Physical Attributes and Psychological Characteristics of Basketball Players Towards Creation of a Wellness Program

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Abstract: The objective of this research is to examine the evaluations provided by 44 basketball coaches according to the physical features and psychological traits and talents of their players. The primary aim is to enhance coaching effectiveness and promote overall well-being. The profiles of coaches exhibited a broad range of coaching backgrounds, including various age groups, genders, and years of experience. The evaluation of athletes' physical characteristics, including speed, agility, core strength, and leaping ability, was carried out, uncovering notable variations in coaches' evaluations of athletes' speed across different age categories. Nevertheless, there were no notable disparities observed with regards to any physical characteristics. Furthermore, an evaluation was conducted to assess the psychological attributes and abilities of players, such as visualization, relaxation, attentional focus, anxiety management, self-confidence, and motivation towards athletic success. The findings revealed that there were no notable variations based on the age, gender, or years of experience of the coaches. Furthermore, the research has successfully proven a noteworthy correlation between the physical features and psychological characteristics and talents of players, thereby emphasizing the interdependence of these dimensions within the realm of coaching. Therefore, it is suggested that a comprehensive wellness program be implemented for basketball coaches, with a primary focus on strengthening coaching efficacy. This can be achieved by developing coaches' understanding and proficiency in analyzing and enhancing players' physical features, as well as their psychological traits and skills. The program integrates a range of tactics, including scheduled training sessions, workshops, and mentorship opportunities, with the aim of addressing multiple dimensions of coaching well-being. Through the implementation of this program, basketball coaches have the opportunity to enhance their coaching capabilities and make a positive impact on player development and team success. This program underscores the significance of continuous support and development for coaches in fostering the physical and psychological growth of athletes in the realm of basketball.

Keywords: Speed Agility; Core Strength; Leaping Ability; Psychological Characteristics; Ability to Visualize; Ability to Relax; Ability to Focus Attention; Ability to Cope with Anxiety; Self-Confidence; Motivating Athletic Achievement.

1. Introduction

Other terms this study focuses on are core strength and leaping abilities as vital prerequisites for many different sports, including basketball. It helps to establish a good posture and allows one to carry out certain day-to-day tasks. This functional unit is able to distribute the forces which are generated by the lower or upper limbs. Within the framework of the training methodology, it is possible to distinguish between two distinct forms of training in order to fulfill these two functional requirements: Increasing control and stability of the lumbar spine is the goal of the core stability exercises; the core strength exercises are designed to enable high levels of strength and muscular power to be transferred, engaging both local stabilizers and global mobilizers. To this point, the majority of research conducted on the topic has focused on the efficacy of core stability exercises in athletes or in physically active adults, with a particular emphasis on low back pain. Very little research has been conducted in the sporting world to explain the preventative effect of core stability in young athletes. It is understood that exercises of core stability reduce back pain in sports, and it may increase balance performance in cross-country skiers, as well as performance in jumping, throwing, and sprinting. However, the relationship between core stability and athletic performance is not as well understood, and there are fewer studies on the topic.

In conclusion, future studies will be able to discover the causes, origins, and problems of coaching techniques and styles, as well as how the on-the-spot command of the coaches during the game may influence the performance of the players. They are able to recognize the athletes' training needs and concerns, as well as their own weaknesses and strengths, and design practical interventions for meaningful coaching styles, coaching interventions, and programs. As a result, they are able to set goals that are both meaningful and realistic.

2. Organization of the Text

2.1. The Terms of the Psychological Characteristics of Basketball Players

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In terms of the psychological characteristics of basketball players, some terms are identified as variables.

1) The first of which is visualization in basketball.
2) The second is the ability to relax.
3) The third is the ability to focus.
4) Fourth is coping with anxiety.
5) The fifth is self-confidence.
6) The last one is respect for others.

2.2. Statement of the Problem

This research aims to assess the physical attributes and psychological characteristics of basketball players towards a wellness program for basketball players. Specifically, this study sought answers to the following questions:

2.2.1 What is the profile of the respondents in terms of:
- Age;
- Sex;
- years of experience?

2.2.2 What is the assessment of the basketball coaches of the players' physical attributes in terms of:
- Speed
- Agility
- Core strength
- Leaping ability

2.2.3 What is the assessment of the coaches of the players' psychological characteristics and skills in terms of:
- Ability to visualize
- Ability to relax
- Ability to focus attention
- Ability to cope with anxiety
- Self-confidence
- Motivating athletic achievement

2.2.4 Is there a significant difference in the assessment of the basketball coaches of the players' physical attributes when they are grouped according to profile?

2.2.5 Is there a significant difference in the assessment of the coaches of the players' psychological characteristics and skills when they are grouped according to profile?

2.2.6 Is there a significant relationship in the assessment of the basketball coaches of the players' physical attributes and psychological characteristics and skills?

2.2.7 Based on the results of the study, what wellness program can be designed to improve the wholeness of basketball players?

2.3. Hypotheses:

H01: There is no significant difference in the assessment of the basketball coaches of the players' physical attributes when they are grouped according to profile.

H02: There is no significant difference in the assessment of the coaches of the players' psychological characteristics and skills when they are grouped according to profile.

H03: There is no significant relationship in the assessment of the basketball coaches of the players’ physical attributes and psychological characteristics and skills.

3. Literature References

Table 1. Reliability Measurement (Cronbach’s Alpha) for Players’ Physical Attribute

<table>
<thead>
<tr>
<th>Construct</th>
<th>Cronbach’s Alpha</th>
<th>No. of Item/s Deleted</th>
<th>No. of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>0.90</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Agility</td>
<td>0.91</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Core Strength</td>
<td>0.87</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Leaping Ability</td>
<td>0.91</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

Several things contribute to an athlete's success or failure. Athlete success may be attributed to a combination of technical, tactical, mental, physical, and psychological abilities. Mental, physical, and psychological preparations account for at least half of an athlete's overall success in sports, and in some disciplines, like golf, tennis, and figure skating, it may account for as much as 90 percent. There has been a quick and highly dramatic development in the application of self-efficacy intervention toward the success that should be accomplished among the members. Anxiety and tactical performance metrics are also strongly affected by other psychological skills, such as motivation. As a consequence, athletes' performance depends in large part on their ability to develop and use psychological abilities throughout training (Menegassi et al., 2018). Moreover, Ntoumanis's (2001) research on motivation demonstrates that, from the vantage point of psychological abilities prior to a game, there is no difference between solo sports and team sports. Apart from the overarching explanation, it's very evident that any research into basketball's positional distinctions implies vastly varied psychological talents for each player (Pion et al., 2018). Every position on the court requires a diverse set of skills from basketball players. Motivation, self-confidence, self-efficacy, and visualization are some of the conceivably-identified psychological talents in connection to the many facets of the playing position. After that, aggression, prudence, interpersonal passivity, low positive mood, and inefficiency change are looked into depending on a player's location on the pitch (Tayari, Kamkary, Roohi, & Shokrzade, 2012). Contrary to what was observed in the literature study of basketball psychology and playing position, research found that the psychological abilities required for each position in basketball differed significantly. Consequently, the purpose of the study is to determine whether or not, and to what extent, basketball players in different positions possess psychological talents. Athletes of all skill levels who are committed to excelling are increasingly realizing that their mental health and psychological processes are crucial to maintaining peak performance over the long haul. Indeed, "physical training and exercise are not sufficient to thrive in competition, the
athlete must have their mind ideally tuned for the task (Cappuccio, 2018).

Table 2. Reliability Measurement (Cronbach’s Alpha) for Players’ Psychological Characteristics

<table>
<thead>
<tr>
<th>Construct</th>
<th>Cronbach’s Alpha</th>
<th>No. of Item/s Deleted</th>
<th>No. of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to Visualize</td>
<td>0.82</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Ability to Relax</td>
<td>0.89</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Ability to Focus Attention</td>
<td>0.91</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Ability to Cope with Anxiety</td>
<td>0.89</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Self-Confidence</td>
<td>0.90</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Motivating Athletic Achievement</td>
<td>0.90</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 1 and 2 presents the reliability measurement, particularly the Cronbach’s alpha of the scales, players’ physical attribute that composed of speed, agility, core strength, and leaping ability domains as well players’ psychological characteristics which will be measured using ability to visualize, ability to relax, ability to focus attention, ability to cope with anxiety, self-confidence and motivating athletic achievement domains. Cronbach's alpha, abbreviated as CA, is a statistic used to assess construct reliability or internal consistency (Roldan & Sanchez-Franco, 2012; Kock, 2015). For Cronbach's alpha to be able to determine whether or not a measurement is reliable, the value of the measurement being analyzed must be equal to or greater than 0.70 (Fornell & Larcker, 1981; Nunnally, 1978). The analysis of the data showed that all of the constructs satisfied the criterion for reliability and were considered to be good items with good internal consistency based on CA values ranging between 0.87 and 0.91 for players’ physical attribute and between 0.82 and 0.91 for players’ psychological characteristics.

4. Conclusion

1. The age profile of the respondents in this study consisted of a heterogeneous sample of basketball coaches spanning different age ranges. This diversity in age groups may introduce changes in coaching methodologies and evaluations of players, hence potentially impacting the techniques employed for player development.

2. The coaches displayed varying evaluations of the physical attributes of the players, including but not limited to their speed, agility, core strength, and leaping ability. This highlights the significance of effective communication between coaches and players in order to establish mutual understanding and align expectations and objectives related to player development.

3. The evaluation of players’ psychological characteristics and skills was subject to varying perspectives among coaches. These perspectives encompassed the players’ capacity for visualization, relaxation, attentional focus, anxiety management, self-confidence display, and motivation towards athletic success. Customized advice and support may be required to effectively address these discrepancies and bolster players' psychological characteristics.

4. The study examined the impact of coaches’ age on the assessment of physical attributes, specifically focusing on the perception of player speed. Results indicated that coaches aged 25-26 and above tended to see their players as faster in comparison to coaches aged 45 and above. The observed disparity in age underscores the possibility for intergenerational mentorship and the exchange of knowledge within the coaching profession.

5. The analysis of coaches' evaluations of players' psychological features and skills, as categorized by age, sex, and coaching experience, did not reveal any notable disparities. This implies the necessity of implementing standardized coaching tactics in order to improve the mental qualities of athletes, irrespective of the coach's background or profile.

6. The findings of the study indicate a significant and positive correlation between the evaluations made by coaches regarding the physical attributes of players, such as speed, agility, core strength, and leaping ability, and their psychological characteristics and skills, including the ability to visualize, relax, focus attention, cope with anxiety, exhibit self-confidence, and enhance athletic achievement. It is imperative for coaches to acknowledge the comprehensive aspect of player development, prioritizing the enhancement of both physical and psychological traits in order to maximize players’ performance and foster their all-encompassing growth.

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References


