The Effect of Intrinsic Motivation and Sport Commitment on the Performance of Iranian National Water Polo Team

Mehr Ali Hemati Nezhad¹ - Kazem Danesh Sani²

1. Associate professor University of Guilan
2. M.A in Sport Management, Ghadr Institute of Higher Education, Kochesfahan, Iran¹

Corresponding Author Email: kazemdanesh_s@yahoo.com

Abstract

The purpose of the present study was to investigate the effect of intrinsic motivation and sport commitment on the performance of Iranian national water polo team. Statistical populations of this study included the whole men players invited to the camp of Iranian national water polo team (N=28). The statistical sample has been selected equal to the sampling group. After confirmation of virtual and contextual validity of intrinsic motivation questionnaires (McAuley et al) and sport commitment model scale (SCMS) by the experts, their reliability in a guide study and via Cronbach’s alpha coefficient were calculated respectively equal to α=0.83 and α=0.92 for the intrinsic motivation and sport commitment questionnaires. For analyzing the data, one-sample Kolmogorov-Smirnov test, one-way analysis of variance (ANOVA) and Tukey post hoc test were used in significance level of P<0.05. Results showed there was a significant difference between sport commitment values of successful, less successful and unsuccessful players and there was no significant difference between the intrinsic motivation values of successful, less successful and unsuccessful players. Also the results indicated there is a significant difference between the sport commitment of water polo players and high, middle and low sport records but there is no significant difference between the intrinsic motivation of water polo players and high, middle and low sport records. According to the study summary, it seems the players’ sport commitment as one of the individual characteristics effective on the team performance may have an important role in success and upraising the sport teams’ performance level.

Keywords: Intrinsic motivation, Sport commitment, Team performance

Introduction

A sport team includes the players, technical staff and management cadre that all have the united team purposes and follow the specified behavioral and communicational patterns as a group and team and ultimately all members have the share in the team summaries (Ramzaninezhad et al., 2009). But it doesn't seem the team performance to be equal to the total efforts and capabilities of team members, but a series of the complex reactions and factors exist between the team members that are effective in this regard. Within the recent years, some researchers have perused the effects psychological factors on the team performance and have presented different theories and models. The most studies have reported the equal factors and causes that affect the team performance (Ramzaninezhad and Hoseini Keshtan, 2009). Upon considering the past models and theories may conclude the factors affecting the team performance and success as 3 variables of players’ characteristics, coaches’ characteristics and team factors. The players’ characteristics such as age, record, motivation, anxiety, self-reliance sport commitment of the players; coaches’ characteristics such as instructor class, age, record,
leading style, and coach behavior; and team factors such as past successes of the team or group, team cohesion and self-reliance (Ronayne, 2004). The players' characteristics include different factors that during the last years the researchers have considered these characteristics and their effects on the individual performance and success of the players. Each one of the individual characteristics may be a facilitator or disturber factor for sport performance. The players' motivation is one of the important and effective factors on team performance; different theories have been presented in connection with the appropriate level of motivation for improvement of sport performance. The motivation as an intrinsic and extrinsic motive and mechanism stimulates the human behavior and leads it towards achieving the goal and includes all intrinsic efforts and external powers (Robbins, 1998; Chase, 2001). In order to a person can access the high level of motivation should decide to act (capability) and be provided by the proper materials and means for performing that action (environment), the lack of each one of the foregoing elements will hurt the performance, in fact may explain that performance = f (environment × capability × motivation) (Chen, 1998). Therefore, the athletes can act successfully in their sport field when they utilize the required capability and motivation for having the appropriate performance. In fact, the capability and motivation lead to the appropriate sport performance.

According to the definition of motivation, one of the initial and secondary motivations is intrinsic motivation that is originated from the own individual. The intrinsic motivation in the sport including the excitement, entertainment, interesting in practice, an opportunity for proving the own capability, skill improvement and enjoying the sport. This type of motivation as respect to the quality is different from physiologic requirements and extrinsic motivation such as money and reward. An athlete who is stimulated intrinsically attempts only for the experience existed in the own sport and sport exercise. The intrinsic motivation is significant when the behavior reinforcing resource or rewarding resource is an extrinsic factor. In other word, the individual conducts a behavior in order to achieve a specified extrinsic mode or conditions. The athlete who is stimulated intrinsically attempts only for the experience existed in the own sport and exercise. The athlete satisfies motivations such as curiosity, efficiency and personal will instead of participation in a competition for achieving the admiration, celebrity, and money.

According to Gill Diane (2000), although the intrinsic rewards are common, but the most people participate in the sport exercises due to the intrinsic motivations that is an effective key on the sport performance (Gill Diane, 2000). Charbonneau, Burling and Clovey (2001) have indicated in a study that the intrinsic motivation may predict the athletes' performance (Sashkin, 1998). The results of Askari (2006), Khayyat (2004) and McInerney (2001) studies indicated that a significant relationship exists between the intrinsic motivation and academic performance of the students (Askari, 2006; Khayyat, 2004; McInerney et al., 2001).

Shafizadeh (2007) had reported a significant relationship between the players' motivations and successful performance (Shafizadeh, 2007). Christian et al (1993) have introduced the intrinsic motivation as the highest priority of the motive of people participated in the championship and indicated that who have high intrinsic motivation have better individual performance and the sport teams that are consisted of more number of these people will have further efficiency and ultimately better team performance (Christian and Fredrick, 1993). As Hessian and Richard (2002), the motivation is the basis for success in the recreational and competitive activities and the effort of every athlete toward the success and better performance is dependent to his/her motivation value (Hessian and Richard, 2002).

One of the other factors affecting the team performance is sport commitment. The sport commitment is the psychological structure that indicates the tendency and interesting of the individual to the continuity of participation in sport exercises during the time. The different models have been presented in the context of commitment. One of these models is Scanlan sport commitment model scale (SCMS). This model has been designed for investigating the reason of peoples' participation continuation in the special sports (Scanlan et al., 1993). According to the Scanlan sport commitment model (1993), the sport commitment is similar to organizational commitment but is different in the behavior and goal. According to the theory of Scanlan et al (1993), the sport commitment is an attractive factor for continuation of sport exercise and it causes the athlete to enjoy the sport (Scanlan et al., 1993). It is obvious whatever the athletes' commitment to the sport team is higher may be effective on its efficiency, effectiveness and performance. In fact, it is understood that one of the causes of sport teams' survival is continuation of the activity of that team's athletes. Thus, creation of this commitment in the athletes is an important and effective factor and the factors creating the commitment in the players should be identified. Sport commitment enhancement among the athletes seems to be in relation to the enhancement of sport exercise enjoyment, enhancement of participation in sport exercise and enhancement of social expectations of the athletes for continuation of the sport (Morris and Sherman, 1981). Sport commitment model includes both cognitive and emotional factors. The athletes having high sport commitment are ready to act beyond the stipulated duties and may have an effective role in sport effectiveness and performance. Existence
of such players in the sport teams is along with the sport performance level upraising and lowering the absence and their delay in the teams. Vice versa, the players with the low loyalty and sport commitment feeling not only move towards achieving the team goals but affect the establishment of culture of inattention to the team issues and problems among the other players (Tsai Wen and Chang Kong, 2010). The results of research applied by Morris & Sherman (1981) and Gaunter (1997) indicates that the organizational commitment is an effective factor on the employees’ performance (Morris and Sherman, 1981; Gunter, 1997). Tsai Wen and Chang Kong (2010) stated there is a mutual and bilateral relationship between the sport commitment and sport performance (Tsai Wen and Chang Kong, 2010).

In consideration of the role of these both important individual and effective factors on the team performance, this paper intends to find the answer of this key question that if the players’ sport motivation and commitment affect the team performance as the individual characteristics or not. Also, the extant paper compares these factors between the successful, less successful and unsuccessful players and comparing these factors between the high, average and low recorded players.

**Materials and methods**

Statistical populations of this study included the whole men players invited to the camp of Iranian national water polo team (N=28). Whereas the players’ number was finite, the statistical sample was considered equal to the sampling group. Two intrinsic motivation questionnaires (McAlovey et al., 1989) including 18 questions and sport commitment model scale (SCMS) including 14 questions (Scanlan et al., 1993) were used for collection of the data. The reliability of the questionnaires in a guide study and via Cronbach’s alpha method was calculated equal to α=0.83 and α=0.92 respectively. In addition, in this study, the water polo players invited to the national team camp were divided in three equal categories in accordance with the scoring table and the players below 33% point were selected as the unsuccessful athlete, between 33% and 66% as the less successful athletes and over 66% as the successful athletes. Kolmogorov-Smirnov test, one-way ANOVA test and Tukey post hoc test in significance level of P≤0.05 were used for data analysis.

**Results**

The summary of one-way ANOVA test indicated that a significant difference exists between the sport commitment value of successful, less successful and unsuccessful players and no significant difference exists between the intrinsic motivation value of successful, less successful and unsuccessful players (table 1). The summary of Tukey post hoc test indicated that the successful players have higher sport commitment than the others whilst no significant difference existed between the sport commitment of successful and unsuccessful players. As well as, the results of one-way analysis of variance test indicated that a significant difference exists between the sport commitment of water polo players with high, average and low sport record; the sport commitment of players with high sport record is significantly more than sport commitment of the players with average and low sport record and whilst the results indicated that no significant difference exists between the intrinsic motivation of water polo players with high, average and low sport record (table 2).

<table>
<thead>
<tr>
<th>Group</th>
<th>M±SD</th>
<th>F</th>
<th>df</th>
<th>Sig</th>
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<tbody>
<tr>
<td>Players' motivation</td>
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<tr>
<td>Successful players</td>
<td>5.55±0.86</td>
<td>0.62</td>
<td>2</td>
<td>0.53</td>
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<tr>
<td>Less successful players</td>
<td>5.52±0.61</td>
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<tr>
<td>Unsuccessful players</td>
<td>5.68±0.41</td>
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<tr>
<td>Successful players</td>
<td>3.52±0.52</td>
<td>5.08</td>
<td>2</td>
<td>0.001*</td>
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<tr>
<td>Less successful players</td>
<td>3.33±0.33</td>
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<tr>
<td>Unsuccessful players</td>
<td>3.25±0.19</td>
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* significant relationship in P≤0.05
Table 2. Comparing the sport commitment and intrinsic motivation of high, average and low recorded players

<table>
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<tr>
<th>Group</th>
<th>M±SD</th>
<th>F</th>
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<tbody>
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<td>Sport commitment</td>
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<tr>
<td>High recorded players</td>
<td>6.26±0.83</td>
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<td>0.001*</td>
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<tr>
<td>Average recorded players</td>
<td>5.38±0.56</td>
<td>24.59</td>
<td>2</td>
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<tr>
<td>Low recorded players</td>
<td>4.62±0.35</td>
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<tr>
<td>High recorded players</td>
<td>3.31±0.43</td>
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<td>Intrinsic motivation</td>
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<tr>
<td>Average recorded players</td>
<td>3.27±0.28</td>
<td>0.90</td>
<td>2</td>
<td>0.40</td>
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<tr>
<td>Low recorded players</td>
<td>3.23±0.16</td>
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* significant relationship in P<0.05

Discussion and Conclusions

The results showed that the successful water polo players have higher sport commitment than the less successful and unsuccessful players. Tsai Wen and Chang Kong (2010) explained that a mutual and bilaterial relationship exists between the sport commitment and sport performance, and sport commitment is predictor of sport performance, on the other hand, the sport teams' performance may be effective on the individuals' sport commitment as the predictor (Tsai Wen and Chang Kong, 2010). According to the conceptual model of Chelladurai (1990), among the factors affecting the performance and satisfaction of athletes, individual characteristics of the players such as sport commitment may affect the sport performance. The athletes of higher sport commitment have higher sport performance (Chelladurai, 1999). Also, the results indicated that there is no significant difference between the intrinsic motivation value of successful, less successful and unsuccessful players. Many studies applied in the past demonstrated that there is a strong and significant relationship between the sport performance and motivation of the athletes (Shafizade, 2007) which is not corresponding the findings of the extant paper. Dongfang et al (2003) have introduced the motivation as the individual mental factor as the important and key factor for enhancing the sport performances (Dongfang et al., 2003). A lot of researches show that the athletes who have high level in both important mental factors means sport commitment and motivation, show better performance while performing the sport activities (Giacobbi and Weinberg, 2000). Bowman et al (2001) demonstrated in their study that the intrinsic motivation may be an effective factor on the sport performance (Bowman et al., 2001).

As well as, the findings of the extant paper indicated that a significant difference exists between the water polo players with high, average and low sport records, and the players who have higher record have more sport commitment. In relation to the influence of sport record on the successful performance of teams and athletes, Carron (1985) model indicates that upon enhancing the record among the athletes, other variables affecting the team performance such as commitment, cohesion, and collective efficiency (group dynamics) is improved and ultimately lead to the team performance improvement. Nevertheless, with respect to the effect of intrinsic motivation and sport commitment on the team performance, applying frequent researches seems to be necessary in order to clarify the role and function of these vital factors in this connection more than ever.

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