.080
	CPMS → Personal Dedication Satisfaction	0.333	0.056	5.948***	0.111
	CPMS → Team Task Contribution Satisfaction	0.375	0.055	6.823***	0.140

H 1 is supported. CPMS as the behavioural control and motivational tool that provides various performance information is able to influence and enhance the satisfaction of the football players.

Table 3: The summary of the study outcome of the hypothesis testing on reward mediate between CPMS and football players' satisfaction

*t-value > 1.96, p < 0.05. **t-value > 2.58, p < 0.01. ***t-value > 3.29, p < 0.001

H2: Reward mediate the positive relationship between CPMS and the satisfaction of football players' satisfaction					
Model	Path (a): CPMS and Reward	Path coefficient	Path (b): Reward and Player Satisfaction	Path Coefficient	Path (c'): Indirect effect of the mediating variable
Model 2	CPMS → Reward	0.335	Reward → PD Satis	0.183	VAF = 33.15% Sobel z=2.318 Partial Mediating

H2 is partial supported. Reward acts as the mediating variable on the relationship between CPMS and the personal dedication satisfaction of football players.

Notes:

CPMS - Comprehensive Performance Measurement System	AU - Ability Utilization	PD - Personal Dedication
PT - Personal Treatment	IP - Individual Performance	TTC - Team Task Contribution

TI - Training Instruction	TP - Team Performance	Satis - Satisfaction
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More than half of the respondents (55.8%) have played football since the ages of 6-11. Respondents less than five years experience, between the ages of 12-17 and over 18 years, are respectively at 19.1%, 18.2%, and 3.9% each. As most of the respondents were between the ages of 21-30, rationally, their involvement in football is between 6-11 years. The majority of the duration in which the players are with their current team is less than 2 years or 56.4%. The period of 3 to 4 years is 30.9%, 5 to 6 years is 7.9%, and 7 years above is 4.8%. A brief period with a club or state association is consistent with the profession where most professional players, including those in Malaysia, are often brought

into new teams when the league season comes to its close. For the game status, the main players 40.6%, reserve players 41.8%, injured players 5.8%, others, or those serving as substitutes 11.8%. Every club/state association can only register 25 players for every club and state association; 11 main players and 14 reserve players. It found that two hours of training per day has the highest percentage, which is 61.8%. Less than two hours of training is practised by most clubs/state football associations. When the match season begins, players will only undergo low-intensity training to avoid injury and keep having high stamina level, with the tight schedule every week. Football players are guided by qualified and experienced coaches, where almost all coaches (93.3%) have more than five years of experience.

The study respondents comprise professional players from clubs/state associations competing in the Malaysian professional league. Most experienced respondents play professionally; qualified and experienced coaches guide them. The respondents' distribution is also consistent with the structure of the field play position and the player status. Thus, the respondents should be able to give correct answers to portray the use of CPMS in the club/state association, also the influence of reward on their self-satisfaction.

The next study outcome shows that the hypothesis testing with the Structural Equation Modeling, SEM uses the software Partial Least Square (PLS). Two models were tested. Model 1 was used to test Hypothesis 1, which examines the direct relationship between the CPMS and the five dimensions of football players' satisfaction, derived from the exploratory factor analysis. The mediating variable for hypothesis 2 refers to Model 2. The mediating effect of the reward tested the relationship between CPMS and every player satisfaction dimension. The summary of the study hypothesis is presented in Table 3.

CPMS and the satisfaction of football players from the dimension of personal treatment and training instruction satisfaction ($\beta=0.384$; $t=7.336$, $p<0.001$), ability utilization and individual performance ($\beta=0.188$; $t=4.149$, $p<0.001$), personal dedication satisfaction ($\beta=0.333$; $t=5.948$, $p<0.001$), team performance satisfaction ($\beta=0.284$; $t=5.588$, $p<0.001$) and the team task contribution satisfaction ($\beta=0.375$; $t=6.823$, $p<0.001$). Based on the determination of the path coefficient value by Cohen (1998), it is found that CPMS gives a moderate positive effect (between 0.31 and 0.50) towards personal treatment and training instruction satisfaction, personal dedication satisfaction, and team task contribution satisfaction. However, for team performance satisfaction and ability utilisation, and individual performance, the positive effect is small (between 0.05 and 0.30). The hypothesis testing outcome finds that Model 1 used to test hypothesis 1 is supported, showing that CPMS influences and enhances football players' satisfaction.

Model 1 is based on the variant value (R^2). The study's outcome finds that CPMS has contributed 3.5% to the ability utilisation and individual performance satisfaction change.

The 14.7% to the change in the personal treatment and training instruction satisfaction, 11.1% to the change in the personal dedication satisfaction, 8% to the change in the team performance satisfaction and 14% to the change in the team task contribution satisfaction. CPMS was found to have a small effect on all five dimensions of player satisfaction, where R^2 in the range of 0.02 and 0.15, and it refers to a small value.

The hypothesis 2 testings using Sobel test finds that for Model 2, there is an indirect effect of CPMS on the personal dedication satisfaction through reward (path c') 0.061 (0.335*0.183) is significant with the z value=2.318; $p < 0.05$. Therefore, reward acts as the partial mediating variable when the z value is significant and exceeds 1.96. To estimate the strength size of the indirect effect of reward on the relationship between CPMS and personal dedication satisfaction (path c'), the VAF value is calculated. The VAF value for reward is 33.15% [$0.061 / (0.061 + 0.123)$], and it acts as the partial mediating variable, consistent with Sobel's test outcome.

These findings show that the testing for hypotheses H2 using Sobel test and VAF calculation finds that the reward plays the role as the partial mediator. The reward was found to mediate the partial relationship between CPMS and the dimension of player satisfaction.

DISCUSSION

Model 1 SEM is used to test the relationship between CPMS and player satisfaction. The findings of Model 1 establishes that CPMS gives a positive and significant path coefficient effect towards five dimensions of player satisfaction: personal treatment, training and instruction; individual performance and ability utilisation; personal dedication; team performance; and team task distribution. Thus, Hypothesis 1 is accepted.

The acceptance of hypothesis 1 shows that CPMS as a tool of behavior control and motivation that provides various performance information influences and increases football players' satisfaction. CPMS has a moderate impact on the satisfaction of personal treatment and training instruction, team task contribution, and personal dedication. Meanwhile, CPMS has a small influence on the satisfaction of team performance, individual performance and ability utilisation. CPMS that fulfills the basic psychological needs plays a vital role in controlling the behavior and motivating players through various performance measurement aspects. This PMS is linked with the club/state association's strategy and operation to the point that the player's intrinsic motivation and self-determination can increase. It will further impact the players' satisfaction.

These findings are consistent with previous studies in the sector of business industry and individual services [1][33][34], in which PMS preparation with feedback and complete information has given a positive impact on individual motivation and job satisfaction. Lau

& Martin-Sardesai [32] also assert that the use of CPMS through Balance Score Card and an additional dimension covering all critical aspects in business has increased job satisfaction and motivation. In sports, several previous studies find that individual athletes achieve intrinsic motivation when basic psychological needs (autonomy, competency, relatedness) have become satisfactory [7]. Besides that, intrinsic motivation is also the best predictor of the athletes' overall performance as they display high determination and spirit [14]. Meanwhile, the testing of hypothesis 2 shows that CPMS gives a positive and significant path coefficient effect toward the reward in Model 2. The path of reward variable gives a positive and significant path coefficient effect towards personal dedication satisfaction. This reward mediates the partial relationship between CPMS and players' dedication satisfaction. Thus, H2 is partly accepted.

The result shows CPMS related to bonus, extra benefits, appreciation, personal development, and promotional opportunity to ensure the performance target can increase players' satisfaction with high commitment and spirit throughout the training and competition. The findings have supported previous studies in the sector of the business and service industry, which proves that the consistency of the PMS with a reward can increase the firm/individual managers/individual workers [5][28][30][49]. According to Lynch and Cross [39], CPMS will be less effective if there is no reward granting system. The existence of the reward and its relation with performance can spur or draw the players' interest and spirit in achieving the best performance. In sports, skills, physical stamina, and player performance are the benchmarks in the salary, bonus giving, and various additional benefits [43]. Previous sports studies also show that there is a positive and significant relationship between reward and player satisfaction [16][23][52][53].

CPMS which characterises the psychology needs for autonomy, competence and relatedness can increase self-determination when used comprehensively, and this increased intrinsic motivation. The reward as extrinsic motivation (external regulations) through full internalisation towards intrinsic motivation further enhances the football players' self-determination motivation until satisfaction can achieve through high levels of effort, dedication, and spirit. Based on Ryan and Deci [47], this kind of reward is more informative by nature, forming self-development (self-reward) and when it succeeds, it will reach the target intended. Suppose the athlete already has intrinsic motivation. In that case, reward-based on extrinsic motivation will motivate and increase the self-determination by forming a positive behavior through the struggle and dedication on the club and state association, and achieve the satisfaction needed. Gafor [23] supported that one's involvement is spurred by a combination of internal satisfaction and related to an external reward obtained through sports.

The reward, moved by the basic psychology fulfillment of autonomy, competency, and relatedness in the CPMS found a consistent finding with previous studies in the business

and service industry. Eisenberger and Rhoades [19] study shows that unexpected performance-reward has increased employees' efficacy and creativity by getting good performance feedback. For autonomous needs, Rynes [48] establishes that reward increases individual employee's performance when they are allowed to make decisions and give ideas to strengthen the firm's strategies. Meanwhile, the need for relatedness in contact by Goleman [26] looks at the managers' effort to train, give support and help employees increase the performance in the tourism business. The finding is consistent with a study by Fareed [21], Ivana [29], Mehmood [41], and Pratheepkanth[44], who state that extrinsic and intrinsic reward giving are among the main factors that affect the motivation of the employees in achieving high performance and job satisfaction. The study by Tshube [53] also shows that extrinsic and intrinsic rewards have motivated athletes to strive for victory. Tapps [51] states that athletes with a high level of intrinsic motivation will achieve internal satisfaction also various benefits when they take part in sports activities. It automatically avoids bribery and fraud among football players.

CONCLUSION

CPMS is a tool for control and effective monitoring in influencing football players' behavior like individual workers or managers in the industrial sector, towards a congruent goal achievement for the club or state association. As a behavioral motivation tool, CPMS needs to fulfill the basic psychological needs of autonomy, competency, and relatedness that become the main aspects in enhancing football players' self-motivation level and further contributes to players' well-being satisfaction. CPMS's effectiveness on football players' satisfaction also depends on the reward's capability to fulfill the basic psychological needs determined in CPMS. The use of CPMS since the players' early involvement can increase their self-determination from time to time. The implementation of CPMS that is more proactive in the national football development program will bring back these sports' supremacy in this country.

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