EDITORIAL BOARD

Chief Editor
Prof. Rajesh Kumar, India

Editors
Prof. Syed Ibrahim, Saudi Arabia
Prof. L.B. Laxmikanth Rathod, India

Associate Editors
Prof. P. Venkat Reddy, India
Prof. J. Prabhakar Rao, India
Prof. Quadri Syed Javeed, India

Members
Prof. Lee Jong Young, Korea
Prof. Henry C. Daut, Philippines
Prof. Ma. Rosita Ampoyas-Hernani, Philippines
Dr. Vangie Boto-Montillano, Philippines
Prof. Erika Zemkova, Slovokia
Dr. Lila Sabbaghian Rad, Iran
Prof. Bakthiari Chowdhary, India
Dr. Lim Boon Hooi, Malaysia
Dr. Le Duc Chuong, Vietnam
Dr. Vu Viet Bao, Vietnam
Dr. Nguyen Tra Giang, Vietnam
Dr. Marisa P. Na Nongkhai, Thailand

Mr. Chenlei, China
M.K.A. Anoma Rathnayaka, Srilanka
Prof. G.L. Khanna, India
Prof. V. Satyanarayana, India
Dr. Bharath Z. Patel, India
Dr. M.S. Pasodi, India
Mr. Y. Emmanuel Shashi Kumar, India
Prof. B. Sunil Kumar, India
Prof. K. Deepa, India
Dr. C. Veerender, India
Dr. Rina Poonia, India
Dr. G. Shyam Mohan Reddy, India

ABOUT THE JOURNAL


International Journal of Health, Physical Education and Computer Science in Sports is multidisciplinary peer reviewed journal, mainly publishes original research articles on Health, Physical Education and Computer Science in Sports, including applied papers on sports sciences and sports engineering, computer and information, health managements, sports medicine etc. The International Journal of Health, Physical Education and Computer Science in sports is an open access and print International journal devoted to the promotion of health, fitness, physical Education and computer sciences involved in sports. It also provides an International forum for the communication and evaluation of data, methods and findings in Health, Physical education and Computer science in sports. The Journal publishes original research papers and all manuscripts are peer review. Index Journal of Directory of Research Journal Indexing and J-Gate etc. The Indian Federation of Computer Science in Sports has been set up the objectives of Dissemination of scientific knowledge concerning computer science in sport and Physical Education. Providing a forum for the exchange of ideas among the Physical Educationists, Coaches, Sports Experts Etc. It is a Peer Reviewed (Refereed) International Research Journal.

Publisher
Indian Federation of Computer Science in sports, www.ijhpecss.org and www.ifcss.in under the auspices of International Association of Computer Science in sports.
E-mail: rajesh2sports@gmail.com
CONTENTS

Research Articles

Youth empowerment project and service delivery in the case of the University of Gondar youths’ development center
Abiot Kassaw ................................................................................................................................. 1

A survey study on the role of psychological variables on the performance of football players: In case of selected Ethiopian premier league football clubs
Abreham Goshu, Dessalegn Wase, Habtamu Feyisa ....................................................................... 5

Effect of yogasanas, pranayama, and meditation on breath-holding time of high schoolgirls
Deepa Jahagirdar .............................................................................................................................. 11

A study of achievement motivation among male kho-kho players
Shantharaju ........................................................................................................................................ 14

Anthropometric profile of volleyball players at different level of contests: In reference to South Gondar woredas team and project players
Ephrem Tamrat Desalegn, Addisalem Mihret Belete .................................................................... 18

Evaluating the effectiveness of sports sponsorship among football fans in Ethiopia
Tarekegn Girma .................................................................................................................................... 22

Players physiological qualities for the selection process of the 1st and 2nd division football clubs in Ethiopia
Eyasu Merhatsidk Gebreegziabher .................................................................................................... 26

A study on influence of yoga on student’s life
Mohd Akhter Ali, M. Kamraju, Sanja Devi, P. Manisha ................................................................ 30

Performance and achievement of Mr. Zameer Ahmed Khan in the field of Volleyball
Syedyunus Dharwad .......................................................................................................................... 33

Physical fitness traits of junior Volleyball players in West Gojjam, Ethiopia
Demissie Gashu Walle, A. Kaleemulla, Zelalem Melkamu .................................................................. 39

Configuration of mind frame through motivational techniques in sports: A review
Kariga Anitha, L. B. Laxmikanth Rathod ............................................................................................ 43

Psychological preparation for enhancing the performance in sports and games
Rajesh Kumar ...................................................................................................................................... 45
Importance of sports psychology in sports and games
S. Chandrashekar Goud, B. Sunil Kumar, K. Deepla

A study of the hurdles affecting sports in secondary schools of Punjab, Pakistan
Mehwish D/O Manzoor Ahmad

Health status and lifestyle habits of college freshmen students: Basis for a proposed intervention program
Jonathan Jeffrey B. Bellen, Rhene A. Camarador

Physical fitness habits as a strategy to reduce absenteeism
Vincent B. Esguerra, Ma. Rosita Ampoyas-Hernani, Amparo Leonila F. Esguerra

A comparative study on strength endurance and cardiovascular endurance of female athletes
D. H. Shailesh Kumar, T. Keshava Murthy

Yoga as a present and future in India
Bharat Z. Patel
INTRODUCTION

As one of the vital issues, empowerment of youths is a very crucial for the progression and improvement of countries all over the world in general and specifically for youth’s self-development, participation in productive activities, control over their own lives, and people surrounding them and their family. In line with this, Ethiopia has formulated youth-focused policy as “The Ethiopian National Youth Policy in 2004 with the vision to create an empowered young generation with democratic skills, and ideas, who is equipped with knowledge and professional skills, and gets organized and built on ethical integrity.” To achieve these goals institutions like higher education institutions take community services as one of their missions. Similarly, University of Gondar plays a key role in community lives and the youth center at Gondar city administration is an exemplary. Structure of organization, skilled and committed personal and service delivery systems are the major factors which hinder the effectiveness of youth’s empowerment centers to give its service to the fullest capacity. Service delivery is the provision of comprehensive and coordinated services to people in need. Human service delivery is complex in contemporary world, with high community expectations, competing demands and often delivered under fiscal constraints. United Nations (1996) identified fields of action that is needed internationally as education, employment, health, environment, leisure-time activities, girls, and young women, and effective participation of youth in the life of society and in decision-making, in which most of them are youth services. The youth services is part of group services that make up well-being, play key role in life’s of young people and provides opportunities to participate in ranges of activities that are beneficial to personal, social, and educational well-being (Bond, 2010). Youth services are
also part of youth development that is about enabling young people to receive education, be healthy, have access to decent employment, and gain civic and political empowerment. A high youth development environment should guarantee young people access to these needs and enable young people to develop their capabilities and full potential (Common Wealth, 2013). In line with this, University of Gondar youth center is established to empower youth’s of the Gondar city and surrounds as one project of reaching the community. However, the intended goals to contribute to the target groups’ need improvement in both qualities of service delivery and range of inclusions of the beneficiaries. As a member of the organization and project implementer, the researcher did this assessment for the betterment of the center to address its goal to the fullest capacity. Therefore, the researcher was try to assess the relevance of the current organizational structure, system of service deliveries and controlling mechanisms, inclusion of services, and suitability of the place for variety of range of services.

**General Objective of the Study**

The general objective of this study is to assess the appearance of the youth empowerment project and its service delivery status of the University of Gondar youth’s center at Gondar city administration.

**Specific Objectives of the Study**

The objectives of the study are as follows:

- To assess the wide-range performance of youth empowerment projects in the youth center of the University of Gondar
- To describe the services being provided by the University of Gondar youth’s center
- To identify activities that youth might suggest for improvement of services delivery
- To identify youths benefits from the services being provided by the center.

**MATERIALS AND METHODOLOGY**

The study was conducted at University of Gondar youth’s center in Gondar city administration. A qualitative single instrumental case study approach was used. A purposive sampling technique was utilized. The researcher has included ten in-depth interviewee participants, eight key informants, and two focus group discussions in the study. Data were analyzed thematically using cross case analysis qualitatively. During analysis, the researcher ensured that the data were transparent, understandable to the reader, and trustworthy using multiple data collection methods and data triangulation.

**RESULTS AND DISCUSSION**

The current study found out that when youth spend their time at the youth center by engaging in recreational and sports activities, they may have less probability to be engaged in addiction and deviant behavior. This is strongly fitted with the evidence in the literature of the study by Omboto et al. (2013) found that recreational activities will reduce crimes committed out of excitement games because engaging in sports and other activities will leave them with no time for destructive activities. This implies that the more youth are engaged in recreational activities, the less probability youth have to be involved in crime or misbehaviors. At youth centers, young people value the non-health benefits, including the availability of recreational facilities, prevention of idleness, building of confidence, improving interpersonal communication skills, vocational training, and facilitation of career progression. This strongly fitted with the study by Godia et al. (2014). At youth centers, young people value, the non-health benefits, includes availability of recreational facilities, prevention of idleness, building of confidence, improving interpersonal communication skills, vocational training, and facilitation of career progression. The current study found out that youth have been presenting their complaints because they were unhappy with service provision in the youth center due to wrong organizational structure and less skilled and less committed personal in the center. As a result, they have a rough relationship with some staff members of the center. In line with this, research conducted by Jili (2012) on the perception of youth on services delivery indicates that poor services delivery and unhappy job opportunities were the main reasons for protest. From this discussion, it is noted that when youth are unsatisfied with service provision, it may lead them to conflict. Even though there are clinical services in the youth center, most of them are not work effectively in the youth center. In line with this, research conducted by Selamawit (2015), on sexual reproductive health indicates that sexual reproductive health in youth center is not effective as a result of poor communication. From this discussion, it is noted that reproductive sexual reproductive health in the youth center is not effective. The current study found that empowerment activities include trainings, academic practices, information, free condom distribution, free hall services to youth to do on their talents, constructing youth center intended for youth behavioral change, and existence of some recreational materials and places in the center for youth refreshment. The training include life skill trainings which focused on gender, how to create job, computer skill development, how to handle maths, saving, knowing personal skills, and promoting active participation, training on HIV/AIDS transmission and ways of protection, leadership, volunteerism, peer education, and awareness how to use condom effectively. According to the participants of the study, youth have been benefited from the training in different ways; become interactive, develop self-confidence, and communication skill and entered into career progression as a result of participation are given in youth center. This in line with research conducted by Tedla (2014) reveals that youth development program has contributed to improve
The level of program participants in all elements of life skill and also program participants in community services come first followed by youth at education program and entertainment program. The research pointed out that the youth association is the second most important influencing body on the life skill development of the youths.

The study also found that youths want place to discuss their own issue and to train themselves in that place that is the reason youth go to the youth center. This persists to the study conducted by check way and Gutierrez (2006) as cited in Assefa (2011), youth participation is the active and meaningful involvement of young people in all stages of program decision-making, including planning, implementation, monitoring, and evaluation. Give youth space to discuss their own issues and participation. They often still need time to define their own role as a youth, youth group in the partnership. The whole organization needs to understand and commit to youth-adult partnerships.

**CONCLUSION**

The study was conducted with the objective of assessing empowerment project; its implementation and implication for youth well-being: The case of the University of Gondar youths’ center. The youth empowerments’ implication for their social welfare, economic benefit, and health were assessed. The qualitative research design was used. The study participants were selected using non-probability method; purposive sampling was employed to select study participants, youth interviewees, and key informants. Youths were selected by dividing activities in the center into four main categories. Interview guideline was used to generate data from youth interviewees and key informants, and observation was also conducted by the use of the observation checklist to substantiate data from interviews. The data obtained were analyzed thematically based on the study objectives and were discussed in line with literature related to youth empowerment, the fundamental assumptions of the Positive Youth Development Model and Project Management Landscapes.

The findings indicated that the youth center has something to do with youth empowerment. The first contribution is in terms of social capital. It contributes more in terms of building good social relationships both among them and with the wider society. Through participation, the youth respondents felt that they learned new social skills and developed interpersonal relationship skills. Other implication is in terms of economic and health dimensions. Though minimal, health and economic implications of the empowerment process is also considered. The study found negligible repercussions of the empowerment processes on the economic livelihood. Empowerment on their health dimension is somehow good in a relative way. Major challenges of the center were also identified as the inability to go in line with the planned procedures, failure to have a detailed plan, inadequacy of regular procedures for the activities to be executed in the center, inability to have regular review meeting with the concerned stakeholders, and failure to consult the major beneficiaries (youths) regularly, among others. The problems related to underemployment, i.e., people in the center like the manager and program and training officer are not the right people to run the activities of their respective positions can also be taken as other challenges of the center. This study generally found that youth empowerment in the youth center creates opportunities for empowerment, though it did not meet up the criterion required by Contemporary Project Management.

**Recommendations**

- According to the findings of the study, the youth center has been providing inadequate services for youth. These services are insufficient when compared with the services of listed in the manual of the youth center. Thus, the youth center should provide services based on the services mentioned in the manual of the youth center.
- According to the finding, the center is not accessible and convenient for youth with disabilities and female youth. Social workers should advocate for these segments of population to address their needs.
- The findings of the study showed that though there is a counseling service in the youth center, it is not providing services for youth. Since counseling is important for youth because they face many challenges at this age. Thus, social workers should be employed for providing this kind of services in its holistic manner.
- The study found out that ICT and library services are available in the center as one of the services given to youth, but these services are not given as expected currently. Thus, the researcher urges the youth center to provide the services adequately for the youth.
- Facilitating recreational places and materials to meet youth need is must because it is important to prevent youth from practicing unwanted behavior. The study indicated that when they are busy on recreation places, they have no time to experience destructive things. Thus, this kind of service should be arranged and facilitated youth by the youth center.
- The findings of the study stressed that there is a lack of awareness about the youth center because the community has negative views towards the youth center. Thus, to overcome this problem, concerned bodies should provide awareness creation about the benefits of the youth center.
- Further research is needed on this segment of population. In the way of doing this study, the researcher face problem related to literature as a result of no enough research on youth in general and youth center service delivery in particular.
- The researcher found that youth services are unfulfilled and youth fired of the unfulfilled services and report cases...
repeatedly, but the issue still not solved, youth still not attention, and convenient place from the top management system. Young people who live with disability are not benefited. Because of the youth center is not convenient for them in terms of materials and place of training.

- Consulting with the city administration, the university should have another site for the center to give a wide range of services for all youths as the researcher feels the current arena is not comfortable as it is surrounded by churches and drug consumption houses.
- The area is not green and it is very narrow to attract youths.

REFERENCES

32. Wong N. They see us as resource: The role of a community-based youth center in supporting the academic lives of low-income Chinese American youth. Anthropol Educ Q 2008;39:181-204.
A survey study on the role of psychological variables on the performance of football players: In case of selected Ethiopian premier league football clubs

Abreham Goshu, Dessalegn Wase, Habtamu Feyisa

Department of Sport Science, College of Natural Sciences, Addis Ababa University, Addis Ababa, Ethiopia

ABSTRACT

The purpose of this study was to investigate the role of psychological variables on the performance of male football players in case of selected Ethiopian premier league clubs. A descriptive survey research method was employed to investigate the problem. The target population in the study was selected male players who were participating in 2018/2019 tournament of the Ethiopian premier league such as St. Georges M.F.C, Ethiopian Coffee M.F.C, Defense M.F.C, Adama M.F.C, and Hawassa M.F.C. From the total 128 players and 15 coaches, a comprehensive sample of 75 players and ten coaches were taken in the study. The data collection instruments designed for the studies were questionnaires, interviews, observation, and document analysis. The questionnaires were prepared for the male players and the coaches. A structured interview was conducted for the coaches. Using a checklist observation was carried on 3 times during training sessions at the training centers. Some documents were examined, which describe the annual plan and training session. The data collected from 75 male and ten coaches through the questionnaires and observation checklist were organized and analyzed using descriptive statistics such as tables, frequencies, percentages, and graphs. The data obtained from the interview and document analysis were qualitatively analyzed in words and were triangulated with the responses of the questionnaires. The findings of the study displayed that half of the coaches plan psychological training in the annual training plan. However, the coaches do not implement effectively in the training session, as well as the coaches do not follow the scientific method in their implementation of psychological variables. At last psychological variable (motivation, self-confidence, and team cohesion) results indicate that the variables are the challenge of players in the training and competition. These findings will be useful to coaches and players of the premier league clubs and enable to implement psychological training effectively in line with fitness training to improve the quality performance of players.

Keywords: Football, Motivation, Performance, Self-confidence and team cohesion

BACKGROUND

In the past 15 years, Applied Sport Psychology has shown great and significant development at all levels of sport discipline. In those years, numerous athletes and coaches at all levels of competition utilized results of scientific studies which reported the importance of mental preparation and positive effects of mental preparation on personal and performance characteristics of elite athletes (Gould et al., 1999). Practicing psychological variables along with physical practices play an important role in enhancing the player’s preparedness such that psychological variables help the athlete to not only enjoy more from sport experience but also to perform the sport activity in a more desirable way and achieve sport successes.

Sport has become a popular past time among the people. Above all, interest in football has been growing in the country over the years. The rapidly increasing popularity of football has also need a demand of excellent performance. In any sports competition, an individual athlete or a team would participate targeting better performance for achieving successfully in the team. The likely success of an athlete or a team is the result of better preparation and hard efforts (Tenenbaum and Eklund, 2007).

Today, sport psychologists are very frequently employed in professional sport to meet the needs arising in this area. They help athletes to learn psychological variables. According to
Veale (2011) stated that mental preparation is the learning and implementation of traditional cognitive-behavioral techniques “with the objective of assisting sports participants in the development of mental skills to achieve performance success and personal well-being.” The importance of mental preparation within football settings tried to be approved by studies related with profile of elite athletes identified numerous psychological variables and characteristics related to success.

The role of psychological training on athletic performance has long been of interest to athletes, coaches, sport psychologists, and sports scientists. Successful coaches emphasize the psychological preparedness of athletes (Orlick and Partington, 1988; Bacon, 1989). In general, it is recognized that psychological training plays a crucial importance in the performance enhancement of football players. Thus, with this substantial information that the researcher was initiated to carry out research undertaken, which focuses on the role of psychological variables on the performance of Ethiopian male football premier league players. To investigate this issue, a number of premier league male players and coaches were taken from clubs.

**Statement of the Problem**

Psychological training should be an integral part of an athlete’s holistic training process, carried out in conjunction with other training elements (Adling and Bangar, 2017). It is quite evident that drawing up and implementing of the training plan is an essential tool to optimally improve football performance. This is best accomplished by a collaborative effort among the coach, the sport psychologist and the players; however, a knowledgeable and interested coach can learn basic psychological variables and impart them to the players, especially during actual practice. The influence of the mental state on performance is as important as technical and tactical training. This is why it should benefit from the same importance in training programs (Taylor and Wilson, 2005).

To enhance the performance of football player’s role of psychological training, it is essential to optimally develop the potential capacities of the players. Reid et al. (2004) studies show that sport psychology consultants should be ready for everything and by successful results prove how beneficial sport psychology can be McCann (2008). In the football setting, the empathic and compassionate way of working seems to be highly appreciated (Gilbourne and Richardson, 2006).

Many previous studies have focused on the physical training requirements of different game positions. However, physical preparations are not sufficient to allow high performances and players require specific mental attributes. In today’s high-level football performance, being physically gifted is not enough to succeed at the highest level. Achieving excellence in soccer is a complex inquiry that requires an accurate combination of motor and mental skills. High levels of stress or low coping skills, whether on or off the field, can cause alterations in cognitive appraisal and focus that can interfere with physical performance through alterations in muscular tension and physical coordination. As a result, it is important that all football team coaches are expected to prepare and implement psychological training plans to attain their desired goals.

Based on the current poor performance of Ethiopian male football premier league, the researcher was try to assess and answer the question on the role of psychological variables on the performance of football players such as motivation, self-confidence, and team cohesion.

**Objectives of the Study**

**General objective**

The general objective of the study was to investigate the role of psychological variables on the performance of Ethiopian premier league football players.

**Specific objectives**

The specific objectives of the study were as follows:

1. To assess the knowledge of players and coaches on the use of psychological skills training.
2. To examine the annual training plan of Ethiopian premier league football clubs.
3. To assess the role of psychological variables in enhancing players performance.
4. To investigate the role of football coaches in using psychological variables for the enhancement of players performance.

**Significance of the Research**

This study may have the following significance:

- Provide reliable information for the premier league coaches on the use of psychological variables that enhance the performance of football players.
- It may create awareness and common understanding about the role of psychological variables enhancing football performance.
- Provides guidance to coaches, players, football managers, and practitioners on creation of appropriate quality training for the improvement of player’s performance.
- Serve as a springboard for other researchers who have interest to conduct researches on similar area.

**METHODS**

**Research Design**

The design employed in this research is descriptive method. Under descriptive research, survey method is also utilized to assess the role of psychological variables on the performance of football players. More importantly, the study applies both quantitative and qualitative methods (mixed approach) to
describe and analyze the information that has been obtained using different data collection instruments. The researcher used both primary and secondary sources of data. The researcher obtains primary sources from coaches and players. Secondary sources of data were gathered from documents, books, journals, web, and other research papers that are related to the study. To gather data, the researcher employed four types of data collecting tools. These are questionnaires, interviews, document analysis, and observation checklist. These instruments were helpful in triangulating the responses obtained from the respondents. To insure the appropriateness of the items, a pilot study was carried out in one selected Ethiopian premier league male football club for 15 players and two coaches who were selected for the pilot study. Based on the response obtained from the pilot study, correction and revision made to avoid ambiguity of questionnaire items and to maintain the validity and reliability of questions and language coherence. After that, the questionnaire was distributed for selected football clubs.

Pilot Study
To insure the appropriateness of the items, a pilot study was carried out in one selected Ethiopian premier league male football club for 15 players and two coaches who were selected for the pilot study. Based on the response obtained from the pilot study, correction and revision made to avoid ambiguity of questionnaire items and to maintain the validity and reliability of questions and language coherence. After that, the questionnaire was distributed for selected football clubs.

Population of the Study
According to the data obtained from Ethiopian Football Federation, there are 16 male football premier league club participants in 2011 E.C. From those, this study was focused on five selected Ethiopian male premier league football clubs. Those clubs are Ethiopian coffee M.F.C, three coaches and 26 players; St. Gorge M.F.C has three coaches and 27 players; Ethiopian defense M.F.C has three coaches and 24 players; Adama M.F.C has three coaches and 25 players; and Hawassa M.F.C has three coaches and 25 players. Totally from five clubs, 15 coaches and 128 players were found.

Sample and Sampling Techniques
Samples from the total population of five clubs for this research, the researcher was selected by using random sampling techniques for players, using a simplified formula provided by Yamane (1967) provided below for each club of total population and coaches were selected by purposive sampling method. According to this from Ethiopian coffee F.C, two coaches and 15 players were selected. Second, from St. George F.C, two coaches and 15 players were selected. Third, from Ethiopian defense F.C, two coaches and 15 players were selected. Fourth, from Adama F.C, two coaches and 15 players were selected for the study and from Hawassa F.C, two coaches and 15 players were selected for the study.

\[ n = \frac{N}{1 + N (e)^2} \]

Where, \( n \) = sample size, \( N \) = population size, \( e \) = level of precision.

The level of precision is the range in which the true value of the population is estimated to be; it is expressed in percentage points (±0.05)².

Procedures of Data Collection
Before developing the instruments, related literature was thoroughly examined and items were prepared in the English language. Second, the leaders of each club, those the researcher randomly selected for the study was approached and asked to assist in the investigation by allowing some of their players and coaches to participate in the study. All clubs indicated a willingness to participate. Then, all of the participants were informed the purpose of the study. Following this, the question items were tested their reliability and conductivity to address the purpose of the study needs to collect data from the participants by making sample groups of the participants. According to the test, players’ English language skill were been limited. So that the questionnaires addressed to the players were translating into their national language (Amharic). Then, it was distributed for the sample selected population. At last, after the items collected from the players and coaches, the analyses were continued.

Method of Data Analysis
Data analysis is the process systematically searching, arranging, and organizing the questionnaire, interview, observation, and other documents that collected for the intended study. The data collected. The organized data were presented and analyzed quantitatively by the methods of descriptive statistics such as tables, frequency, percentage, and graphs. The analyzed data were then discussed and interpreted. Interview and document analysis were analyzed qualitatively. Finally, summary, conclusion, and recommendations were drawn from interpreted data.

RESULTS AND DISCUSSION
This study was aimed to investigate the role of psychological variables on the performance of Ethiopian premier league male football players in five selected clubs with other different specific objectives to be addressed. Thus, the researcher drafted problems of the basic research questions and identified the research gap that was not well addressed with other previous studies. Considering the significance of the research and the wide application of the findings obtained from the study, the investigators planned to conduct this research study.
The results obtained from the analysis and discussions done in described the findings and results of the study possibly answered based on the basic research questions as follows:

1. Do coaches and players have the knowledge on the use of psychological skill training in enhancing their performance?

The result of the analysis which was obtained from interview, field observation, and document analysis shows that coaches and players do not have enough knowledge on:

- The use of mental skills techniques in training and competitions
- Preparation of psychological training program in preparatory, competition, and transition period
- Planning mental training based on the interest of players and coaches
- Integrating psychological training in the training session.

2. Does psychological training is implemented effectively in Ethiopian premier league football clubs?

The result of the analysis, which was obtained from the observation checklist and questionnaires of both coaches and players, shows that all clubs rarely implement psychological training. In spite of having a key role, the coaches were not early implement psychological skills foundation that will facilitate future athletic success.

3. To what extent the players use psychological variables (motivation, self-confidence, and team cohesion) in their training and competition to enhance their performance?

To explore the role of internal and external specification revealed in the questionnaires of coaches and players, motivation has a great contribution to determine to what extent the players were ready to perform better for their team. The implication of motivation on the clubs indicates that the majority of the football players responded that “they do not agree on motivational role” since it is not implemented effectively in Ethiopian premier league male football clubs.

The other psychological variable was the other that has been given for the player respondents and the same as to coaches respondents is self-confidence. Most of the respondents disagreed that “as they have self-confidence and they are not sure that self-confidence is vital for withstanding and recovering from setbacks such as a defeat or a poor performance.”

On the other hand, the variables related to the performance of the trainee also indicated that they clearly showed how those variables determine the performance of the players as well as the team in general. The factors determined the social cohesion and task cohesion indicated that “the Ethiopian premier league male football performance was significantly affected with those determinants.”

Nieuwenhuis et al. (2002) reported that psychological variables (factors) play an increasing role in the contemporary game of soccer by influencing the level of performance and further stated that coaches through the knowledge of the contribution of psychological constructs in the game of soccer can identify the weakness in the psychological build-up of a player which can help him provide the basic counseling necessary for the player to achieve his maximum performance. The aim of this study was to investigate the role of psychological variables on the performance of Ethiopian premier league male football players. Thus, with the separate different specific objectives, the researcher has been intended to answer the basic research questions. Hence, to answer the basic research questions and addresses, the objectives, questionnaires, interview, observation, and document analysis were selected for the purpose of the study.

The variables which selected to measure the internal motivation of the players indicated that “players in the premier league clubs are not intrinsically motivated.” Thus, the factors listed under internal motivation affects the player’s performance improvement. According to Ryan and Deci (2012) intrinsically motivated players will keep on practicing despite setbacks and are motivated to make decisions that support developing athletic performances.

The other categories of the variables selected as the measure of players’ performance are those measured as the external motivations. The summary results seen from players and coaches respondent indicates external motivation is one challenge on the performance of the premier league players. These results show that players are not extrinsically motivated by the clubs. Parker (2004) cited external motivation takes into account the different behaviors that occur for instrumental value of completing task and will not only improve physical performance, it will also assist in the learning of physical skills, which in turn will affect the quality performance of players.

The last psychological variable that has been given for the player’s respondents as well as the coaches’ respondents was team cohesion. Based on the questions distributed for them, most of the respondents disagreed on that football players in premier league clubs are socially cohesive. Bray and Whaley
(2001) study revealed that high levels of cohesion increased performance by producing higher levels of effort. In some extent, task cohesion is a challenge on player’s performance in the premier league clubs, it indicates that “the players in the premier league clubs are not cohesive in task.” Task cohesion also includes a practical assessment of the level of athlete and team coordinated efforts that show to what extent each team and its members achieve its goals (Carron et al., 1985).

This result can be considered an encouraging finding because PST literature has shown a positive influence of these techniques on football players’ performance (e.g., Johnson et al., 2004; Munroe et al., 2012; Thelwell et al., 2006; 2010). By contrast, participants highlighted a lack of use of psychological variables and this can be considered a cause of concern. However, in spite of the significant role of psychological variables on the successful performance of the football game, psychological variables do not implement effectively in the Ethiopian premier league male football clubs.

**CONCLUSIONS AND FUTURE PERSPECTIVES**

**Conclusion**

The objective of this study was to find out the implementation of psychological variables on the performance of Ethiopian men’s premier league players in selected clubs. To this end, data were collected from 85 participants (players and coaches) of five premier league clubs through questionnaires, interview, and document analysis and observation checklist. Data gathered through the questionnaire might have a limitation of English language skill, but the researcher tried to solve the limitation by translation on the national language. In spite of this limitation, the study came up with the following major points:

According to the data gathered through document analysis and interview, half of those selected club coaches draw up (prepare) psychological training in the annual training plan and the rest were not. In this connection, the major reasons for not including the psychological training in annual training are:

- Not having enough knowledge about psychological training
- Due to the contractual stability of coaches in the clubs (joining the club late)
- Miss understanding about the importance of psychological training
- Lack of time.

According to the findings of this study, the premier league player’s self-confidence is below average. Robert and Gould (2001) high levels of self-confidence can enhance emotional state, concentration, goal setting, effort expended, and development of effective competitive strategies. The factors such as feeling confident before an important competition, recovering from loss of confidence, trust themselves in the hardest moments of competition, and losing confidence when important competition draws nearer are the major problems of premier league players.

The coaches’ result also shows that the player’s self-confidence is low. Team cohesion also another variable analyzed in this study. The results indicated as it leads the players not to have social interaction as well. Team task cohesion also another factor affects the performance of the player’s premier league clubs.

In general, based on the data that have been collected from the respondents, saying that almost all of the variables mentioned in this study are the psychological challenge of players’ in the premier league and are not implemented as expected as it can be so that the football coaches in the club have been in one way or other using psychological strategies to enhance the performance of their player both during competition and training.

**Recommendation**

Based on the findings of the study, the following suggestion is forwarded as a means to alleviate the problems encountered in the process of preparing and implementing psychological variables to tackle psychological problems of premier league players to improve their performance.

- As a result of this study shows that the reason why coaches did not include psychological training plan in annual training is not having enough knowledge and misunderstanding about psychological intervention. Therefore, coaches should update themselves through training, prepare psychological skill training in their training program.
- The coaches and clubs should follow the scientific method of implementing psychological variables to improve the performance of Ethiopian premier league male football players.
- It is the coach’s responsibility to provide reward and assist the players to set a goal for themselves.
- The coaches should plan and implement mental skills techniques to boost the self-confidence of players.
- A coach should also promote both type of cohesion (social and task) among the team members by means of assessing at the end of half session.
- A coach should give psychological skill training test every month.
- A coach must be committed to set specific times during or after practice to devote psychological training.
- Sport psychology consultants and other concerned bodies should make sufficient research paper.
• The players should attend each training session with full concentration and try to apply it.
• Players need to develop a positive way of looking at the game during moments of difficulty.
• The federation must pay attention and work on the male premier league clubs coaching staff in line to have a professional sport psychologist.

AUTHORS’ CONTRIBUTIONS

This study was designed and compiled by Abreham Goshu (M.Sc. in Football coaching) as the principal investigator. The development of the basic research questions, identifying the problems, and selecting appropriate statistical models have been done by him. Edition of the overall progress of the work and compiling the research was supported by Dessalegn Wase Mola (M.Sc. in Athletics Coaching) and Habtamu Feyisa (Msc. in Athletics Coaching). Finally, all parts of the research have been read by the researcher and approved for the publication.

ACKNOWLEDGMENTS

We would like to thank Ethiopian premier league football clubs, Addis Ababa University Sport Science. Our deep gratitude was Dr. Tesfaye Asgdom for his sustainable support and technical guidance during this study period.

REFERENCES

The present study aims to determine the effect of yogasanas, pranayama, and meditation on the breath-holding time of high schoolgirls. The sample for the study comprises 80 girls between the ages of 14 and 16 years. The sample was further divided into two groups: (I) Experimental group (40) and (II) control group (40). The subjects of the experimental group went through a yogasanas, pranayama, and meditation training for 12-weeks under the direct supervision of researchers. The control group was engaged in daily routine work. The subjects of both the groups were tested before and after the experimental period of 12-weeks. The data analyzed statistically by applying ANCOVA. The results show that there is a significant change in the breath-holding time as a result of the experimental training. Since the result has revealed that there is a significant difference, the hypothesis is accepted.

**Keywords:** Breath-holding time, Pranayama, Pranayama, Yogasanas

---

**INTRODUCTION**

Yoga is a physical, mental, and spiritual practice aimed at attaining permanent peace within. This practice for permanent inner peace originated in ancient India, and it also belongs to the six schools of Hindu philosophy or six “astika.” Yoga is also considered as a form of exercise due to its physical forms and postures that have physical benefits to the body, and it is also considered as meditation due to the mental and emotional benefits. It gives as well as it is also considered spiritual because it involves getting in touch with your spirit or beyond physical nature. This is why yoga is known as a combination of physical, mental, and spiritual exercise and development or creating a union with your inner self which can benefit life.

The word yoga means “unity” or “oneness” and is derived from the Sanskrit word yuj, which means “to join.” This unity or joining is described in spiritual terms as the union of the individual consciousness with the universal consciousness. On a more practical level, yoga is a means of balancing and harmonizing the body, mind, and emotions. This is done through the practice of asana, pranayama, mudra, bandha, shatkarma, and meditation and must be achieved before a union can take place with the higher reality.

**METHODOLOGY**

The present study aims to determine the effect of yogasanas, pranayama, and meditation on the breath-holding time of high schoolgirls. The sample for the study comprises 80 girls between the ages of 14–16 years. The sample was further divided into two groups: (I) Experimental group (40) and (II) control group (40). The subjects of the experimental group went through a yogasanas, pranayama, and meditation training for 12 weeks under the direct supervision of researchers. The control group was engaged in daily routine work. The subjects of both the groups were tested before and after the experimental period of 12 weeks. The data analyzed statistically by applying ANCOVA. The results show that there is a significant change in the breath-holding time as a result of the experimental training. Since the result has revealed that there is a significant difference, the hypothesis is accepted.
pranayama, and meditation training treatment. Weekly 6 days, i.e., Monday to Saturday, from 7.00 am to 8.00 am for a period of 12 weeks. All the subjects involved in this study were carefully monitored throughout the training program to be away from injuries. They were questioned about their health status throughout the training program. None of them reported any injuries or discomfort. However, muscle soreness appeared in the earlier period of the training program and was reduced in due course.

Table 1 shows that the pre-test means scores of the breath-holding time of the control and experimental groups of high schoolgirls students. It is observed that mean scores of pre-test of the control and experimental groups of high schoolgirls students are 13.5763 and 13.8320, and their standard deviation is 1.39,373 and 1.43,633, respectively. The obtained “F” ratio value is (F = 0.421 1,78, α =0.05) 0.421 at 5% level of significance, which is less than the table value (F = 4.0); hence, the null hypothesis is accepted, it can be concluded that the breath-holding time level between the experimental group and control group found almost similar among the high schoolgirls students.

Further, it is observed that mean scores of post-test of the control and experimental groups of girls high school students are 13.1840 and 14.7353; their standard deviation is 1.17,446 and 1.30,682, respectively. The obtained “F” ratio value is (F = 31.179 1, 78, α = 0.05) 31.179 at 5% level of significance, which is much more than the table value (F = 4.0); hence, the null hypothesis is rejected and the alternative hypothesis is accepted. It can be concluded that there is a significant difference found between the experimental group and control group with respect to the breath-holding time level of girls high school students. This indicates that the breath-holding time level is more among the control group when compared to the experimental group. Finally, it can be concluded that yogasanas, pranayama, and meditation training has made a significant impact on the control of the breath-holding time level of the high schoolgirls students.

The adjusted post-test means scores on the breath-holding time of the control and the experimental groups are 13.241 and 14.685, respectively. The obtained “F” ratio value is (F = 33.821 1, 76, α = 0.05) 33.821 at 5% level of significance.

Table 1: The analysis of covariance for pre-test and post-test on the breath-holding time of the control group and experimental group of high schoolgirls

<table>
<thead>
<tr>
<th>Type of test</th>
<th>Control group</th>
<th>Experimental group</th>
<th>Source of variance</th>
<th>Sum of the squares</th>
<th>df</th>
<th>Mean square</th>
<th>F ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test mean</td>
<td>13.5763</td>
<td>13.8320</td>
<td>Between</td>
<td>1.308</td>
<td>1</td>
<td>1.308</td>
<td>0.421</td>
</tr>
<tr>
<td>SD</td>
<td>1.39373</td>
<td>1.43633</td>
<td>Within</td>
<td>156.215</td>
<td>78</td>
<td>2.003</td>
<td></td>
</tr>
<tr>
<td>Post-test mean</td>
<td>13.1840</td>
<td>14.7353</td>
<td>Between</td>
<td>48.128</td>
<td>1</td>
<td>48.128</td>
<td>31.179</td>
</tr>
<tr>
<td>SD</td>
<td>1.17446</td>
<td>1.30682</td>
<td>Within</td>
<td>120.398</td>
<td>78</td>
<td>1.544</td>
<td></td>
</tr>
<tr>
<td>Adjusted post-test mean</td>
<td>13.241</td>
<td>14.685</td>
<td>Between</td>
<td>41.356</td>
<td>1</td>
<td>41.356</td>
<td>33.821</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Within</td>
<td>92.932</td>
<td>76</td>
<td>1.223</td>
<td></td>
</tr>
</tbody>
</table>

*Significance α = 0.05, table value = 4.0

**Figure 1:** The analysis of covariance for pre-test and post-test on the breath-holding time of the control group and experimental group of high schoolgirls
which is much higher than the table value ($F = 4.0$); hence, the null hypothesis is rejected and the alternative hypothesis is accepted. It can be concluded that there is a significant difference that is found between the experimental group and control group with respect to breath-holding time level of high schoolgirls students.

Figure 1 gives a clear picture of the adjusted means of two training groups. Thus, it is inferred that yogasanas, pranayama, and meditation training is more effective in increasing the breath-holding time among the subjects experimental group in comparison to control groups.

**DISCUSSION ON FINDINGS**

**Breath-holding Time**

In this study, it is found that there is a significant difference between pre-test control and experimental group in breath-holding time, but there is a significant difference in the post-test of the control and experimental groups due to 12 weeks of the yogasanas, pranayama, and meditation training program.

The results, by and large, were in conformity with the findings of Singh *et al.*, (2009) Madanmohan *et al.*, (1992), Telles *et al.*, (1991), Rajakumar (2010), Kumar (2015), and Vaibhav Rai (2014).

**CONCLUSIONS**

Result of this study, it was concluded that through the 12 weeks of yogasanas, pranayama, and meditation training of high schoolgirls were significantly improved breath-holding time compared to control group.

**REFERENCES**

- Bhusan L. Yoga; 1994.
A study of achievement motivation among male kho-kho players

Shantharaju

Physical Education Director, Government First Grade College, Chamarajanagar, Karnataka, India

ABSTRACT

The aim of this study was to achieve the purpose of achieving the achievement motivation levels of male kho-kho players and the objectives of comparing the achievement motivation levels of kho-kho players categorized and grouped on the basis of achievement, participation experience and levels, and training age; 94 kho-kho players in the age group of 18–26 years drawn from different registered clubs of Karnataka state during the state kho-kho championship were measured for their achievement motivation levels through achievement motivation scale developed and standardized by Dr. Kamalesh. The subjects were then grouped under different categories, such as high achievement group \((n = 48)\) and low achievement group \((n = 46)\) and low participation group \((n = 46)\) and high participation group \((n = 48)\) and below 5 years of training age \((n = 29)\), between 6 and 10 years of training age \((n = 59)\), and above 10 years of training age \((n = 6)\). Achievement motivation scores that were derived from the subject’s responses to 20 items of the scale represented the data for the present study statistical analysis involved computation of mean and application of \(t\)-test and \(f\)-test (completely randomized design) to find out if any significant differences existed in the mean achievement motivation scores of kho-kho players categorized and prepared.

Keywords: Achievement, Kho-kho, Motivation scale performance, Motivation, Training age

INTRODUCTION

Kho-kho is one such indigenous game which requires certain levels of psychomotor factors on the part of those who play at a competitive level. Players are required to pose’s high level of fitness and proficiency in fundamental skills. The game of kho-kho is as fast as any of the international games or sports. Motivation can affect the selection, intensity, and persistence of an individual’s behavior, which in sport obviously has a strong impact on the quality of an athlete’s performance. An athlete’s motivational level is determined by the interaction of personal factors such as personality, needs, interest, or ability and specific situational factors such as the practice, facilities, type of coach, or the terms win/loss record.\(^1\) Motivation is a process by which an individual is inspired, guided, or coaxed to do something. It is one of the important conditions rather than the central core of life.\(^2\) It is believed that superior athletic performance has benefited from the knowledge of the physiology and biomechanics of human motor activity. However, may coaches and psychologists throughout the world believe that future records will be broken primarily due to increased attention to the psychological parameters of human personality.\(^3\) Sinha tried to analyze some of the factors associated with success and failure in university education. On the basis of examination marks, 185 high achievers and 190 low achievers were tested on Sinha’s anxiety scale, Bihar test of general intelligence, and Saksena’s personality inventory. High achievers were found to be superior in intelligence, better in adjustment, and moderate in level of anxiety.\(^4\) Muthayaa studied motivation with the help of Mccleland’s need achievement test under neutral conditions on a group of 60 adolescent schoolboys. He observed that the mean score on need achievement of the high achievers was greater than that of low achievers, the mean difference being significant beyond 0.01 level.\(^5\)

Hypothesis

- The subjects as a group may have moderate levels of achievement motivation.
- There may not be any significant difference in the achievement motivation levels of high and low achievers.
There may not be any significant difference in the achievement motivation levels and kho-kho players in respect to their levels of participation.

There may not be any significant difference in the achievement motivation levels of kho-kho players in respect to their training age.

**Delimitation**

- The study was delimited to 94 male kho-kho players from three different categories.
- The study was delimited to male kho-kho players of Karnataka state only.
- The study was basically delimited to male kho-kho players of the age groups and who had participated in various tournaments, local, university, state, and national.
- The study was further delimited to assessment of achievement-motivation in relation to, levels of achievement of subjects (high and low achievement groups), levels of participation (high level and low level), and training age (three categories).

**Significance of the Study**

- The results of the study may help sports persons (kho-kho players) in evaluating their achievement motivation levels their abilities and success.
- Knowledge of the results of the study can be useful for players, coaches, and trainers.
- The knowledge of results can be used as motivation techniques by themselves. Because the players know where they stand along the given dimension of achievement motivation.
- The results can be useful for feedback purposes so that the players can themselves evaluate their level of achievement motivation as well as the coaches can make attempts to strengthen and augment motivation levels through psychological training.

**METHODOLOGY**

The subjects for the present study were drawn from various kho-kho clubs of Karnataka state who participated in the state kho-kho championships. The subject drawn for the present study was regular participants in various kho-kho tournaments from local to national level. The subjects were male kho-kho players in the age group 18–26 years.

**Description of the Test**

The sports achievement motivation test developed and standardized by Dr. Kamelesh consists of a series of question numbering 20. Each question or item in the questionnaire has two alternative answers. The subject will have to tick the one that he or she feels is most suited to him or her. This would reveal a response to each item of the questionnaire or scale. All instructions in the questionnaire are very clearly stated, and depending on the response of the subject, the subject would get either zero mark or two marks for an answer to each question. The scoring key has also been given in the manual. A subject answering the questionnaire may get a maximum of 40 marks, as described in the manual. The subject would be graded on the basis of the total number of marks that he would get after answering all the 20 questions. The final score that the subject would get would be considered as the achievement motivation score of each subject. The subjects could also be graded or characterized as high in achievement motivation (31–40 marks), average or moderate in achievement motivation (24–30 marks), and low in achievement motivation (0–23 marks).

**RESULTS AND DISCUSSION**

The data collected were statistically analyzed computing the mean achievement motivation scores and the significance of differences in the mean achievement scores of different categories of subjects was analyzed by applying, t-test and f-test. The statistical analysis of data has revealed the following results that are presented in Tables 1–4.

Table 1 indicates that the mean value of achievement motivation scores of the subjects selected was found to be 27.30. As per the mean scores, the kho-kho players were found to have average achievement motivation scores and hence average or moderate in achievement motivation level. Hence, the hypothesis formulated in the present study was accepted.

Table 2 indicates that the difference in the mean achievement motivation scores of high and low achievement groups was 4.3514. The “t” value obtained was 0.606 with 92° of freedom which was found to be non-significant (P < 0.546). This has revealed that high and low achievers did not differ significantly in their mean achievement scores. Hence, the hypothesis number 2 formulated in the present study was accepted.

Table 3 reveals that high and low participation groups had the mean achievement motivation scores of 26.0417 and 28.5652, respectively. The difference in the mean scores was –2.5236. The “t” value obtained was –2.422 with 92° of freedom which was found to be statistically significant (P < 0.017). The low participation group had significantly higher mean scores (man 28.57) compared to the high participation group (mean, 26.04). The hypothesis number 3 formulated in the present study was rejected.

Table 4 indicates the results of one-way ANOVA. The figures reveal a non-significant difference in the achievement

<table>
<thead>
<tr>
<th>Table 1: Mean achievement motivation scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
</tr>
<tr>
<td>94</td>
</tr>
</tbody>
</table>
motivation scores between the three groups of subjects categorized on the basis of training age. The “F” value of 0.521 with 2 and 91° of freedom is found to be non-significant ($P < 0.596$). The three groups of subjects do not differ significantly in their achievement motivation scores. Therefore, hypothesis number 4 formulated in the present study was accepted.

**The Results Obtained in the Present Study may be Attributed to the following Factors**

The group of subjects selected for the present study was heterogeneous in terms of achievement participation experience and exposure and training age. Heterogeneity in respect of these factors might have contributed to average motivation levels. Because motivation appears to be stronger when goal-seeking is nearer low achievement groups, low participation groups, and low training age groups that might be thinking of higher achievements whereas their counterparts in high achievement groups, high participation groups, and higher training age groups might have achieved all that they wanted and hence might have reached a level of saturation point in respect of motivation.

**This Factor Might Have Influenced Average or Moderate Motivation Levels**

The same factors of heterogeneity and motivation levels of subjects belonging to different groups might have influenced the result of insignificant differences among them. The groups low in achievement and participation and training age will be seeking higher achievement and will be moving up on the motivation scale, and those who have already made achievements may be moving down the motivation scale due to saturation and lack of further motivation. This might have caused similarly in motivation levels among different groups of subjects. A significant difference between participation and high participation groups in mean achievement scores, in favor of low participation groups, may be again due to the fact that low participation groups will be aspiring for participation in higher levels and many competitions (goal-seeking). They will be seeking higher achievements, whereas the high participation group will have already reached such participation exposure, successes, and achievements. Goal seeking will be lesser and hence low motivation levels.

**CONCLUSIONS**

1. The mean achievement motivation scores of the male kho-kho players were found to be 27.30, and therefore, the male kho-kho players were found to have moderate levels of achievement motivation. The hypothesis number 1 formulated in the present study was accepted.
2. There were no significant differences in the mean achievement motivation score of high and low achievers, the hypothesis number 2 formulated in the present study was accepted.
3. There were significant differences in the mean achievement motivation scores of low participation and high participation groups. The low participation group had significantly higher mean scores; hypothesis number 3 formulated in the present study was rejected.
There were no significant difference in the mean achievement motivation scores of kho-kho players grouped under three categories on the basis of training age, the hypothesis number 4 formulated in the present study was accepted.

REFERENCES


Anthropometric profile of volleyball players at different level of contests: In reference to South Gondar woredas team and project players

Ephrem Tamrat Desalegn, Addisalem Mihret Belete

Department of Sport Science, University of Gondar, Gondar, Ethiopia

ABSTRACT

The purpose of this study was to compare the anthropometric profiles of volleyball players at different level of matches (i.e., inter-projects level and inter-clubs level). A sample of 52 subjects, which includes 26 each, inter-project level \( n = 26 \), mean ± SD: Age 16.42 ± 0.47 years, height 162.04 ± 6.14 cm, weight 58.44 ± 4.42 kg, and body mass index [BMI] 18.34 ± 1.86) and inter-club level \( n = 26 \), mean ± SD: Age 21.42 ± 0.46 years, height 171.08 ± 4.14 cm, weight 64.22 ± 4.36 kg, and BMI 21.42 ± 2.18) male volleyball players, was selected for the present study. The purposive sampling technique was used to select the subjects. All the subjects were assessed for height, weight, lengths, circumferences, diameters, and skin-fold thicknesses. An independent samples t-test revealed that inter-club volleyball players had significantly higher height \( (P < 0.05) \), arm length \( (P < 0.05) \), upper leg length \( (P < 0.05) \), and lower leg length \( (P < 0.05) \) as compared to inter-project level volleyball players. The inter-club level volleyball players were also found to have significantly greater elbow diameter \( (P < 0.05) \), shoulder diameter \( (P < 0.05) \), hip diameter \( (P < 0.05) \), knee diameter \( (P < 0.05) \), calf circumference \( (P < 0.05) \), chest circumference \( (P < 0.05) \), upper arm circumference \( (P < 0.05) \), and fore arm circumference \( (P < 0.05) \). Inter-club volleyball players had significantly greater biceps \( (P < 0.05) \), triceps \( (P < 0.05) \), subscapular \( (P < 0.05) \), and suprailliac skin-fold \( (P < 0.05) \) as compared to basketball players.

Keywords: Anthropometric, Club, Contest, Project, Volleyball

INTRODUCTION

Anthropometric characteristics are related to a player’s profile and might be used to predict a player’s success. Anthropometric characteristics of players have been an interest of sports trainers, exercise scientists, physical education, and sport medicine professionals for years and many of them assumed that the practicing players might be expected to exhibited structural and functional characteristics that are specifically favorable for the sport (Milicerowa, 1973). In addition, anthropometric measurements and morphological characteristics play an important role in determining the success of a sportsperson (Wilmore and Costill, 1999 and Keogh, 1999). Volleyball belongs to sport activities, in which anthropometric characteristics of its participants influence the level of sport performance. It was established that volleyball players compared to most other athletes have distinctive anthrop-morphological characteristics (Ercolessi, 1999; Jankovic et al., 1995; and Ugarkovic, 2004). An athlete’s anthropometric characteristics represent important prerequisites for successful participation in any given sport (Gualdi-Russo and Zaccagni, 2001). Body height, being the most characteristic trait of volleyball players, is significantly conditioned genetically (Milicerowa, 1973). Many previous studies have evaluated anthropometric profile of volleyball player (Bandyopadhyya, 2007; Gabbett and Georgieff, 2007; Bayios et al., 2006; Duncan et al., 2006; Gaurav et al., 2010; Hadzic et al., 2012; Petroski et al., 2013; and Gaurav and Singh, 2014). Therefore, the purpose of this study was to compare the anthropometric characteristics of volleyball players at different match level (i.e., between clubs and at club level).

MATERIALS AND METHODS

Subjects

A sample of 52 subjects, which includes 26 each, at club level \( n = 26 \), mean ± SD: age 16.42 ± 0.47 years, height 162.04 ±
6.14 cm, weight 58.44 ± 4.42 kg, and body mass index (BMI) 18.34 ± 1.86) and inter-project level (n = 26, mean ± SD: age 21.42 ± 0.46 years, height 171.08 ± 4.14 cm, weight 64.22 ± 4.36 kg, and BMI 21.42 ± 2.1) male volleyball players, was selected for the present study. The purposive sampling technique was used to select the subjects. The club level subjects were selected from different volleyball clubs of North Gondar and Gondar city administration of Ethiopia, and inter-project level subjects were selected from different projects found in Gondar town.

**Methodology**

The subjects were assessed for circumferences, height, weight, lengths, diameters and skin-fold thickness. Stature was measured using a standardized wall mounting stadiometer (measuring range 200 cm, least count 0.5 cm, MIndiart, New Delhi, India). The body mass was measured to the nearest 0.1 kg using calibrated digital scale in kilogram (Adam equipment Co, Ltd, Milton Keynes, UK) and its capacity was 150 kg. The scale was checked using standardized weights in regular intervals and checked, whether it was reading zero or not before measured.

BMI was calculated by the following formulae: BMI (kg/m²) = (Body weight in kg)/(height in meters)². Girths and lengths were taken with the steel tape to the nearest 0.5 cm, while widths and diameters of body parts were measured using sliding caliper. Skin-folds thicknesses were assessed using skin-fold caliper.

**Statistical Analyses**

Values are presented as mean values and SD. Independent samples t-test was used to test if population means estimated by two independent samples differed significantly. The level of significance was set at 0.05. Data were analyzed using SPSS Version 20.0.

**RESULTS**

Table 1 depicts the demographic characteristics of inter-club and inter-project level volleyball players. The mean age of inter-club players was 21.42 years and inter-project were 16.42 years. The mean height of inter-club was 171.08 cm and inter-project was 162.04 cm. The mean weight of inter-club was 64.22 kg and inter-project was 58.44 kg. The mean BMI values of inter-club were 21.42 and inter-project was 18.34. Results indicated than inter-club players that had more height and weight than inter-club volleyball players.

Table 2 shows the comparison of length measurements of inter-club and inter-project level volleyball players. It is evident from the results that significant differences were found between inter-club and inter-project level volleyball players with regard to arm length (P < 0.05), upper leg length (P < 0.05), and lower leg length (P < 0.05). The inter-club players had better lengths measurements than inter-project volleyball players.

Table 3 shows the comparison of diameter measurements of inter-club and inter-project level volleyball players. Results indicated that inter-club players had significantly greater elbow diameter (P < 0.05), shoulder diameter (P < 0.05), hip

---

**Table 1: Demographic characteristics of inter-club and inter-project level volleyball players**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Inter-project volleyball (n=26)</th>
<th>Inter-club volleyball (n=26)</th>
<th>t-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>Mean 16.42, SD 0.47</td>
<td>Mean 21.42, SD 0.46</td>
<td>34.204</td>
<td>0.000*</td>
</tr>
<tr>
<td>Height (cm)</td>
<td>Mean 162.04, SD 6.14</td>
<td>Mean 171.08, SD 4.14</td>
<td>167.591</td>
<td>0.000*</td>
</tr>
<tr>
<td>Body weight (kg)</td>
<td>Mean 58.44, SD 4.42</td>
<td>Mean 64.22, SD 4.36</td>
<td>45.147</td>
<td>0.000*</td>
</tr>
<tr>
<td>BMI (kg/m²)</td>
<td>Mean 18.34, SD 1.86</td>
<td>Mean 21.42, SD 2.18</td>
<td>0.46</td>
<td>0.878</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level

**Table 2: Comparison of length measurements of inter-club and inter-project level volleyball players**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Inter-club volleyball (n=26)</th>
<th>Inter-project volleyball (n=26)</th>
<th>t-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm length (cm)</td>
<td>Mean 80.06, SD 3.7</td>
<td>Mean 76.06, SD 3.7</td>
<td>4.583</td>
<td>0.000*</td>
</tr>
<tr>
<td>Leg length (cm)</td>
<td>Mean 94.36, SD 15.98</td>
<td>Mean 90.36, SD 15.98</td>
<td>1.062</td>
<td>0.292</td>
</tr>
<tr>
<td>Upper leg length (cm)</td>
<td>Mean 51.75, SD 6.54</td>
<td>Mean 47.75, SD 6.54</td>
<td>2.597</td>
<td>0.011*</td>
</tr>
<tr>
<td>Lower leg length (cm)</td>
<td>Mean 41.83, SD 3.53</td>
<td>Mean 37.83, SD 3.53</td>
<td>4.803</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level
diameter ($P < 0.05$), and knee diameter ($P < 0.05$) as compared to inter-project volleyball players.

Table 4 shows the comparison of circumference measurements of inter-club and inter-project level volleyball players. Results indicated that inter-club players had significantly greater calf circumference ($P < 0.05$), chest circumference ($P < 0.05$), upper arm circumference ($P < 0.05$), and fore arm circumference ($P < 0.05$) as compared to inter-project volleyball players.

Table 5 shows the comparison of skin-folds measurements of inter-club and inter-project level volleyball players. Results indicated that significant differences were found between inter-club and inter-project level volleyball players with regard to biceps ($P < 0.05$), triceps ($P < 0.05$), subscapular ($P < 0.05$), and suprailliac skin-fold ($P < 0.05$), respectively. The inter-club had significantly greater skin-folds thickness as compared to inter-club volleyball players.

**DISCUSSION**

In the present study, the anthropometric measurements of the volleyball players have been evaluated in relation to their competition level (i.e., inter-club and inter-project). This study indicates the existence of differences between inter-club and inter-project players. The overall results show that inter-club volleyball players were taller and heavier as compared to the inter-project volleyball players. Body height, being the most characteristic trait of volleyball players, is significantly conditioned genetically (Milicerowa, 1973). The mean height of the inter-club volleyball players (178.06 ± 6.14 cm) and inter-project volleyball players (174.06 ± 6.14 cm) in the present study is greater than the volleyball players of West Bengal, India (173.10 ± 4.19 cm) reported by Bandyopadhyaya (2007).

In volleyball, teams compete by manipulating skills of spiking and blocking high above the head. Therefore, the presence of...
tall players is an indispensable factor in the success of a team (Gaurav et al., 2010). In this study, the inter-club volleyball players had significantly greater arm length, upper leg length, and lower leg length than inter-project volleyball players because anthropometric characteristics are almost exclusively genetically determined; therefore, length and breadth measurements cannot be changed with training (Norton and Olds, 2001). On the other hand, inter-club volleyball players had significantly greater all the diameters.

Results indicated that the inter-club volleyball players had significantly greater calf circumference, chest circumference, upper arm, and forearm circumference than the inter-project volleyball players. The findings of the present study are in line with the study of Gaurav and Singh (2014), who evaluated the differences in anthropometric characteristics of volleyball players in relation to their performance level (i.e., inter-university and inter-college). They observed that inter-university players had better anthropometric measurements as compared to inter-club volleyball player. In case of skin-fold measurements, the inter-project volleyball players had significantly greater skin-folds thickness as compared to inter-club volleyball players. The skin-fold thickness of four sites, biceps, triceps, subscapular, and suprailiac of volleyball players in the present study was more than those of reported by Bandyopadhyay (2007). The skin-fold thickness is significantly higher in the inter-club volleyball players group, indicating that the inter-project volleyball players had a greater quantity of subcutaneous fat deposition.

**CONCLUSION**

It is concluded that various anthropometric measurements have clear impact on the competition level of volleyball Players.

The skin-fold thickness is significantly higher in the project volleyball players group, indicating that the project volleyball players had a greater quantity of subcutaneous fat deposition.

In this regard, woreda volleyball players had significantly greater chest circumference, upper arm, and forearm circumference than the project volleyball players. In addition, the woreda volleyball players had significantly greater arm length, upper leg length, and lower leg length than project volleyball players. Moreover, woreda volleyball team players were taller and heavier as compared to the project volleyball players.

**Recommendations**

In selecting the physical exercises while designing the training program, it is recommended that the form of exercise should have on the anthropometric variables.

Significant differences existed among U-17 volleyball project players of different playing positions. Coaches should use this information to determine the type of anthropometric measurements that are needed.

The selection and training process should emphasis on their anthropometric measurements for the betterment of the result.

**REFERENCES**

Evaluating the effectiveness of sports sponsorship among football fans in Ethiopia

Tarekegn Girma

Specialization in Sport Management, Department of Sport Science, Wolayita Sodo University, Ethiopia

ABSTRACT

In Ethiopia, more potential commercial companies are there but, few are participating on sport sponsorship due to feeling fear to achieve their commercial objectives. Purpose of this research was to survey effectiveness of commercial companies by sponsoring sport organization in Ethiopia. Researcher was going to evaluate commercial objectives (brand awareness, company image, and purchase intention) among football fans in specific club. Research was delimited to Ethiopia buna football club and Habesha Beer Company in Ethiopia because currently they are in sponsorship agreement. The cross-sectional survey research design was adopted in the study. Three-hundred and eighty six fans were randomly sampled from fans of Ethiopia buna football club. Mean and standard deviation were adopted for data analyses. Quantitative data were analyzed using descriptive statistic with the help of Statistical Package for the Social Sciences. Finding of the study shows that commercial objectives (brand awareness, company image, and purchase intention) of Habesha Beer company were created and increased by fans of Ethiopia Buna FC. Researcher proposes that other potential companies may achieve their commercial objectives if they participate on sport sponsorship. However, more detailed research and interpretation of results suggest that potential commercial companies could become beneficial if they are sponsor sport event/sport club in Ethiopia. Contribution/Originality: This study contributes to the existing literature to encourage different potential commercial companies to sponsor sport events in Ethiopia. The study used to fill the gap between negative attitudes of potential commercial company’s managers toward effectiveness of sport sponsorship and to introduce the effectiveness of sport sponsorship to potential commercial company’s in Ethiopia.

INTRODUCTION

Sports are the area, in which sponsorship has developed furthest. According to Czinkonta and Ronkainen (2004), sponsorship is a promotional tool that marketers are using to affect customer behavior. The purposes of sponsorship include increasing sales, generating and raising awareness, reaching new target markets, and enhancing corporate image (Shank, 1999). A firm uses sponsorship to support an event to reach a specific or a wider target group and achieve corporate and commercial objectives (Javalgi et al., 1994). Sponsorship is one of the fastest growing components of the marketing communication mix, according to the 2014 spending report by the professional authority in sponsorship consulting and research IEG, the worldwide sponsorship spending increased 3.9% in 2013, and forecasts 4.1% sponsorship spending growth over 2013, to $55.3 billion.

Depending on the year being studied and the country and definitions, the share of sports sponsorship within sponsorship as a whole lies approximately between 50% and 70% of the total (Lagae, 2005). There are various types of sponsorship, including television and radio program sponsorship, sport, art, music, entertainment events, and educational sponsorship. Sport, art, and music events were received the highest volume of sponsorship funds, because they are events that have global acceptance. Many companies have increasingly implemented sponsorship in their marketing strategy as a key success for their businesses. Given that sports sponsorship is the most beneficial and the less damaged kind of sponsorship compared to other marketing tools. It becomes a main attraction for companies to invest in (Slack, 2004). As the practice of sponsorship marketing becomes an increasingly more important element of the marketing mix, this research pursues to contribute to the emergent body of theoretical research that supports sponsorship as a way to increase awareness, company image, and purchase intensity.

Therefore, the results of this study were important to increase sponsorship, sport industry development, and understand
benefits of sport sponsorship in the context of developing countries specifically in Ethiopia.

**Objectives of the Study**

The objectives of this study were to investigate effect of sport sponsorships on fans perception toward company’s image, brand awareness, and purchase intention: in case of Habesha Beer Company in Addis Ababa, Ethiopia.

**MATERIALS AND METHODS**

The present study is a descriptive study in terms of the nature and the method it employs. The research was conducted on Ethiopia buna football club only because it was potentially sponsored by Habesha Beer Company. In Ethiopia, more potential commercial companies are there but, few are participating on sport sponsorship. Three-hundred and eighty six fans were randomly sampled from fans of Ethiopia buna football club. The total of 386 questionnaires was distributed to fans of Ethiopia Buna FC and among these ten papers are missed and five responses were excluded due to partially completed. Besides, all returned questionnaire’s responses from selected subjects were analyzed and discussed. After the data were collected, the raw data were entered into the computer and were analyzed by the Statistical Package for the Social Sciences Software (Version 20). Descriptive statistics were used to analyze the data. Mean and standard deviation were used for data analysis were employed in the study to explore the effect of sport sponsorship on variables selected. To conduct this research, as well as to collect data and information about the variables researcher used standard existing questionnaires with slight modification of scholars. The researcher used Likert scaling to measure customer’s company image, brand awareness, and purchase intention with a series of short statements on a given in the surveys in from of the five-point range of responses from 1 (strongly disagree) up to 5 (strongly agree). The level of significance is set at 0.05 level. The reliability of the questionnaire in the present investigation: Cronbach’s alpha for the questionnaire was a (0.781) for brand awareness, (0.814) for company image, and purchase intention (0.886), respectively.

**RESULTS**

The study sought to determine the extent to which respondents agreed with the above statements relating to the effect of sports sponsorship on fans perception toward brand awareness. From the research findings, the study established that majority of the respondents agreed that I can easily remember the sponsored brand name as shown by mean of (M = 4.49), I have sufficient information about the sponsored brand and its offers as shown by mean of (M = 4.24), I got the brand for the 1st time through sponsored event as shown by mean of (M = 3.59), I can recognize the sponsored brand logo as shown by mean of (M = 4.52), and I differentiated the brand characteristics through sponsored event as shown by mean of (M = 4.54). The above findings concurs that

<table>
<thead>
<tr>
<th>Table 1: Summary of descriptive statistics for means and standard deviations: Effect of sports sponsorship on fans perception toward brand awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive statistics</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>I can easily remember the sponsored brand name</td>
</tr>
<tr>
<td>371</td>
</tr>
<tr>
<td>1.00</td>
</tr>
<tr>
<td>5.00</td>
</tr>
<tr>
<td>4.49</td>
</tr>
<tr>
<td>1.16</td>
</tr>
<tr>
<td>I have sufficient information about the sponsored brand and its offers</td>
</tr>
<tr>
<td>371</td>
</tr>
<tr>
<td>1.00</td>
</tr>
<tr>
<td>5.00</td>
</tr>
<tr>
<td>4.24</td>
</tr>
<tr>
<td>1.09</td>
</tr>
<tr>
<td>I got the brand for the 1st time through sponsored event</td>
</tr>
<tr>
<td>371</td>
</tr>
<tr>
<td>1.00</td>
</tr>
<tr>
<td>5.00</td>
</tr>
<tr>
<td>3.59</td>
</tr>
<tr>
<td>1.49</td>
</tr>
<tr>
<td>I can recognize the sponsored brand logo</td>
</tr>
<tr>
<td>371</td>
</tr>
<tr>
<td>1.00</td>
</tr>
<tr>
<td>5.00</td>
</tr>
<tr>
<td>4.52</td>
</tr>
<tr>
<td>1.03</td>
</tr>
<tr>
<td>I differentiated the brand characteristics through sponsored event</td>
</tr>
<tr>
<td>371</td>
</tr>
<tr>
<td>1.00</td>
</tr>
<tr>
<td>5.00</td>
</tr>
<tr>
<td>4.54</td>
</tr>
<tr>
<td>0.89</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
</tr>
<tr>
<td>371</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 2: Summary of descriptive statistics for means and standard deviations: Effect of sports sponsorship on fans perception toward company image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive statistics</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Habesha Beer has good product and services</td>
</tr>
<tr>
<td>371</td>
</tr>
<tr>
<td>1.00</td>
</tr>
<tr>
<td>5.00</td>
</tr>
<tr>
<td>4.47</td>
</tr>
<tr>
<td>0.97</td>
</tr>
<tr>
<td>Habesha Beer target to support the football activity</td>
</tr>
<tr>
<td>371</td>
</tr>
<tr>
<td>1.00</td>
</tr>
<tr>
<td>5.00</td>
</tr>
<tr>
<td>4.14</td>
</tr>
<tr>
<td>1.08</td>
</tr>
<tr>
<td>Habesha Beer responds to consumer needs</td>
</tr>
<tr>
<td>371</td>
</tr>
<tr>
<td>1.00</td>
</tr>
<tr>
<td>5.00</td>
</tr>
<tr>
<td>4.23</td>
</tr>
<tr>
<td>0.92</td>
</tr>
<tr>
<td>Sponsors of my favorite team have a good credibility</td>
</tr>
<tr>
<td>371</td>
</tr>
<tr>
<td>1.00</td>
</tr>
<tr>
<td>5.00</td>
</tr>
<tr>
<td>4.58</td>
</tr>
<tr>
<td>0.87</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
</tr>
<tr>
<td>371</td>
</tr>
</tbody>
</table>

23
brand awareness is achieved by exposing the brand to as many potential consumers as possible (Aaker, 1991; cited in Gwinner, 1997, p. 1).

The study sought to determine the extent to which respondents agreed with the above statements relating to the effect of sports sponsorship on fans perception toward company image. From the research findings, the study established that majority of the respondents agreed that Habesha Beer has good product and services as shown by mean of (M = 4.47), Habesha Beer target to support the football activity as shown by mean of (M = 4.14), Habesha Beer responds to consumer needs as shown by a mean of (M = 4.23), and sponsors of my favorite team have a good credibility as shown by mean of (M = 4.58). The finding supported by an empirical study (Tsiotsou and Konstantions, 2009) found that highly attached fans are more likely to develop positive image about their team’s sponsor and consequently express positive intention to say good things and buy the sponsor’s products.

The study sought to determine the extent to which respondents agreed with the above statements relating to the effect of sports sponsorship on fans perception toward purchase intention. From the research findings, the study established that majority of the respondents agreed that I am willing to try the products/services of club’s sponsors as shown by mean of (M = 4.38), I always enjoy Habesha Beer with my friends as shown by mean of (M = 4.47), I am willing to take away Habesha Beer to celebrate holiday in home as shown by a mean of (M = 4.12), I am willing to buy the products/services of the sponsors as shown by mean of (M = 4.38), and if the company presents new product/service, I will buy it as shown by mean of (M = 4.39). The finding supported Whitlark et al. (1993) discovered that “75% of the respondents who indicated that they would be likely to buy a sponsor’s products actually did purchase the products within 3–6 months.”

**DISCUSSION**

The purpose of this research was to survey the effectiveness of sport sponsorship and Ethiopia potential commercial companies and to aware that benefits of sport sponsorship to the other potential companies support sport events and achieve their commercial objectives. Moreover, the researcher attempted to fill the gap between negative attitudes of potential commercial company’s managers toward the effectiveness of sport sponsorship and to introduce the effectiveness of sport sponsorship to potential commercial company’s managers in Ethiopia. The finding of the descriptive analysis showed that majority of the respondents strongly agreed and Habesha Beer brand awareness was created and increased by fans of Ethiopia Buna FC. The finding supported Kosher and Merz (1995) argue that sponsorship is poor at building awareness and is rather used to push existing brand awareness, and also majority of the respondents strongly agreed and Habesha Beer company positive image was created and increased by fans of Ethiopia Buna FC. A lot of companies utilize sponsorship as a vehicle for brand exposure, many firms view sponsorship as an opportunity to foster a favorable image of their brand or firm (Milne and McDonald, 1999). In other words, create a positive corporate image. Firstly, the majority of the respondents strongly agreed and they were highly motivated to purchase and use Habesha Beer company product. Pitts (2004) showed that “a staggering 92% of respondents at Gay Games IV who said that they were more likely to purchase the sponsors’ products due to the companies’ support for the event.” If companies participated on sport sponsorship were achieve their commercial objectives, why not other potential companies are participate and use this modern and effective tool of promotion. Therefore, researcher recommends that potential commercial companies to participate in sport sponsorship and to become beneficial from sport sponsorship.

**CONCLUSION**

The purpose of this research was to survey effectiveness of sport sponsorship and Ethiopia potential commercial companies and to aware that benefits of sport sponsorship to the other potential companies support sport events and achieve their commercial objectives. To this end, the data collected from 386 fans from Ethiopia buna football club who
Implications

The purpose of this research was to survey effectiveness of sport sponsorship and Ethiopia potential commercial companies and to aware that benefits of sport sponsorship to the other potential companies support sport events and achieve their commercial objectives. In the light of the findings of the study, the following recommendations were forwarded: Potential commercial companies could become beneficial if they sponsor sport event/sport club, Habesha Beer Company to make further sponsorship agreement with Ethiopia buna football club.

FUNDING

This study received no specific financial support.

COMPETING INTERESTS

The authors declare that they have no competing interests.

CONTRIBUTORS/ACKNOWLEDGMENT

Both authors contributed equally to the conception and design of the study.

REFERENCES


Players physiological qualities for the selection process of the 1st and 2nd division football clubs in Ethiopia

Eyasu Merhatsidk Gebreegziabher

Department of General Secretary, Ethiopian Football Federation, Ethiopia

ABSTRACT

The study assessed the physiological performances of football players in the 1st and 2nd division football clubs, Ethiopia. The aim of this study was mainly to understand and to develop basic standards to select players based on their physical quality to formulate and implement effective strategies for the coaching program. The study employed a cross-sectional study design. The samples of 240 players from eight different teams were selected. Speed, power, agility, endurance, and flexibility tests were conducted. The data were analyzed using descriptive and inferential analysis techniques. Significantly weight (0.014) and height (0.036) differences were found between the 1st and 2nd division, but not in body mass index. Mean value per setting from 1st to 2nd division, respectively: 10 m speed 2.08 s and 2.14 s ($P < 0.0001$); 20 m speed 3.4 s and 3.49 s ($P < 0.0001$); and 40 m speed 5.87 s and 6.07 s ($P < 0.0001$). Flexibility was 11.96 cm and 14.96 cm ($P < 0.05$). First division club’s players were taller, heavier, faster, and flexible than the second division club’s players.

Keywords: Ethiopia, Football, Physiological performance, Talent selection program

INTRODUCTION

Ethiopia has 1,220,900 sq.km and more than 85,000,000 people, and football is the number one sport in the country (Andualem et al., 2016). The Ethiopian national football team rank has been declined gradually as compared to other Africa countries football level. Today’s, football players must have basic physiological performances that are suitable for their positions, such as goalkeeper, defender, midfielder, and striker (Mohr et al., 2003). The literature has emphasized the importance of the physiological characteristics of players. Gil et al. (2010) and Perroni et al. (2014) suggest that increased body fat is negatively related to the selection of players and the performance of football players. Players for higher performance in football are selected not only based on body size and physical structure. Consequently, identification policies based solely on physical attributes may serve only to select current performance levels and may prematurely exclude those who have the potential to excel in the future (O’Connor et al., 2016). Such an approach would lead to late maturing players, who are not necessarily shorter and weaker as adults, could be missing out on specialized training (Reilly et al., 2000).

Cooper and Storer (2001) suggest that filed tests are appropriate when testing groups of people, providing quantitative and objective measures of exercise performance in a variety of settings. Many studies (Vaeyens et al., 2006 and Hemati et al., 2013) also highlighted the importance of physiological tests such as 10, 20, and 40 m speed. Technical analysis of field sports shows that most young players execute straight-line speeds for an average of 3 s (up to a maximum of 5 s) before encountering an obstacle or altering direction to gain a tactical advantage. For this reason, the 10, 20, and 40 m speeds are more accurate tests for the selection program. Surveys such as that conducted by Baechle and Earle (2008) have shown that vertical jumping ability has a direct correlation with the ability to accelerate and changing direction, in practice, and at game time. Cooper introduced 12 min run test for the estimation of aerobic fitness. Cooper and Storer (2001) demonstrated that the replacement of 12 min run test with 20 m shuttle running test.

Therefore, the objective of this research was to study the physical qualities of football players so that coaches and managers understand, formulate, and implement effective strategies for their coaching program. The study will also help
to develop basic standards for clubs to select better players based on their physical qualities. There is abundant research on the physical qualities of players in the selection process: Very limited published research exists, however on the Ethiopian football and the relationship between players settings.

**METHODOLOGY**

Two-hundred and twenty football players participated in the study. One-hundred and twenty were represented from 1st division to the rest 120 players that were selected from 2nd division clubs. A total of eight teams were randomly selected. Once the clubs were identified, all members of the club included in the study. All players who were included in the study were active players at the time of the study. The players used to train at least 5–6 training sessions per week and involved in one game on a weekly basis. To be eligible for the study, all players were required to be free from injury, not taking medication, and restricted from any act or behavior that may affect the test performance either positively or negatively.

**Ethics/Informed Consent**

All participants involved in this study were provided with verbal and written communications of the study’s requirements.

**Research Design**

This study employed a cross-sectional study design. The study was designed to examine football-specific physical fitness differences among the two-division football players at the clubs.

**Data Collection Procedures**

Along with the basic, a total of five physical fitness tests were used a data collection instrument. These five tests were conducted into consecutive days. Speed, standing vertical jump (power), and Illinois agility was assessed on the 1st day of the test. On the 2nd day: Yo-Yo intermittent endurance and sit and reach (flexibility) tests were conducted. One time measurement was taken for all physical fitness qualities.

Bodyweight measurement was taken using a digital scale according to the standards for bodyweight measurement. Height measurement was taken using a stadiometer. Speed and agility tests were conducted using a digital stopwatch. A wall-assisted vertical jump test was conducted to measure the lower leg explosive power, and the modified yo-yo intermittent recovery test on a 20 m specified distance was conducted for aerobic endurance performance. To measure the flexibility of the lower back and hamstring muscles, the sit-and-reach test was used. In this study, all the physical fitness tests were conducted based on the recommendation of Ransone, 1996.

**Statistical Analysis**

All the descriptive statistics for football-specific fitness measurements are presented using mean and standard deviation. To see the physical fitness differences among the two groups (1st and 2nd division), one-way analysis of variance was employed independently. Statistical Package for the Social Sciences version 24 used to analyze the data. All Statistical significance was accepted at $P < 0.05$ with 95% confidence level.

**RESULTS**

From 240 respondents, 100 (42%) came from EFF teams, 80 (33%) from clubs and 60 (25%) were from academy. From the whole respondents, 50 (21%) were secondary level, 56 (23%) were grade 10 completed, 101 (42%) were metric qualified, and 33 (13%) were diploma certificate and above. From the total number, 108 (45%) were played football at 1st time at home, 70 (29%) were youth teams, and 62 (26%) were played at school. Most of players 191 (80%) attend selection process, and the rest 49 (20%) did not attend.

**The Physical Performances of Players**

The mean and the standard deviation of results across the physical performance tests ($n = 240$) are shown in Table 2. The mean time of the total players for 10 m, 20 m, and 40 m speed were 2.15 s, 3.51 s, and 5.96 s, respectively, the mean value of the sit and reach test and the vertical jump was 12.94 cm and 42.93 cm. Using the Yo-Yo intermittent endurance, test the mean predicted value for VO$_2$ max was 49.73 ml/kg/min.

**Table 1: Biographical data of players**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>First division</td>
<td>120</td>
<td>50</td>
</tr>
<tr>
<td>Second division</td>
<td>120</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>240</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary</td>
<td>50</td>
<td>21</td>
</tr>
<tr>
<td>Grade 10</td>
<td>56</td>
<td>23</td>
</tr>
<tr>
<td>Grade 12</td>
<td>101</td>
<td>42</td>
</tr>
<tr>
<td>Certificate</td>
<td>33</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>240</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>They played football at 1st time</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>At home</td>
<td>108</td>
<td>45.0</td>
</tr>
<tr>
<td>At school</td>
<td>62</td>
<td>25.8</td>
</tr>
<tr>
<td>Youth team</td>
<td>70</td>
<td>29.2</td>
</tr>
<tr>
<td>Total</td>
<td>240</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attend the selection process</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>191</td>
<td>79.6</td>
</tr>
<tr>
<td>No</td>
<td>49</td>
<td>20.4</td>
</tr>
<tr>
<td>Total</td>
<td>240</td>
<td>100.0</td>
</tr>
</tbody>
</table>
The physical performances of the participants were presented in the following Tables 2 and 3.

The mean value of the group of players per setting from 1<sup>st</sup> division and 2<sup>nd</sup> division, respectively, was as follows: 10 m speed time was 2.08 s and 2.26 s ($P < 0.0001$); 20 m speed time was 3.4 s and 3.7 s ($P < 0.0001$); and 40 m speed time was 5.87 s and 5.9 s ($P < 0.0001$). Sit and reach flexibility were 11.96 cm and 11.31 cm ($P < 0.05$). Vertical jump scores were 43.40 cm and 42.25 cm. The Illinois agility scores were 17.42 m and 17.5 m. The VO<sub>2</sub> max value was 50.1 and 50.22 ml/kg/min from the 1<sup>st</sup> division to 2<sup>nd</sup> division clubs setting, respectively. The 1<sup>st</sup> division football players were significantly faster than the 2<sup>nd</sup> division players. The 1<sup>st</sup> division players have significantly better flexibility than the 2<sup>nd</sup> division players. No significant difference observed between settings per power, agility, and VO<sub>2</sub> max.

**DISCUSSION**

This study aimed to describe the present physical performances of Ethiopian football players and compare the results of within players with various settings for the selection process. The main findings of this study showed the following results. The 1<sup>st</sup> division football players were significantly taller and heavier compared to the 2<sup>nd</sup> division football players. No significant difference between settings for per body mass index (BMI). The 1<sup>st</sup> division football players were significantly faster compared to the 2<sup>nd</sup> division football players. There was no significant difference between settings per power, agility, and VO<sub>2</sub> max.

Regarding physiological correlates of success: Abbott and Collins (2010) described: As early as the 1920s, researchers were examining the potential of physiological an example of height and strength accordingly measures as discriminating factors between players involved in different sporting events.

There was a significant difference between the 1<sup>st</sup> division football teams and 2<sup>nd</sup> division football teams. The study result indicates that the 1<sup>st</sup> division football players were significantly taller, heavier, faster, and more flexible compared to the 2<sup>nd</sup> division football players. According to Veale (2011), evidence demonstrates a large difference in access to club facilities (including training hours) between part-time (8 h/week) and full-time trainee (roughly 40 h/week). Better clubs have better facilities and equipment in addition to a skilled workforce in the selection and their training program.

In summary players at 10, 20, and 40 m, the 1<sup>st</sup> division football players attained significantly better results. For the sit and reach flexibility tests, 2<sup>nd</sup> division football players attained significantly better results. According to Vaeyens et al. (2006), top clubs are used the current dynamic talent selection program to maintain their sporting and financial status and different chances for players who differ in progress and maturity must be canceled out. The selection, development, and professional guidance of football players were a priority for success.

Regarding to the correlation matrix comparing the relationship of variables performance described in Table 3. BMI and height were negatively related to speed and agility. This implies that the player had larger BMI that was slower and less agile, the taller players were slower and less agile.

As a result indicated, the different values were observed and it helps to consider when the player’s selection process implemented. Regarding to the result and the literatures, we
better consider the biological age rather than chronological age may provide a more accurate index of performance potential.

Limitations of the study were recognized. The limited number of teams and fields for the study, although football fields were not available sufficiently or were not appropriate for the selection process.

**CONCLUSION**

The present study analyzed the results of player’s physical performances. The result showed that in Ethiopian, 1st division football clubs players were significantly taller, heavier, faster, and flexible than the 2nd division football players. Considering all the results, the findings suggest that physical tests can have the power to select the talented players.

**ACKNOWLEDGMENT**

The players who volunteered to participate in the study and clubs for their support in the collection of the data.

**REFERENCES**


Veale JP. Physiological Assessment in Talent Identification within Australian Football (Doctoral Dissertation, Victoria University); 2011.
A study on influence of yoga on student’s life

Mohd Akhter Ali¹, M. Kamraju², Sanja Devi², P. Manisha²

¹Assistant Professor, Department of Geography, Osmania University, Hyderabad, Telangana, India, ²Student, Department of Geography, Osmania University, Hyderabad, Telangana, India

ABSTRACT

Yoga is widely practiced as a way to plug physical, psychological, and spiritual well-being, while kind of studies has documented the efficacy of yoga for functioning in healthy individuals and people experiencing illness or pain. We propose an analog between the physical, psychological, and spiritual effects of the practice of yoga in students behavior. Physical systems activated through yoga practice include musculoskeletal, cardiopulmonary, autonomic system nervosum, and endocrine functioning. Psychological benefits include enhanced coping, self-efficacy, and positive mood. Spiritual mechanisms which may be understood within a Western medical model include acceptance and mindful awareness. We present empirical evidence that supports the involvement of those domains. However, additional well-conducted research is required to further establish the efficacy of yoga for health states and to know how posture, breath, and meditative activity affect the body, mind, and spirit. In this study, we are mainly concerned with secondary data for the evaluation of yoga’s influence on students.

Keywords: Cardiopulmonary, Musculoskeletal, Nervosum, Psychological, Spiritual

INTRODUCTION

Teenage is that the period of time of scholars once they are stucked between sort of workload and pressures. They need to perfectly accomplish their school or college task, steel oneself against sort of examinations or test, got to score excellent marks, work better in their workplace and improve their performance, and many other tension.

In several schools, colleges, and universities round, the world several programs and courses are made compulsory for the scholars to hitch. Yoga is one of the among them. Students from all round the world have gained benefits by doing yoga. It helps your body to relax and soothes your mind. Furthermore, it helps to form your body flexible and improves your concentration power. Furthermore, students can gain various other benefits from yoga which will help them in completing their work perfectly and make them high scorer within the class.

Objective
The main objective of this paper is to find the impact of yoga in school going students.

METHODOLOGY
For this study, we mostly went for secondary data from a review of the literature from various articles and research papers published.

REVIEW OF LITERATURE
Joshi et al. (1992) reported that pranayama leads to an increase in breath-holding time and decrease respiration rate. It is also believed that practice of kumbhaka (breath retention) in the most of pranayama enhances concentration and reduces anxiety.

Khumar et al. (1993) examined the effectiveness of Shavasana (a type of yoga exercise) as a therapeutic technique to alleviate depression. Fifty female university students were diagnosed with severe depression; 25 were subjected to 30 sessions of Shavasana, and 25 served as controls. Results revealed that (1) Shavasana was an effective technique for alleviating depression and (2) continuation of the treatment for a longer period resulted in a significantly increases positive change in the Ss.

DISCUSSION
There is a broad variety of yoga schools, practices, and goals in Hinduism, Buddhism, and Jainism. The term “Yoga” in the
Western world often denotes a modern form of hatha yoga and yoga as exercise, consisting largely of the postures called asanas.

The origins of yoga have been speculated to date back to pre-Vedic Indian traditions, possibly in the Indus valley civilization around 3000 BCE. It is mentioned in the Rig-Veda, but yoga most likely developed as a systematic study around the 5th and 6th centuries BCE, in ancient India ascetic and śramaṇa movements. The chronology of earliest texts describing yoga-practices is unclear, varyingly credited to Upanishads. The Yoga Sutras of Patanjali go back to the 2nd century BCE and gained prominence within the west within the 20th century after being first introduced by Swami Vivekananda. Hatha yoga texts emerged sometimes between the 9th and 11th centuries with origins in tantra.

Yoga gurus from India later introduced yoga to the West, following the success of Swami Vivekananda within the late 19th and early 20th century together with his adaptation of yoga tradition, excluding asanas. Outside India, it is developed into a posture-based fitness, stress-relief, and relaxation technique. Yoga in Indian traditions, however, is a quite physical exercise; it is a meditative and spiritual core. One of the six major orthodox schools of Hinduism is additionally called yoga, which has its own epistemology, ontology, and metaphysics and is closely associated with Hindu Samkhya philosophy.

Impact of Yoga in the Life of Students

Meditation and yoga bring positive vibes among the students and if they are doing it regularly, it will help in bringing positive outcomes which are advantageous for the scholars. There are a sort of positive outcomes of yoga for learners and various other peoples. Some of the advantages of yoga to students.

Destress students

Students face tons of depression and stress thanks to a spread of reasons such as family pressure, financial pressure, or the other depression. Yoga is one among the simplest thanks to eliminate all of your pressure. Yoga keeps all of your depression away and keeps your mind fresh.

Concentration and sharpness

Yoga helps in increasing the sharpness of your brain and your concentration power. It helps you in relaxing your mind and supply you more peace of mind.

Strength

Strength is required by your body to satisfy all day activities appropriately. Especially, young students need tons of strength as they are overloaded with many tasks. Therefore, yoga helps in building your strength and provides you power.

Health benefits

Medically proved yoga has various medical benefits. A lot of diseases are often improved by doing yoga daily. It helps to scale back excellent hypertension among students.

Weight management and flexibility

Flexibility of the body is another advantage of doing yoga daily. Practicing yoga asana, your muscles also are stretched, thereby increasing the pliability of your body. Uneasiness in breathing and obesity is a number of the issues associated with weight which is extremely common among the scholars. Due to high calories drinks and food intake, students need to face such sorts of problems. With practicing yoga regularly, they will help their weight management.

Advancement of educational brain

Doing yoga regularly helps you in advancing your brain muscles and helps students to attain the very best grades. Hence, yoga helps learners to remain relaxed and stress-free from all the depress and academic tensions which are useful in your academic advancement.

Enhances your power and memory

Yoga is that the power for all the scholars that help in enhancing their memory and provides them more energy and power.

Increases focus

Students can enhance their focus and concentration with the assistance of yoga. A student can receive multiples benefits with the assistance of yoga.

CONCLUSION

There are multiple benefits of yoga for the students. Whether its kids, school going children or college students anyone can avail benefits from yoga. Yoga has proved to be of great benefit in reducing mental health disorders among students. Students can leave these stress management-based activities with the help of online assignments service provider helper. It is the important time for the development of the mental health of the students. With studentsassignmenthelp.com leave, all the difficult work for your assignment help experts to do and improve your strength, stamina, concentration power, and relaxation of mind by practicing yoga regularly.

REFERENCES

Ali, et al.: A study on influence of yoga on student’s life

1993;20:82-7.
Performance and achievement of Mr. Zameer Ahmed Khan in the field of Volleyball

Syedyunus Dharwad
Assistant Professor, Department of Physical Education, University of Agricultural Sciences, Dharwad, Karnataka, India

ABSTRACT
Physical education aims at all-round development of the personality of an individual and includes physical, mental, social, emotional, and moral aspects to make an individual a good citizen. Volleyball in India is a popular sport that is played in various regions of India and several reputed Volleyball tournaments are also organized as well. The investigator has conducted a study on the renowned personality Mr. Zameer Ahmed Khan and the contribution he made to the field of Volleyball. The objective of the present study was to investigate the factors responsible for the successful sporting career of Mr. Zameer Ahmed Khan and his contribution toward his performance and achievement in Volleyball. The author found that consistent performance and success in various competitions have not only made Mr. Zameer Ahmed Khan capable for hard training and perseverance in sports but also made him realize his own potentials of becoming a Volleyball player of international repute.

Keywords: Health, Perseverance, Physical education, Volleyball

INTRODUCTION
The purpose of physical education and sport from ancient to modern times is to assist students in developing and understanding of the historical foundations of physical education and sport so that they will be equipped to undertake further work in the sociocultural study of human movement. Students will be encouraged to seek out the meanings of sport and physical education held for people during different historical periods, and to identify the linkages between modern sports and physical education and their earlier counterparts.

Volleyball is a team sport played by two teams on a playing court divided by a net. The sport originated in the United States and is now just achieving the type of popularity in the U.S. that it has received on a global basis, where it ranks only behind soccer among participation sports. William G. Morgan has gone down in history as the inventor of the game of Volleyball in 1895, to which he originally gave the name “Mintonette.”

The objective of the game for each team is to send the ball regularly over the net, to ground it on the opponent’s court, and to prevent the ball from being grounded on their own court. The ball is put into play by the right back-row player, who serves the team is allowed to hit the ball 3 times (in addition to the block contact) to return it to the opponent’s court. A player is not allowed to hit the ball twice consecutively, except when he is attempting a block. The rally continues until the ball touches the ground/floor, goes “out” or a team fails to return it to the opponent’s court or commits a fault. The perfect play in Volleyball is Pass, Set, and Spike! Today, there are more than 46 million Americans who play Volleyball. There are 800 million players worldwide who play Volleyball at least once a week.

Mr. Zameer Ahmed Khan (Plate 1) was born on November 1, 1950 in Dharwad District of Karnataka State. Right from his childhood, he loved sports, and his ambition was to become an International Player. There was strong support from his family when he wanted to enter in the field of sports. During his school days, he was active in many sports such as Athlete, Tripple Jump, and Discuss throw. Mr. Zameer Ahmed Khan started playing Volleyball in the year 1967–1968 and was inspired by his coach Mr. B.G. Khan. He entered in the field of Volleyball by choice of his coach and not by chance.
At the tender age of 17 years, he was selected for National Team and represented Mysore State during the year 1967–1968 and played at Trivandum (Kerala). His favorite position in Volleyball is blocker though he is an all-rounder. He started his career by playing Inter District match held at Mudduhal and Shimoga and selected for Nationals 1st time and was winner too. He says that the main reason for choosing Volleyball as his profession is it is economic and more disciplined. He had preferred Volleyball as his game during the school and college days than any other game. Hence, the present study was designed to study the performance and achievement of Mr. Zameer Ahmed Khan in the field of Volleyball.

**METHODOLOGY**

The study has been designed to investigate the factors responsible for the successful sporting career of Mr. Zameer Ahmed Khan and his contribution toward his performance and achievement in Volleyball. The study was purely descriptive cum analytical in nature which was based on the survey method. The house held schedule methods along with interview techniques were adapted to employ the questionnaires, and thus the investigator gathered the necessary information.

**Rating Scale**

Opinion rating scale on Mr. Zameer Ahmed Khan was constructed with the help of experts for the following four dimensions viz.,

a. Mr. Zameer Ahmed Khan as a player
b. Mr. Zameer Ahmed Khan as a coach and mentor
c. Mr. Zameer Ahmed Khan as a personality
d. Mr. Zameer Ahmed Khan as a manager and administrator.

Likert scale having four options such as agree, strongly agree, disagree, and strongly disagree was used for the study. Finally, the total number of responses was received and the interpretation was done accordingly. The respondents chosen for the study were the family members and relatives of Mr. Zameer Ahmed Khan.

**Analysis of Data**

Analysis of the data was done after administrating the questionnaire to ten respondents after ascertaining their willingness to participate in the study. Finally, the total number of responses received was converted in terms of percentage and the statistical and graphical representation was done accordingly. The graph was further interpreted to give a clear understanding of the data.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Statements</th>
<th>Relatives</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mentally strong at competition time</td>
<td></td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2.</td>
<td>Believes in faith in teachers</td>
<td></td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3.</td>
<td>Always respects referees decision</td>
<td></td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4.</td>
<td>Always likes to help others</td>
<td></td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5.</td>
<td>Always keeps himself physically fit for competition</td>
<td></td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6.</td>
<td>Very conscious about his diet</td>
<td></td>
<td>56</td>
<td>44</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7.</td>
<td>Purely a professional athlete</td>
<td></td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8.</td>
<td>Always has a family support</td>
<td></td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9.</td>
<td>Very hard working athlete</td>
<td></td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10.</td>
<td>Discuss his personal matters with friends</td>
<td></td>
<td>89</td>
<td>0</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>11.</td>
<td>He follows the rules and regulations of the game strictly</td>
<td></td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12.</td>
<td>He tried his best to bring progress among Volleyball players</td>
<td></td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>13.</td>
<td>He enjoys his victory</td>
<td></td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>14.</td>
<td>He works hard on his minus point</td>
<td></td>
<td>44</td>
<td>56</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>15.</td>
<td>Has a pleasant manner</td>
<td></td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>16.</td>
<td>Has a vast knowledge about sports</td>
<td></td>
<td>33</td>
<td>67</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>17.</td>
<td>His approach to sports is more scientific</td>
<td></td>
<td>44</td>
<td>56</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18.</td>
<td>Very friendly and cooperative</td>
<td></td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>19.</td>
<td>Always motivated teammates</td>
<td></td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>20.</td>
<td>His presence is inspiring</td>
<td></td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
RESULTS AND DISCUSSION

Opinion Rating Survey of Mr. Zameer Ahmed Khan as a Player

The opinions of respondents for 20 different questions on Mr. Zameer Ahmed Khan as a player are shown in Table 1. The table depicts that cent percent of the relatives strongly agreed that Mr. Zameer Ahmed Khan was mentally strong at competition time, always liked to help others, was a very hardworking and professional athlete, and always kept himself physically fit for competition. The tabular data depict that among the relatives, 11% agreed and 89% strongly agreed that Mr. Zameer Ahmed Khan had belief in his teachers, always respected his referee’s decision, always had family support, and used to follow the rules and regulations of the game strictly.

Meanwhile, the table also depicts that 56% of the respondents agreed and 44% of them strongly agreed that Mr. Zameer Ahmed Khan used to be very conscious about his diet. Consequently, 89% of the relatives agreed, while 11% of them disagreed for the statement that Mr. Zameer Ahmed Khan used to discuss his personal matters with friends.

Further, it is observed that cent percent of the respondents strongly agreed that Mr. Zameer Ahmed Khan tried his best to bring progress among Volleyball players. The table shows that 11% agreed and 89% respondents strongly agreed that Mr. Zameer Ahmed Khan enjoyed his victory, had a very friendly and cooperative nature. The tabular data depict that among the relatives, 44% agreed and 56% strongly agreed that Mr. Zameer Ahmed Khan used to work hard on his minus point and had a scientific approach toward sports.

Moreover, the data depict that cent percent relatives strongly agreed that Mr. Zameer Ahmed Khan has pleasant manners, has vast knowledge about sports, always motivated his teammates, and his presence is inspiring.

Opinion Rating Survey of Mr. Zameer Ahmed Khan as a Coach

The opinion of relatives about Mr. Zameer Ahmed Khan as a coach is shown in Table 2. It is evident from the table that cent percent of the relatives strongly agreed that Mr. Zameer Ahmed Khan was a committed professional. The tabular data depict that among the relatives, 22% agreed, whereas 78% strongly agreed that Mr. Zameer Ahmed Khan has a natural ability of spotting talent and often cited examples of world performance.

The table shows that 33% of the relatives agreed and 67% strongly agreed that Mr. Zameer Ahmed Khan was a very hard

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Statements</th>
<th>Relatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Committed professional</td>
<td>0</td>
</tr>
<tr>
<td>2.</td>
<td>Natural ability of spotting talent</td>
<td>22</td>
</tr>
<tr>
<td>3.</td>
<td>Very hard working and industrious</td>
<td>33</td>
</tr>
<tr>
<td>4.</td>
<td>Always receptive to new ideas</td>
<td>0</td>
</tr>
<tr>
<td>5.</td>
<td>Very good in providing motivation to his players</td>
<td>11</td>
</tr>
<tr>
<td>6.</td>
<td>Knows how to influence human performance</td>
<td>33</td>
</tr>
<tr>
<td>7.</td>
<td>Always maintains diary</td>
<td>33</td>
</tr>
<tr>
<td>8.</td>
<td>Daily schedule for his students always on scientific lines</td>
<td>11</td>
</tr>
<tr>
<td>9.</td>
<td>Often cited examples of world performance</td>
<td>22</td>
</tr>
<tr>
<td>10.</td>
<td>A good conversationalist</td>
<td>11</td>
</tr>
<tr>
<td>11.</td>
<td>Keeps complete records of performance</td>
<td>56</td>
</tr>
<tr>
<td>12.</td>
<td>Punctual for his classes</td>
<td>0</td>
</tr>
<tr>
<td>13.</td>
<td>Does not show inclination or favor</td>
<td>11</td>
</tr>
<tr>
<td>14.</td>
<td>Employed variations in his coaching style</td>
<td>11</td>
</tr>
<tr>
<td>15.</td>
<td>His classes were interesting and inspiring</td>
<td>22</td>
</tr>
<tr>
<td>16.</td>
<td>Employed audio-video aids</td>
<td>22</td>
</tr>
<tr>
<td>17.</td>
<td>A good example to others</td>
<td>0</td>
</tr>
<tr>
<td>18.</td>
<td>Motivated students to take part in competitions</td>
<td>11</td>
</tr>
<tr>
<td>19.</td>
<td>Corrected mistakes</td>
<td>56</td>
</tr>
<tr>
<td>20.</td>
<td>Very popular among students</td>
<td>22</td>
</tr>
</tbody>
</table>
working, industrious coach, knew how to influence human performance, and always maintains diary. The tabular data further depict that cent percent of the respondents strongly agreed that Mr. Zameer Ahmed Khan was always receptive to new ideas during his coaching. It was observed that 11% of the relatives agreed, while 89% strongly agreed that Mr. Zameer Ahmed Khan was a very good in providing motivation to his players, always planned his daily schedule for his students on scientific lines, and did not show inclination or favor toward any player.

Moreover, 11% of the respondents agreed and 78% strongly agreed, while 11% disagreed that Mr. Zameer Ahmed Khan was a good conversationalist. The tabular data depict that the majority of the relatives (56.00%) agreed, whereas 33% strongly agreed and 11% disagreed that Mr. Zameer Ahmed Khan kept complete records of his performances. Cent percent of the relatives strongly agreed that Mr. Zameer Ahmed Khan was always punctual for his classes. The table depict that the majority of the relatives (100.00%) strongly agreed Mr. Zameer Ahmed Khan employed variations in his coaching style, always used to set a good example to others, and motivated students to take part in competitions.

The tabular data depict that among the relatives, 22% agreed, and 78% strongly agreed that Mr. Zameer Ahmed Khan’s classes were interesting, inspiring, and employed audio-video aids during his coaching. The table further shows that 56% of the relatives agreed, while 44% strongly agreed that Mr. Zameer Ahmed Khan always believed in correcting mistakes and was very popular among students.

### Opinion Rating Survey of Mr. Zameer Ahmed Khan as a Personality

The opinion of relatives about Mr. Zameer Ahmed Khan as a personality is shown in Table 3. Here, the tabular data depict that cent percent of the relatives strongly agreed that Mr. Zameer Ahmed Khan always used to behave in sober manner, respects established traditions and possesses a very pleasant personality. Further, 11% of them agreed and 89% strongly agreed that Mr. Zameer Ahmed Khan follows the rules strictly, acts in a self-reliant manner, is a warm-hearted person, and acts in a controlled manner. The table shows that 78% of the respondents agreed, while 22% strongly agreed that Mr. Zameer Ahmed Khan behaves boldly in decision-making.

Meanwhile, 22% of them agreed, whereas 78% strongly agreed that Mr. Zameer Ahmed Khan is a practical man and behaves in a relaxed manner. Meanwhile, 56% of the relatives agreed, while 44% strongly agreed that Mr. Zameer Ahmed Khan acts in a dominant manner. Cent percent of the respondents strongly agreed that Mr. Zameer Ahmed Khan was always punctual for his classes.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Statements</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Behaves in sober manner</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2.</td>
<td>Follows the rules</td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3.</td>
<td>Behaves boldly in decision making</td>
<td>78</td>
<td>22</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4.</td>
<td>Acts in self-reliant manner</td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5.</td>
<td>Is a practical man</td>
<td>22</td>
<td>78</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6.</td>
<td>Respects established traditions</td>
<td>56</td>
<td>44</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7.</td>
<td>Behaves in relaxed manner</td>
<td>22</td>
<td>78</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8.</td>
<td>Is a warm-hearted person</td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9.</td>
<td>Acts in a controlled manner</td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10.</td>
<td>Acts in a dominant manner</td>
<td>56</td>
<td>44</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11.</td>
<td>Takes his own decision</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12.</td>
<td>Possesses a very pleasant personality</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>13.</td>
<td>Very friendly and cooperative</td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>14.</td>
<td>Health conscious</td>
<td>67</td>
<td>33</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>15.</td>
<td>Has a good physique</td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>16.</td>
<td>Not stubborn</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>17.</td>
<td>Never loses his cool</td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18.</td>
<td>Has lot of patience and perseverance</td>
<td>67</td>
<td>22</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>19.</td>
<td>Believes much in social service</td>
<td>78</td>
<td>22</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>20.</td>
<td>His attitude toward others is always human</td>
<td>22</td>
<td>78</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
agreed that Mr. Zameer Ahmed Khan takes his own decision. The data further depict that 11% of the relatives agreed and 89% strongly agreed that Mr. Zameer Ahmed Khan is a very friendly and cooperative man, has a good physique and never loses his cool. Meanwhile, 67% of them agreed, while 33% strongly agreed that Mr. Zameer Ahmed Khan is a health-conscious person.

However, cent percent of them strongly agreed that Mr. Zameer Ahmed Khan is not a stubborn man. Meanwhile, 67% of the respondents agreed and 22% strongly agreed, while 11% disagreed that Mr. Zameer Ahmed Khan has a lot of patience and perseverance. Moreover, the table shows that 78% agreed and 22% disagreed that Mr. Zameer Ahmed Khan believes much in social service. On the other hand, 22% of the relatives agreed, whereas 78% strongly agreed that Mr. Zameer Ahmed Khan’s attitude toward others is always human.

**Opinion Rating Survey of Mr. Zameer Ahmed Khan as a Manager and Administrator**

The opinion of relatives about Mr. Zameer Ahmed Khan as a manager and administrator is shown in Table 4. The tabular data depict that cent percent of the relatives strongly agreed that Mr. Zameer Ahmed Khan is a very knowledgeable man. Among the relatives, 11% of them agreed, while 89% strongly agreed that Mr. Zameer Ahmed Khan is very honest, sincere to his assignments and believes in learning by doing. The table shows that 78% and 22% of the relatives agreed and strongly agreed that Mr. Zameer Ahmed Khan is a pragmatic person.

Moreover, the data depict that 22% of the respondents agreed and 78% strongly agreed that Mr. Zameer Ahmed Khan always helps others and create open and trusting climate. However, 56% of them agreed, while 44% strongly agreed that Mr. Zameer Ahmed Khan respected his teachers. Further, it was noticed that 11% of the relatives agreed, while 89% strongly agreed that Mr. Zameer Ahmed Khan has pleasing manners, his approach to sports is most scientific and followed the rules and regulations of the game strictly.

It was observed that cent percent of the relatives either agreed or strongly agreed that Mr. Zameer Ahmed Khan respects other games and other players and is a hardworking player. However, 67% of them agreed, while 33% strongly agreed that Mr. Zameer Ahmed Khan never used shortcuts. Meanwhile, cent percent of the relatives either agreed or strongly agreed that Mr. Zameer Ahmed Khan is a very friendly and cooperative person.

It is further noticed from the table that cent percent of the respondents strongly agreed that Mr. Zameer Ahmed Khan is a very punctual man. Meanwhile, 11% of the relatives agreed,

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Statements</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Very knowledgeable man</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2.</td>
<td>Very honest and sincere to his assignments</td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3.</td>
<td>Pragmatist</td>
<td>78</td>
<td>22</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4.</td>
<td>Believes in learning by doing</td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5.</td>
<td>Always help others</td>
<td>22</td>
<td>78</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6.</td>
<td>Respects teachers</td>
<td>56</td>
<td>44</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7.</td>
<td>Always create open and trusting climate</td>
<td>22</td>
<td>78</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8.</td>
<td>Has pleasing manners</td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9.</td>
<td>His approach to sports is most scientific</td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10.</td>
<td>Respects other games</td>
<td>56</td>
<td>44</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11.</td>
<td>Respects other players</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12.</td>
<td>Is a hardworking player</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>13.</td>
<td>He follows the rules and regulations of the game strictly</td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>14.</td>
<td>Never uses shortcuts</td>
<td>67</td>
<td>33</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>15.</td>
<td>Very friendly and cooperative</td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>16.</td>
<td>He is very punctual</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>17.</td>
<td>He enjoys game</td>
<td>11</td>
<td>89</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18.</td>
<td>He is always satisfied on his own performance</td>
<td>67</td>
<td>22</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>19.</td>
<td>Has faith in teacher</td>
<td>78</td>
<td>22</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>20.</td>
<td>Is a professional athlete</td>
<td>22</td>
<td>78</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
whereas 89% strongly agreed that Mr. Zameer Ahmed Khan enjoys his game. The tabular data depict that 67% and 22% of the respondents agreed and strongly agreed, while 11% disagreed that Mr. Zameer Ahmed Khan, most of the time, used to be satisfied with his own performance. The tabular data depict that 78% of the relatives agreed, while 22% strongly agreed that Mr. Zameer Ahmed Khan had faith in his teachers. On the other hand, 22% agreed and 78% strongly agreed that Mr. Zameer Ahmed Khan is a professional athlete.

CONCLUSION

The following conclusions may be drawn from the analysis of the data gathered from the subject and other associates in responses to the questionnaires served to them and interviews conducted. The subject possesses very sound habits, discipline, sincerity, humbleness, regularity, punctuality, calmness, relaxed approach, optimistic attitude, die-hard attitude, aggressive attitude, and a very positive and favorable approach toward sports and people and has shown total dedication, will power, determination, and involvement as a Volleyball player and coach at various levels.

REFERENCES

Abstract of National Conference on Physical education and Health Science; 2014.
Physical fitness traits of junior Volleyball players in West Gojjam, Ethiopia

Demissie Gashu Walle¹, A. Kaleemulla², Zelalem Melkamu³

Sport Academy, Bahir Dar University, Ethiopia

ABSTRACT

The purpose of this study was to compare the physical fitness traits of junior Volleyball players in the West Gojjam district of Ethiopia with that of their international norms. The cross-sectional study involves 54 (n = 54) junior Volleyball players from West Gojjam and secondary data from official websites, journals, and books. Six fitness traits were tested and the result examines that junior Volleyball players in the West Gojjam district of Ethiopian were significantly lower than international norms (P < 0.01). Officials, experts, Volleyball coach, and people should consider the physical fitness traits of players during the talented identification of players.

Keywords: Junior, Physical fitness traits, Volleyball players

INTRODUCTION

Volleyball game is mostly characterized by jumping serve, attack from the back row, aggressive blocking, suddenly move in the forward direction, sideways, and downward directions. All this requires optimum traits of fitness (Dale, 2017). In Volleyball game, players require performing vigorous activities, including starting, stopping, changing direction, and diving movements, players also perform jump serve, dig, and spike, demonstrate aggressive blocking and spiking actions in an effective manner. Hence, it is essential for the players to possess a high level of physical fitness traits that allow them to play their roles more effectively in each position. Hence, Volleyball sport considered as the game of flexibility, strength, speed, agility, and power (Zhang, 2010; Tian, 2006). Attacking and blocking performance represent 45% of the total actions in a game and 80% of the scores obtained in international matches (Voigt and Vetter, 2003; Zhang, 2010). Therefore, so we can conclude that Volleyball requires a better level of Physical fitness traits.

Statement of the Problem

In Ethiopia, Volleyball is considered as a cultural activity in West Gojjam district of the country. Most of the youths practiced it during their free time. People, officials, coaches, and experts of the region considered the district as talent area in Volleyball sport. According to scholars of the field, talent of Volleyball players greatly depends on the physical fitness traits of the players, next to anthropometric characteristics (Milić et al., 2016; Yadav, 2015; Fattahi et al., 2012; Pridal and Hancák, 2012). To the researchers’ knowledge, there was no study conducted on the physical fitness traits of Volleyball players in the given district. Hence, the purpose of this study was to compare the physical fitness traits of junior Volleyball players in the West Gojjam district of Ethiopia with that of their international norms.

Methods

The study used a cross-sectional research design and it is descriptive in nature. Three junior Volleyball teams from the West Gojjam zone of Ethiopia were involved and all players (n = 54) who are regularly trained and free from injuries were included in the study. All fitness tests were taken by the researchers with the assistance. Before the actual
RESULTS AND DISCUSSION

Descriptive physical fitness traits of junior Volleyball players in the West Gojjam zone of Ethiopia are shown in Table 1.

It is clear that the mean physical fitness traits of junior Volleyball players in the West Gojjam district of Ethiopia on sit and reach, push up, sit up, 10 m sprint run, T-shuttle run, and vertical jump performance were 20.87 ± 7.28 cm 30.05 ± 11.27 rep, 22.96 ± 11.05 rep, 2.17 ± 0.29 s, 10.84 ± 0.62 s, and 38.90 ± 10.03 cm, respectively. Push up, sit up, and vertical jump performance were relative with larger variability. These reflect the presence of big differences among the players in the strength of the upper and middle body as well as the power of lower extremities.

As Table 2 shows that the mean flexibility of the lower back and hamstring muscles of junior Volleyball players in the West Gojjam zone of Ethiopia was 20.87 cm and that of the international normative mean score was 25.00 cm. The difference between these was found to be statistically significant ($P < 0.01$). A similar finding was reported by Sameer et al. (2015) 19.07 3.77 cm, and Govind et al. (2013) 20.38 ± 2.83 cm. While, higher flexibility score of junior Volleyball players reported in England by Duncan et al. (2006), which is 29.22 ± 8.8 cm. This difference in flexibility in the lower back and hamstring muscles related to the nature of their joints, the types of muscle fiber, the characteristic of tendons, and ligaments of the players together with the nature of training given to the players (Horst, 2017). Poor flexibility will boost the risk of injury, decrease the range of movement, damage skilled movement, and extend recovery time and decrease the speed and agility of the players (Hamilton, 2018). Therefore, these lower back and hamstring flexibility of junior Volleyball players found in West Gojjam, Ethiopia still needed to be improved.

As Table 2 indicates the upper body strength mean score of junior Volleyball players in the West Gojjam district of Ethiopia, and the international normative mean score was 30.05 and 32.5 repetitions, respectively. The difference between these was found to be statistically non-significant ($P < 0.05$). Fitness of junior players found in the West Gojjam was a little bit better than the performance of Indian junior Volleyball players, 28.90 ± 4.174, reported by Govind et al. (2013). In Volleyball, there is aggressive blocking, spiking, and repetitive jump serves. All these actions need optimum strength of muscle groups found in the shoulder and around the chest muscle (LA84 Foundation, 2012; Singh et al., 2011). Offensive and defensive actions also nothing without having strong muscle groups on shoulders, around the chest, and arms (Zhang, 2010). All these indicate that the strength of the upper body is vital for successful Volleyball participation. It is one of the vital fitness components for Volleyball players and it contributes a lot for better spike, block, and dig action during the game (Athletic, 2017, Keshav and Harmandee, 2014).

### Table 1: Descriptive statistics on physical fitness traits of junior Volleyball players in West Gojjam zone of Ethiopian (n=54)

<table>
<thead>
<tr>
<th>PFV</th>
<th>Mean</th>
<th>SE</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility (cm)</td>
<td>20.87</td>
<td>0.99</td>
<td>7.28</td>
</tr>
<tr>
<td>Upper body strength (rep.)</td>
<td>30.05</td>
<td>1.53</td>
<td>11.27</td>
</tr>
<tr>
<td>Abdominal strength (rep.)</td>
<td>22.96</td>
<td>1.50</td>
<td>11.05</td>
</tr>
<tr>
<td>Speed (s)</td>
<td>2.18</td>
<td>0.04</td>
<td>0.29</td>
</tr>
<tr>
<td>Agility (s)</td>
<td>10.85</td>
<td>0.08</td>
<td>0.62</td>
</tr>
<tr>
<td>Explosive power (cm)</td>
<td>38.90</td>
<td>1.36</td>
<td>10.03</td>
</tr>
</tbody>
</table>

PFV: Physical fitness variables

### Table 2: Comparison of fitness traits of junior Volleyball players in West Gojjam with international mean value

<table>
<thead>
<tr>
<th>Fitness test</th>
<th>n</th>
<th>Df</th>
<th>Mean (SD)</th>
<th>Tested value</th>
<th>Mean difference</th>
<th>t</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility (cm)</td>
<td>54</td>
<td>53</td>
<td>20.87±7.28</td>
<td>25</td>
<td>−4.12</td>
<td>−4.16</td>
<td>0.001</td>
</tr>
<tr>
<td>Upper body strength (rep.)</td>
<td>54</td>
<td>53</td>
<td>30.05±11.27</td>
<td>32.5</td>
<td>−2.44</td>
<td>−1.59</td>
<td>0.117</td>
</tr>
<tr>
<td>Abdominal strength (rep.)</td>
<td>54</td>
<td>53</td>
<td>22.96±11.05</td>
<td>36.5</td>
<td>−13.53</td>
<td>−8.99</td>
<td>0.001</td>
</tr>
<tr>
<td>Speed (s)</td>
<td>54</td>
<td>53</td>
<td>2.18±0.29</td>
<td>1.86</td>
<td>0.318</td>
<td>7.888</td>
<td>0.001</td>
</tr>
<tr>
<td>Agility (s)</td>
<td>54</td>
<td>53</td>
<td>10.84±0.62</td>
<td>10.49</td>
<td>0.35</td>
<td>4.206</td>
<td>0.001</td>
</tr>
<tr>
<td>Power (cm)</td>
<td>54</td>
<td>53</td>
<td>38.90±10.03</td>
<td>48.74</td>
<td>−9.83</td>
<td>−7.202</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Source: Elizabeth Quinn, 2018; international normative mean was calculated from the findings of Simonek et al., 2017; international normative mean was calculated from the findings of Aouadi et al., 2015; Kumar and Yadav, 2015; international normative mean adapted from Australian College of Sport and Fitness 2013; Nebojs et al., 2012; Nikbakht, 2011; Gabbett et al., 2007; Duncan et al., 2006; international normative mean score was adapted from copper institute, 2006; international normative mean score was adapted from Canadian society for exercise physiology, 1998)
The study also confirms that junior Volleyball players in the West Gojjam zone of Ethiopia were significantly less than international norms with respect to sit up performances \((P < 0.05)\). In this study, the sit-ups mean score of our junior Volleyball players was 22.92 repetitions. It was inconsistent with the sit-up performance of junior Volleyball players in India; their sit-up test score was 41 repetitions as reported by Keshav and Harmandee (2014). In the other study, Bag et al. (2015) reported 38.73 repetitions for the mean sit-up performance of junior Volleyball players. This difference in sit-ups performance is related to the difference in the strength of waist and abdominal muscles, including rectus abdominals, external Oblique’s, internal Oblique’s, transverse abdominals, and hip flexor muscles, including psoas major, iliacus, rectus femoris, pectineus, and sartorius (Quinn, 2018). The strength of the abdominal and hip muscles is the key to successful Volleyball performance (Singh et al., 2011). It also contributes a lot for the proper successful execution of dig actions, explosive jumping, and powerful spiking actions (LA84 Foundation, 2012).

In this study, the mean score of Ethiopian junior Volleyball players and international norms in 10 m sprint run test was 2.17 s and 1.86 s, respectively. The difference between these was found to be statistically highly significant \((P < 0.01)\). This means our junior Volleyball players were not as fast as their international counterparts. Speed is a complex mixture of perception, expectation, decision making, reactions, moving at maximum speed, and reading the game. All of these components are interrelated and have a significant influence on the speed of Volleyball players (Kessel, 2019).

As Table 2 shows that the mean score of Ethiopia junior Volleyball players in relation to the shuttle run agility test score was 10.84 s, while the normative mean of international counterparts was 10.49 s. The difference between these was found to be statistically highly significant \((P < 0.05)\). This means that our players were less agile than the international normative mean. The agility, performance traits of our junior Volleyball were lesser than Australian junior Volleyball players, 10.49 ± 0.96 s (Tim et al., 2007) and better than Indian counterpart, 11.55 s, as reported by Jatinder et al. (2017). This difference in their agility test performance may be related to the difference in cognitive or decision-making ability (knowledge of the situation, pattern recognition, anticipation, and visual scanning) of the players. Physical capability, particularly, strength, and power of the leg muscles and technical abilities difference, such as foot placement, adjustment of step to accelerate, and body position also affect their performance (Young et al., 2015; Gabbett et al., 2008; Sheppard et al., 2006; Sheppard and Young, 2005). It is much more complex, involving speed, balance, coordination, fluidity of movement, and the ability to react to a change of the environment (BBC Sports, 2018; Flisk, 2008). In Volleyball, agility does not only include changing in direction but also involves the ability to predict the movement of the ball, players and react to the game-specific situations (Gamble, 2013). That means that the ability to start, stop, and change directions rapidly and efficiently is essential for Volleyball players (Lloyd et al., 2015; Scanlan et al., 2014; Young et al., 2011; Lockie et al., 2013; Kutlu et al., 2012; Serpell et al., 2011; Sporis et al., 2010; Little and Williams, 2005).

In this study, the mean vertical jump score of junior Volleyball players in the West Gojjam zone of Ethiopia was 38.90 cm and that of the international normative mean was 48.74 cm. The difference between these was found to be statistically highly significant \((P < 0.001)\). This means that the explosive power of our junior Volleyball players was less than the international counterparts. The mean vertical jump score of junior Volleyball players in the West Gojjam zone of Ethiopia was 38.90 cm. It was not alien with the finding, 33.47 ± 6.11 cm, reported by Aouadi et al. (2015). The greater explosive power was reported by Indian and Iranian junior Volleyball players. Their vertical jump test score was 69 cm ± 7.44 cm and 50.0 cm ± 8.4 cm, respectively, as reported by Sameer et al. (2015) and Masoud and Nikbakht (2011). This much amount of difference in the vertical jump is associated with different factors. Such factors include the technical ability of players, their muscular strength and power difference, and their anthropometric characteristics (Al-Fadilli et al., 2015; Aouadi et al., 2012). The vertical jump is common, very vital, and essential fitness quality for Volleyball players and it is the key capabilities for both attacking and blocking actions (Singh and Behera, 2013).

**CONCLUSION AND RECOMMENDATIONS**

Physical fitness is the key predictor for identifying talent in junior Volleyball players. Based on the results of this study, junior Volleyball players in the West Gojjam district of Ethiopian were significantly lower than international players with respect to physical fitness traits. It is vital to study the physical fitness traits of players while searching talented Volleyball players. Officials, experts, Volleyball coaches, and people should consider the physical fitness traits of players during the talented identification of players.

**REFERENCES**


7. Simonek J, Horička P, Hianik J. The differences in acceleration, maximal speed and agility between soccer, basketball, volleyball and handball players. J Hum Sport Exerc 2017;12:


Configuration of mind frame through motivational techniques in sports: A review

Kariga Anitha¹, L. B. Laxmikanth Rathod²

¹Physical Director, GDC, Ramannapet, Yadadri District, Telangana, India, ²Principal, Nizam College (A), Hyderabad, Telangana, India

INTRODUCTION
Motivation is the process of initiating a conscious and purposeful action. The goal-directed, need-satisfying behavior is called motivation. The behavioral regulations can be arranged on a scale from the least to the most self-determined, i.e., amotivation, external regulation, introjected regulation, identified regulation, integrated regulation, intrinsic motivation, and flow. Motivation techniques, such as goal setting, reward, music, and self-talk play an important role in configuration of mind frame for sports performance.

Types of Motivations
The behavioral regulations can be arranged on a scale from the least to the most self-determined, i.e., amotivation, external regulation, introjected regulation, identified regulation, integrated regulation, intrinsic motivation, and flow.

Amotivation implies a lack of intention to engage in an activity. It is associated with feelings of incompetence and a lack of connection between one’s behavior and the expected result. For example, an amotivated athlete expresses a sense of helplessness, namely, “I can’t see the point in training any more it just tires me out” and frequently require counseling, as they are highly vulnerable to dropping out.

External and introjected regulations represent non-self-determined types of extrinsic motivation because athletes do not detect that their behavior is choice full, and as a result, they feel the psychological pressure. Participating in sport to receive prize money, win a trophy, or a gold medal or to avoid punishment or negative evaluation are the characteristic features of external regulation. On the other hand, the introjection is an internal pressure under which athletes might participate out of feelings of guilt or to gain recognition.

Identified and integrated regulations denote self-determined types of extrinsic motivation because activity is initiated out of choice, although it is not necessarily enjoyable. These types of regulation justify why some athletes spend hundreds of hours to repeat the drills; they realize that such activity will finally help them to improve. Identified regulation stands for engagement in behavior because it is highly valued, whereas when behavior becomes integrated that it is in harmony with one’s sense of self and almost entirely self-determined.

Address for correspondence:
Kariga Anitha,
E-mail: anitharajvalli12@gmail.com
Intrinsic motivation generates from within, is absolutely self-determined and characterized by interest in, and enjoyment derived from, sports participation. It is categorized into three types, namely, intrinsic motivation to know, intrinsic motivation to accomplish, and intrinsic motivation to experience stimulation. Intrinsic motivation is regarded as the healthiest type of motivation and reflects an athlete’s motivation to perform an activity simply for the sake of participation.

According to Hungarian psychologist, Mihalyi Csikszentmihalyi, the highest level of intrinsic motivation is flow state. Flow is characterized by complete immersion in an activity, to the degree that nothing else matters. In other words, there is a perfect match between the demands of an activity and an athlete’s perceived ability or skills. During flow, self-consciousness is lost and athletes become one with the activity.

**MOTIVATIONAL TECHNIQUES FOR COACHES AND ATHLETES**

**Goal Setting**
Athletes should be encouraged to set a few ambitious but achievable long-term goals. Through empowering athletes to set their own goals, they are more likely to accept the challenges and pursue the goals with enthusiasm. To align athletes on track with their long-term goals, they should also set suitable medium-term goals. To achieve superior performance, short-term goals are the most important in practical terms as these keep athletes focused on the checkmarks. Goals need to be monitored and revised on a regular basis.

**Using Extrinsic Rewards**
According to self-determination theory, the extrinsic reward reinforces an athlete’s sense of competence and self-worth. A reward should be informational in nature but not controlling because it can destabilize intrinsic motivation.

**Motivational Music**
Research from Brunel University indicates that the use of music during training sessions and recovery times enhances work output, reduces exertion, and improves the pleasure experience during the activity.

**Positive Self-task**
This technique can be used to increase motivation across a wide range of achievement domains. It makes use of an athlete’s powerful inner voice to reinforce their self-esteem. With appropriate reiterations, self-talk can positively alter an athlete’s belief system. The legendary boxer, Mohammed Ali, repeated the claim, “I am the greatest” so many times that even his opponents believed it.

**CONCLUSIONS**

1. An overbearing or unrealistic challenge can cause excess anxiety; therefore, the coaches should ensure that athletes set realistic goals.
2. One of the biggest mistakes that coaches make in setting goals is that they are often too rigid in their approach. The goal setting process works best when there are some flexibility and the individual athlete or team takes ownership of each goal.
3. Simultaneous presence of high extrinsic and high intrinsic motivation is likely to yield the most positive benefits for adult athletes. The extrinsic motives are supported on a firm foundation of high intrinsic motivation.

**REFERENCES**

INTRODUCTION
Stress
It is a physical, mental, or emotional demand which inclines to disrupt the homeostasis of the body. It is an everyday part of life if there is no stress, we would, in all probability, suffer “appalling boredom.” Stress is unavoidable in life and sport, and all performing actors, artists, and athletes achieve their tasks with varying stress levels. It may also relate to any kind of pressure, be it due to one’s job, school work, marriage, illness, or death of a loved one.

The common outcome in all of these is change.

STRESS AND SPORTS PERFORMANCE
Sports performance is not simply a result of physiology (for example, stress and fitness) and biomechanical (for example, technique factors), but psychological factors have a crucial part in determining performance. Every athlete has a certain stress level that is obligatory to elevate his or her game. That is governed by factors, such as past experiences, coping responses, and genetics.

Stress during sports, as in anything else in life, maybe acute episodic or chronic. For the most part of sports, it is episodic, whether during a competitive match between friends, or a championship game. While acute stress may essentially act as a challenge, if not harnessed, it can change to not only an episodic stressor that can affect one in the long term but can also obstruct one’s play (Kamlesh, 2011).

How Does Stress Affect Performance?
The relationship between stress and performance has been portrayed by the stress response curve (Nixon, 1979). In addition, pressure, an important stressor, also has a crucial influence on an individual’s response to stress. One of the most obvious effects of stress in one’s life is the vagaries in his performance. While we can certainly identify the magnitudes of normal or excessive amounts of stress

ABSTRACT
Athletes and coaches often neglect the psychological preparation which is very important for sports performance. Various studies have observed that mental readiness was felt to be the most significant statistical link with elite athletes. Athletes have frequently been quoted to state how the mental aspect is the supreme important measure of one’s performance. Arnold Palmer, a professional golfer, advocated that the game is 90% psychological. The entire time consumed by the golfer actually swinging and striking the ball throughout those 72 holes is roughly 7 min and 30 s, leaving 15 h, 52 min, and 30 s of “thinking time.” Within the parameters of psychological aspects of athletic performance, it is thought-provoking to note that more than 70% questions raised, debated, and pondered at the international conferences and seminars on sport psychology concerns to anxiety and aggression as performance to the genre of emotions. They ascend under varying sets of situations and form a sort of range but always moving upward. Their far-reaching consequences for the physical and mental health of the people in general and performing athletes, in particular, are an open secret. Stress is upshot from non-fulfillment of necessitates; continued stress generates anxiety and anxiety results in tension. The lingering effect of tension is sensed, monitored, and assessed both physiologically and psychologically and is ultimately linked with psychosomatic disorders. Here, stress and anxiety are discussed.

Keywords: Aggression, Psychological factors, Sports performance, Stress, Tension
through mere surveillance, it is best to study the scientific relationship between stress and performance (Kamlesh, 1972 and 2011).

The Stress Response Curve
To better know the effects of stress on performance, the following graph of the stress performance curve explaining how stress affects performance in theoretical terms.

The curve shows that as the level of stress rises, the performance level also increases, to the point of healthy tension. Near the point of fatigue, a known area called the comfort zone designates the kind of stress levels that we can totally accomplish and assist good performance levels. As stress begins to be professed as overwhelming or excessive, the person touches a fatigue point, wherein the performance levels start to drop. The ultimate end of overwhelming stress, called burnout, can be fatigue, ill-health or breakdown.

Positive Effects
As shown by the graph, performance levels rise when stress supervision is effective. Stressors such as pressure and demands can enable better stress response and, consequently, higher levels of performance. For instance, a basketball player attempts to run faster, shoot a three-point shot, and succeeds in it since the pressure, he has obtained from the spectators, the close scores, and the strong opponents.

Negative Effects
When stress is observed as intense or unmanageable, the person starts to experience a slow to extreme reduction in performance levels, producing a drop in efficiency, and enthusiasm to respond to the stress. For instance, a very tight target is given to an office employee who has to take care of her four children at home and a sick mother at the hospital. This irresistible mix of circumstances, if not coped cautiously and totally, will end to a low performance at work, bad relationships with other members of the family, ill health, and burnout.

Pressure and Performance
Pressure, one of the noteworthy life stressors, affects performance, as shown by the “Inverted-U” graph (Robert and Dodson, 1908).

Looking at the left side of the graph, you will notice that low pressure or low levels of stress result in a person’s stress response as “boredom” or unchallenging. Even if the task is of great important, the absence of an appropriate level of pressure, attention, and concentration to perform the task is significantly low.

On the other hand, extreme levels of pressure do not mean high-performance levels; rather, it is identified as the outcome from low pressure – low-performance levels due to “unhappiness” or negative feelings due to vast stress. However, there is a region called the “area of best performance.” In this region, reasonable pressure ensuing to optimum stress or stress that is entirely adaptable leads to the highest level of performance (Daily Mail, 2001).

Approaches for Tackling of Stress
a. When stress originates simply as a stimulus triggering distraction, adaptation of the stimulus itself may be sufficient to reduce stress.

b. Stress as a perception of threat would require the athlete to learn to feel that demands of the situation are not difficult for him/her to meet.

c. In situation, where stress becomes an illogical perception of a threat, the coach must make efforts to change the athlete’s rational and ward of illogical uncertainties.

d. In case of stress as an anticipated negative result, the performer needs to overly review the behavior (routine) to the point at the success, which is more likely to happen and expectancy of failure corresponding to decrease.

e. Where stress arises as a tension response, deep muscle relaxation technique, or biofeedback acts as the best approach.

f. If stress comes as an important negative consequence, the athlete must be made to understand the importance of
and increase (chances of) success and reduce failure by rationalizing his thinking about the level and importance of competition (Barrow and McGee, 1979 Kamlesh, 2011). In nutshell, in dealing with stress as a process objective, external circumstances are perceived and interpreted by the athlete, thus leading to responses, the consequence of which may lead to changing the external situation and/or modifying the athlete’s perception of these external circumstances.

**Anxiety**

It is a distressed state of mind; emotional reactivity; arousal; nervousness; unrealistic; and unpleasant state of mind. Anxiety is an indispensable feature of any competitive situation and without a certain level of anxiety, there cannot be competitive performance. Neither too high nor too low level of anxiety is conducive to sports performance. Ample level of anxiety yields the best results. Unless sports persons learn to handle the stressful competitive situations by managing anxiety, they would fail to realize their aim.

Anxiety has both psychological and physiological effects on sports performance. Once aroused, it raises the general arousal level of a player to the degree that he finds it tough to focus on his game due to continuous assault on his nervous system and failure to diffuse tension initiated by rising anxiety levels. The ability of the player to observe and evaluate situations correctly is reduced.

His information-processing mechanism gets overstressed, resulting in either in the wrong or slow response, even to emergent situations. Under such conditions, a player is not focused that he wishes to do one thing but does something else. He loses control over his body and mind.

The association between anxiety and athletic performance has been a subject of numerous theories launched up from time, for example, drive theory in 1943 and inverted U-hypothesis or optimal arousal level in 1962. The former was formed on the idea that there is an ideal amount of arousal that an athlete will perform at. However, if that level of arousal is passed, then the level of performance will reduce. The same thing occurs when the level of arousal is lesser than the optimal level. Although this hypothesis has much support for many years, it too has fallen out of favor due to its generalization on a subject as complex as brain and behavior (Daily Mial, 2001; Kansal, 2008; and Kamlesh, 2011).

**How to Prevent Anxiety in Sports Performance**

**Diaphragmatic Breathing**

The diaphragm is a muscle between the chest and the stomach cavity. The breathing done by contracting this muscle is known as diaphragmatic breathing. It requires simple practice to learn, and then it should be repeated several times daily.

**Relaxation Technique**

When the athlete feels the symptoms of anxiety, such as increased heart rate, increased blood pressure, or difficult breathing, a relaxation technique can help in controlling the anxiety. In one relaxation technique, the athlete is asked to lied own in a darkened room and think about relaxing his body from the outside inward. As a result, blood pressure, breathing, and heart rate normalize. If the anxiety attack is more severe, then massaging the body can relax the individual to a great extent.

**Visualization**

Visualization is a technique, used by the athletes to control their anxiety. In this technique, one visualizes himself in a situation similar to the actual event. The athlete visualizes himself winning in front of the entire crowd, where the event is to take place. Below are more ways, you can use visualization to combat performance anxiety.

**Visualizing yourself**

This is one of the exercises of visualization in which athlete visualizes themselves. The athlete is asked to visualize every physical aspect of their body with their eyes closed. While visualizing the body, the athlete tells himself that each of these body parts is fine and in good working condition.

**Visualizing your game**

Another exercise requires the athlete to visualize the actual sport that they are to play. The athlete visualizes the events starting from the preparations before going onto the field and the first move, and finally the victory.

**Visualizing your opponents**

So far, you have visualized yourself and your game. In this exercise, the athlete is now required to imagine how he sees his opponent playing. While visualizing his opponent’s moves, he is supposed to tell himself that his moves are better than his opponent and visualize how he should combat his opponents’ moves.

**Muscle Relaxation**

Anxiety results in stiffness of the muscles. Muscle relaxing practices are done to avoid this happening during the actual game. In this technique, the athlete tenses a particular muscle of the leg abdomen, hands, or face for 10 s with the eyes closed. After 10 s of tension, 20 s of relaxation should be practiced before moving to the next muscle.

**Focusing on What Can Be Controlled**

Athletes should reminding themselves that they are better trained; they have developed better techniques, but should not try to
control things that are not in their control such as the audience or the opponent. An overview of the results of research on anxiety with elite athletes as subjects of study makes an interesting reading, even though the conclusions are at great variance across sports: (a) Athletes (especially, gymnasts, track and field athletes, basketball, and tennis players) who interpreted their anxiety as harmful had higher intensity of anxiety than those who reported it as being an aid. (b) The more experienced athletes were found to have lower level of cognitive anxiety. This makes some sense because as an athlete gains experience (especially while playing competitive fixtures), he or she learns tricks of the game and knows how to manage stress. (c) The level of confidence and that of anxiety is said to be closely related. The higher an athlete’s confidence, the less he or she will feel anxious about the competition (and its outcomes) because they know they are ready to take the bull by the horn. Likewise, an over-anxious athlete exhibits sign of self-doubt. Athletes who are made to practice, as also compete, under high anxiety conditions, are better able to manage their anxiety and keep its level optimal, which is conducive to top performance.

CONCLUSION

It is pertinent to see that the athlete is prepared well taking care of his psychological training apart from his technical and tactical training.

REFERENCES

Importance of sports psychology in sports and games

S. Chandrashekar Goud¹, B. Sunil Kumar², K. Deepla³

¹Ph.D Scholar, Department of Physical Education, Osmania University, Hyderabad, Telangana, India, ²Secretary, Boc, IUT, OU, Hyderabad, Telangana, India, ³Chairman, Bos in Physical Education

INTRODUCTION

Psychology is the science of the human mind and behavior. Where there is behavior, there is psychology. Physical education makes an art-science combine dealing with movement, motion, activity, play recreation, and the like. In essence, they are activity-based endeavors; in function, they are enhancers of health and fitness; in an objective, they are developmental to the core; and in nature, they are joyful, recreating, and relaxing. The branch of psychology which is intimately connected with human behavior on the playfield – both under practice and competitive situations – with a view to bring about qualitative improvement in performance, is usually called exercise and sports psychology. It is basically of applied nature. Physical education, an educational endeavor, is much wider in range and focus than an elite competitive sport.

Singer enumerated the focus of modern sports psychology on the following themes:
• Exercise and health psychology for personal well-being.
• Counseling and clinical approaches to help individuals to overcome personal problems and maladaptive behavior.
• Identifying processing mechanisms and conditions leading to the acquisition and maintenance of skill.
• Performance enhancement techniques to contribute to performance potential.
• Group situations are leading to productivity.
• Psychometrics to develop and administer tests for specific purposes.
• Youth sport programs and the enrichment of experiences.

The sports community now recognizes that mental factors such as confidence, composure, focus, and motivation are highly significant to athletic performance. As a result, over the year’s performance enhancement has become an emerging career track within the field of sport psychology. Psychology principles such as positive thinking, imagery, and goal setting can be applied in sports to help athletes perform and prepare for competition. Sport psychology professionals aim to increase athletic performance by instilling mental toughness and minimizing the psychological effects of poor performance.

ABSTRACT

Psychology is the science of the human mind and behavior. The sports community now recognizes that mental factors such as confidence, composure, focus, and motivation are highly significant to athletic performance. As a result, over the year’s performance enhancement has become an emerging career track within the field of sport psychology. Psychology principles such as positive thinking, imagery, and goal setting can be applied in sports to help athletes perform and prepare for competition. Sport psychology professionals aim to increase athletic performance by instilling mental toughness and minimizing the psychological effects of poor performance.

Keywords: Behavior, Human mind, Positive thinking, Sports psychology

Mental training is about improving one’s attitude and mental skills to help them perform their best by identifying limiting beliefs and embracing a healthier philosophy about their sport.
Many athletes and coaches resist mental training because they do not understand how it can help them. For athletes to get the most out of their sport, it is critical for them to understand the value of improving their mental game. Athletes are more likely to embrace mental training when they understand it and its benefits. Our mental training programs aim to help players and coaches discover the benefits of mental training by highlighting the mental skills needed to achieve peak performance and underlining the mental barriers that limit success.

**Our Mental Training Programs Are Designed To**
1. Identify the mental barriers that limit performance.
2. Educate athletes on the mental skills needed to achieve peak performance.
3. Apply mental training strategies to enhance focus, confidence, composure, and mental preparation.

**The Purpose of Our Mental Training Programs Are To Instill**
- An awareness of the zone and the feelings associated with playing in the zone.
- High self-confidence or a strong belief in their skills or ability to play well.
- The ability to fully immersed in the task or totally concentrate on the present.

**The Purpose of Our Mental Training Programs Are To Instill**
- An awareness of the zone and the feelings associated with playing in the zone.
- High self-confidence or a strong belief in their skills or ability to play well.
- The ability to fully immersed in the task or totally concentrate on the present.
- A narrow focus of attention or the ability to focus on one specific thought without distraction.
- The ability to swing effortlessly or let it happen when it counts.
- Emotional control or the ability to remain calm under pressure.
- Clear and decisive mind or not overthinking and doubting their decisions.
- The ability to refocus or collect themselves after mistakes or errors.

**Performance Accomplishments – Getting Athletes to Feel They Have Mastered a Skill to Influence Their Perception of their Abilities**

For wide receivers on a football team, start each practice with them catching the football over and over. This repetition builds a sense of mastery and muscle memory and enhances self-efficacy in their position.

Baseball players who field numerous ground balls develop a sense of mastery in one aspect of the game of baseball to gain self-efficacy in that area.

Hitting a ball off of the tee numerous times to practice mechanics leads to a sense of mastery.

**CONCLUSIONS**

Sports psychologists often work as part of a collaborative team.

There are diverse career paths and specialization opportunities (i.e., teaching, youth sports, and professional athletics training).

It can be a fun, challenging, and exciting job.

Sport psychology professionals aim to increase athletic performance by instilling mental toughness and minimizing the psychological effects of poor performance.

**REFERENCES**

In Pakistan, the extent of facilities and the level of participation in sports among school-age children are considerably low. There might be several reasons behind this. However, one may be the numerous barriers that restrict sports activities at school level and ultimately deprive school student to reap the benefits of sports participation. We can classify these barriers into five categories, including governmental, institutional, financial, cultural and religious, and parents student’s hurdles.

In light of the above discussion, various researchers are conducting the researches to break the barriers and improve the sports activities. This research study is an effort in line with the researches of the world to explore the magnitude and influence of these barriers on the prevalence of sports at the school level. This study was conducted in Punjab a province of Islamic Republic of Pakistan situated in the North West of the country.

STATEMENT OF THE PROBLEM

The students in the present era are not taking part in the educational activities, and therefore, the achievement of the students is low. There may be many reasons, but the expert suggests that sorts create the sound mind in the sound body and thus facilitate educational development. In our country unluckily, there are many hurdles in the way of sports.
The researcher intends to launch a study for hurdles affecting sports and for the suggestion of workable measures to overcome these barriers.

**Objectives of the Study**

The objectives of this study were as follows:

1. To investigate the effects of barriers on sports activities in secondary schools of Punjab.
2. To investigate the gender differences in hurdle affecting sports in secondary schools of Punjab.

**SIGNIFICANCE OF THE STUDY**

This study may provide information to the stakeholders regarding various hurdle affecting sports and possible measures to remove those hurdles at secondary schools so that they could be able to overcome these hurdles and to promote sports. Through this particular study, the authorities may be able to know the hurdles that affect sports at the secondary school level of Punjab and take effective measures to remove them. This study will also be helpful in promoting sports activities at the secondary school level, and thus, the students may be able to enhance their academics by participating in various sports activities.

**Research Hypothesis**

H₁: There is no significant effect of governmental hurdles on sports in secondary schools of Punjab.

H₂: There is no significant effect of institutional hurdles on sports in secondary schools of Punjab.

H₃: There is no significant effect of religious and cultural hurdles on sports in secondary schools of Punjab.

H₄: There is no significant effect of financial resources as hurdles on sports in secondary schools of Punjab.

H₅: There is no significant effect of parent and student hurdles on sports in secondary schools of Punjab.

H₆: There is no overall significant effect of different barriers on sports in secondary schools of Punjab.

H₇: There is no significant difference between the views of male and female respondents in different hurdles.

**RESEARCH METHODOLOGY**

**Population**

Fraenkel and Wallen (2006) define that “population is the group of interest to the researcher, the group to whom the researcher would like to generalize the result of the study.”

The population of this particular study was comprised all the teachers, head of the institutions (HOI), and the parents in the province of Punjab, Pakistan.

**Sample**

Fraenkel and Wallen (2006) define that “A sample in a research study is the group, on which information is obtained.” In this study, there are 25 districts and 1379 higher secondary schools (male – 1069 and female – 310) situated in Punjab, Pakistan. It was quite difficult for the researcher to contact each and every school in the province. To overcome this difficulty, the researcher selected only 11 districts from the whole population using a cluster sample random technique. The researcher selected four schools from each district (two male and two female) by applying convenient or available sampling techniques. The researcher selected five teachers, one HOI from each school, and 20 parents from each district through available sampling technique. Hence, the total number of the sample from one district was 44, and the total sample from the whole province (11 districts) was 484.

**Instrumentation**

The researcher developed a draft questionnaire consisting of 50 questions. This questionnaire was put to 40 experts from Gomal University for the purpose of reliability. Some of the items were deleted by the experts view. The final version of the questionnaire consists of 36 questions. The reliability of this questionnaire was found to be 0.82. This questionnaire was a Likert type consisting of five options (Strongly agree, agree undecided, disagree, and strongly disagree). Instructions for filling up the questionnaire were made clear for the participants.

**Procedure**

The 484 copies of the final version of the questionnaire were distributed among the sample. They were given 1 day time to fill up the questionnaire. They were told that this information will only be used for the research purpose. After 1 day, the filled questionnaires were recollected, and the data were arranged in the form of data matrix on SPSS (version 12).

**Data Analysis**

For data analysis, the research statistic mean, standard deviation, t-statistic, and regression analysis were used. The t-statistic is used to check the difference between two means as in the case of male and female. The regression was used to check the cause and effect relationship.

**PRESENTATION AND ANALYSIS OF DATA**

**Test of Hypothesis 1**

There is no significant effect of governmental hurdles on sports in secondary schools of Punjab barriers on sports. The R square is 0.539, which means that 54% effect on sports is due to governmental barriers. The B is 0.583 (P = 0.000), which means that a total 1 unit increase in governmental barriers will cause 0.583 unit overall increase [Table 1].
Test of Hypothesis 2
There is no significant effect of institutional hurdles on sports in secondary schools of Punjab.

Table 2 shows the effect of institutional hurdles on sports. The R square is 0.699, which means that 70% effect on sports is due to institutional hurdles. The B is 0.682 ($P = 0.000$), which means that a total 1 unit increase in governmental hurdles will cause 0.682 unit overall increase.

Test of Hypothesis 3
There is no significant effect of religious and cultural hurdles on sports in secondary schools of Punjab.

Table 3 shows the effect of religious and cultural hurdles on sports. The R square is 0.571, which means that 58% effect on sports is due to religious and cultural hurdles. The B is 0.295 ($P = 0.000$), which means that a total 1 unit increase in governmental hurdles will cause 0.295 unit overall increase.

Test of Hypothesis 4
There is no significant effect of financial hurdles on sports in secondary schools of Punjab.

Table 4 shows the effect of financial hurdles on sports. The R square is 0.215, which means that 22% effect on sports is due to financial hurdles. The B is 0.273 ($P = 0.000$), which means...
that a total 1 unit increase in financial hurdles will cause 0.273 unit overall increase.

**Test of Hypothesis 5**
There is no significant effect of parent and student hurdles on sports in secondary schools of Punjab.

Table 5 shows the effect of parent and student hurdles on sports. The R square is 0.534, which means that 54% effect on sports is due to parent and student hurdles. The B is 0.508 ($P = 0.000$), which means that a total 1 unit increase in parent and student hurdles will cause 0.508 unit overall increase.

**Test of Hypothesis 6**
There is no overall significant effect of different hurdles on sports in secondary schools of Punjab.

Table 6 shows the step-wise effect of different barriers on sports. The four different models have been shown. In the first model, the R square is 0.696, that is, the effect of institutional role is 70%. In the second model, when parent and student hurdles added with the first model the R square vale is 0.888, that is, overall effect is 89%. In the third model, when governmental role is added that the R square is 0.946, that is, the overall effect is 95%. In the last model, when the religious and cultural hurdles are added that the R square value is 0.982, which means that there is 99% effect.

**Test of Hypothesis 7**
There is no significant difference between the views of male and female respondents in different hurdles.

Table 7 shows $t (482) = 0.64$, $P > 0.05$, which means that there is a significant difference between male and female on governmental hurdles.

**FINDINGS**
Following findings float up as the result of data analysis:

1. To test the first hypothesis $H_1$, the R square is 0.539, which means that 54% effect on sports is due to governmental hurdles. The B is 0.583 ($P = 0.000$), which means that a total 1 unit increase in governmental hurdles will cause 0.583 unit overall increase; therefore, $H_1$ is rejected [Table 1].
2. To test the second hypothesis $H_2$, the R square is 0.699, which means that 70% effect on sports is due to institutional hurdles. The B is 0.682 ($P = 0.000$), which means that a total 1 unit increase in governmental hurdles will cause 0.682 unit overall increase; therefore, $H_2$ is rejected [Table 2].
3. To test the third hypothesis $H_3$, the R square is 0.571, which means that 58% effect on sports is due to religious and cultural hurdles. The B is 0.295 ($P = 0.000$), which means that a total 1 unit increase in governmental hurdles will

---

### Table 4: Effect of financial hurdles on sports

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>463*</td>
<td>0.215</td>
<td>131.724</td>
<td>-</td>
</tr>
</tbody>
</table>

*Predictors: (Constant), FB

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant) FB</td>
<td>B</td>
<td>SE</td>
<td>2.648</td>
<td>0.098</td>
</tr>
<tr>
<td></td>
<td>0.273</td>
<td>0.024</td>
<td>0.463</td>
<td>11.477</td>
</tr>
</tbody>
</table>

*Dependent variable: Collective

### Table 5: Effect of parent and students hurdles on sports

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.731*</td>
<td>0.534</td>
<td>553.283</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant) PSB</td>
<td>B</td>
<td>SE</td>
<td>1.822</td>
<td>0.083</td>
</tr>
<tr>
<td></td>
<td>0.508</td>
<td>0.022</td>
<td>0.731</td>
<td>23.522</td>
</tr>
</tbody>
</table>

*Dependent variable: Collective
Table 6: Overall significant effects of different hurdles on sports

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.836*</td>
<td>0.699</td>
<td>1119.421</td>
<td>0.000*</td>
</tr>
<tr>
<td>2</td>
<td>0.942*</td>
<td>0.888</td>
<td>1905.168</td>
<td>0.000*</td>
</tr>
<tr>
<td>3</td>
<td>0.973*</td>
<td>0.946</td>
<td>2791.814</td>
<td>0.000*</td>
</tr>
<tr>
<td>4</td>
<td>0.991*</td>
<td>0.982</td>
<td>6669.468</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

*Predictors: (Constant), IB

Table 7: Gender difference in governmental hurdles

<table>
<thead>
<tr>
<th>Gender</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>322</td>
<td>3.71</td>
<td>0.56</td>
<td>0.64</td>
<td>0.522</td>
</tr>
<tr>
<td>Female</td>
<td>162</td>
<td>3.67</td>
<td>0.58</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

cause 0.295 unit overall increase; therefore, $H_3$ is rejected [Table 3].

4. To test the fourth hypothesis $H_4$, the R square is 0.215, which means that 22% effect on sports is due to financial hurdles. The B is 0.273 ($P = 0.000$), which means that a total 1 unit increase in financial hurdles will cause 0.273 unit overall increase; therefore, $H_4$ is rejected [Table 4].

5. To test the fifth hypothesis $H_5$, the R square is 0.534, which means that 54% effect on sports is due to parent and student hurdles. The B is 0.508 ($P = 0.000$), which means that a total 1 unit increase in parent and student hurdles will cause 0.508 unit overall increase; therefore, $H_5$ is rejected [Table 5].

6. To test the sixth hypothesis $H_6$, four different models have been shown. In the first model, the R square is 0.696 that is the effect of institutional role is 70%. In the second model, when parent and student hurdles are added with the first model, the R square value is 0.888, that is, overall effect is 89%. In the third model, when the governmental role is added that the R square is 0.946, that is, the overall effect is 95%. In the last model, when the religious and cultural hurdles are added, the R square value is 0.982, which means that there is 99% effect; therefore, $H_6$ is rejected [Table 6].

7. To test the seventh hypothesis $H_7$, $t$ (482) = −1.326, $P > 0.05$, which means that there is a significant difference between male and female on overall sample; therefore, $H_7$ is rejected [Table 7].

**DISCUSSION**

This study was initiated for the purpose to know about the barriers of sports participation and their effect on sports at the secondary schools level of Punjab, Pakistan. After the analysis, it was concluded that there is a significant effect of the entire barriers (governmental hurdles, institutional hurdles, cultural/religious hurdles, and financial hurdles and parents/students hurdles) on sports activities in the secondary school of Punjab. These results are
supported by ChFazal Ahmad and Dr. Maryam. It was concluded by these researchers that lack of funds, space, and facilities coupled with no interest in physical education teachers were the main hurdles in the development of physical education and sports. This present study is in line with Jenkinson, Kate and Amanada (2010) who described hurdles such as lack of qualified staff, lack of equipment’s, unavailability of facilities, and improper curriculum in the way of sports. They further described the institutional hurdles such as access of facilities, access to suitable teaching space, timetabling, support from other staff, and proper subject funding. The results of this present study are also supported by Dorovolomo and Hammond (2005), Landis (2005), and Chavilton et al. (2010). They concluded that improper time allocation for the implementation of sports and physical activities is one of the hurdles in the way of sports promotion at the school level, cultural influences, issue of accessibility to facilities, and costs for the smooth conduction of sports activities which are included in the hurdles of sports promotion. They also said that two main hurdles are practical hurdles such as cost, time, lack of facilities, and awareness among the peoples about sports and personal hurdles such as poor health status, lack of motivation, and commitment.

Daskapan et al. (2006) conducted a research at the university level, and classified the hurdles of sports participation into two main types, i.e. internal hurdles such as lack of time, lack of motivation, and lack of self-efficacy and the external hurdles such as lack of resources, lack of social support, and lack of time. They concluded that the external barriers have a significant impact on the sports as compared to external hurdles.

**CONCLUSIONS**

In the light of the data analysis, the following conclusions are, hereby, made by the researcher.

As far as, the hurdles of sports are concerned, there were total of five main hurdles that affect sports at secondary school level which are governmental hurdles, institutional barriers, financial hurdles, religious and cultural hurdles, and parent/students hurdles. In the study, the effect of these hurdles on sports was analyzed and the result shows that there is a significant effect of all these hurdles on sports. The result also shows that there was a significant gender difference in different hurdles of sports.

**Recommendations**

The following is the recommendations of the study:

1. The result shows that there was a significant effect of the governmental hurdles on sports; therefore, the researcher recommends that for the elimination of corruption; the government may introduce a policy. The media and government may play their role to make the people aware of the benefits of sports.

2. The result shows that the effect of institutional barriers was significant; therefore, the researcher recommends that proper curriculum of physical activities and spots may be introduced at the primary level to provide a firm base for the students of secondary schools level. In each school, sports tournaments and sports gala may be introduced. All heads of the institution may play their role in the improvement of sports at secondary schools level. All physical education teachers may introduce sports programs according to the interest of students. Physical education should be taught as a compulsory subject at the secondary level.

3. The effect of cultural and religious hurdles was significant; therefore, the researcher recommends that the attitude of the general public may be changed toward the favor of the sorts and the proper knowledge about the sports activities may be provided to the peoples.

4. The results show that the effect of financial hurdles was significant; therefore, researcher recommends that more funds may be allocated for sorts at the secondary school level. Furthermore, the provided funds may be used in the proper way.

5. The result shows that the effect of parents and student barriers is significant; therefore, the researcher recommends that the parents and students misconception may be eliminated through the knowledge of sports.

**REFERENCES**


Health status and lifestyle habits of college freshmen students: Basis for a proposed intervention program

Jonathan Jeffrey B. Bellen¹, Rhene A. Camarador²

¹Marikina Polytechnic College, Marikina, Philippines; ²Polytechnic University of the Philippines, Manila, Philippines

ABSTRACT

This study was aimed to determine the health status and lifestyle habits of college freshmen students. In addition, it also aimed to identify the preferred future physical activity and physical exercise schedule of the student respondents. The results of this study would serve as a basis for crafting a proposed sports and recreation intervention programs for the students. A descriptive method of research was employed in the study. By means of using Slovin’s formula, 293 freshmen students who are currently enrolled in physical education during the academic year 2018–2019 were included as the respondents. Stratified random sampling technique was also employed in facilitating the survey questionnaires. Frequency, weighted mean, one-way ANOVA, and independent sample t-test were the statistical tools used in computing and presenting the data. The results demonstrated that most of the respondents were experiencing chest pain, dizziness, and weight problem (underweight) and diagnosed with asthma, anemia, and diabetes. While on the other hand, diabetes, hypertension, and asthma were the top three family health problems. In terms of lifestyle habits of the student respondents, health-related fitness, disease prevention, and nutrition got the lowest category rating of “Needs Improvement” while the rest lifestyle category got “Good Rating.” Badminton, basketball, and running/walking were the most preferred future activities of the freshmen students and they are willing to participate in the program every day between 4:00 pm and 7:00 pm (1 h daily). The test of significant difference in the responses on the lifestyle habits revealed significant difference in the stress management, emotional well-being, environmental, and health protection when grouped according to age. Similarly, there were significant differences on the health-related fitness, avoiding chemical dependency, personal hygiene, and personal safety when grouped according to sex. When grouped according to the previous school attended, there is a significant difference health-related fitness. Finally, a proposed wellness intervention program was proposed to provide fun, enjoyable, and suitable health and wellness activities for freshmen college students.

Keywords: Freshmen students, Health status, Health-related fitness, Intervention program, Lifestyle habits

INTRODUCTION

Globally, statistics shows that communicable diseases are no longer the most prevalent diseases, but rather non-communicable diseases (NCDs). According to the World Health Organization (2018)[1] NCDs kill around 41 million people each year, equivalent to 71% of all deaths globally. Cardiovascular diseases account for most NCD deaths, or 17.9 million people annually, followed by cancers (9.0 million), respiratory diseases (3.9 million), and diabetes (1.6 million). Similarly, according to the Philippines Statistics Authority (2013)[2] diseases of the heart (118,740 deaths) and stroke (54,578 deaths) were also the top two causes of death, while diabetes (27,064 deaths) ranked fifth in the Philippine archipelago. Meanwhile, smoking, physical inactivity, irresponsible alcohol drinking, and unhealthy eating diets all increase the risk of dying from a NCDs.[1]

In addition, physical inactivity caused more than 5.3 of the 56 million global deaths in 2008[3] while it is currently the fourth leading cause of death around the globe.[4] The present projections indicate that time spent being physically inactive will continue to increase substantially.[5]

These data only signifying that the need to have a healthy and active lifestyle habits is very much needed. However, lifestyle changes are not made easily. Systematic education, motivation, and continuous monitoring by health professionals might be very helpful for encouraging lifestyle changes.[6]
Nowadays, it is now one of the priorities of each universities and colleges to promote a healthy lifestyle habits among students and employees as it is critical to their overall well-being. Good health no longer is viewed as simply the absence of illness. The notion of good health has evolved considerably in the past few years and continues to change as scientist learn more about lifestyle factors that bring on illness and affect wellness. In this context, physical education and sport professionals have come to acknowledge students’ need to be exposed to effective lifestyle management practices, and an efficient management system needs to be designed to strengthen the physical and psychological health of university students.\(^7\)

Thus, the need for a well-organized sports and physical activities and programs is very significant to encourage and develop healthy lifestyle habits. Student-oriented programs such as intramural and extramural promoting wellness must put into top consideration.

**Objectives of the Study**

The study aimed to determine the current health status and lifestyle habits of collegiate freshmen students of Marikina Polytechnic College, Marikina City, during the academic year 2018–2019. Specifically, it sought to determine the: (1) Profile of the student respondents; (2) health status of the student respondents in terms medical history; (3) current lifestyle habits of student respondents; (4) preferred future physical activity and physical exercise schedule; and (5) if there is a significant relationship between the profile of the respondents in terms of age, sex, and school and current lifestyle habits of the student respondents.

The researchers believe that giving top priorities on a well-designed sports and recreational activities and programs for all students that will enhance their overall well-being is highly needed. Thus, this paper endeavored to assess the students’ health status and lifestyle habits to design wellness programs suited for their preferences and capabilities.

**MATERIALS AND METHODS**

**Participants**

The study utilized descriptive method of research. Stratified random sampling was employed in facilitating the survey questionnaires. Using Slovin’s formula, 293 freshmen students who are currently enrolled in physical education during the academic year 2018–2019 were included in the study. The researchers gathered a total of 293 or 100% service freshmen students during the gathering of data.

**Procedure**

An adapted researcher-made questionnaire was used to determine the profile of the student respondents, health status of the student respondents in terms medical history, preferred future physical activity, and physical exercise schedule, while Wellness Lifestyle Questionnaire was adapted from the book of Hoeger et al. (2013) to assess current lifestyle habits of student respondents. A letter of permission was also forwarded to the college president to secure permission to conduct the survey among the respondents. After the approval of the office concern and the research director of the college, the survey questionnaires were personally distributed to the respondents.

After retrieving all the accomplished questionnaires, the data were then prepared for tallying and statistical treatment. Collected data were tallied using Microsoft Excel and were forwarded to statistician for statistical treatment. The gathered data were computed using the following statistical treatment techniques appropriate for each problem: Frequency, weighted mean, one-way ANOVA, and independent sample t-test.

**RESULTS AND DISCUSSION**

**Profile of the Respondents**

Most of the respondents are 17–19 years old, with 220 or 75.1% followed by 20+ years old with 73 or 24.9%. Out of 293 respondents, 170 or 58% were male, while 123 or 42% were female. On the other hand, 277 of the respondents or 94.5% are single while 234 or 79.9% of the respondents were graduated from public schools. On the other hand, 141 respondents or 48.1% are Bachelor of Industrial Technology (BIT) students, 56 or 19.1% of respondents are enrolled in certificate on technology, while 96 or 32.8% of respondents are Bachelor of Technical Vocational Teacher Education (BTVTED) students. When it comes to physical activity engagement other than PE classes, majority of the freshmen students engaged themselves in sports activities such as basketball, volleyball, and alike with 134 respondents or 45.7% and followed by outdoor activities such as hiking, camping, and fun run with 89 respondents or 30.4% and third in the rank is dance activities such as ballroom, Zumba, and alike with 70 respondents or 23.9% [Table 1].

According to Rappler,\(^8\) basketball has been a favorite sport by many Filipinos. Nearly every barangay actually has a basketball court of its own; some are even just on the road as long as it has a basketball ring. During their free time, young kids wearing slippers would practice their layups and dunks. According to Henson (2015),\(^9\) volleyball, on the other hand, has also marked an improvement in the history of sports, especially with a firm foundation of players and enthusiasts. It provides amusement and enjoyment not only to the players but also to the audience supporting them. This only reveals that majority of the freshmen students are more oriented in sports such as basketball and volleyball because of the popularity of this sports and easy accessibility of the facilities of this sports that may help them improve their skills and enhance their fitness level.
Health Status of the Student respondents in Terms of Medical Background

Data reveal that respondents experience signs and symptoms such as “chest pain” who got the highest frequency of 56 or 19.1% followed by “dizziness” with 55 or 18.8% and “underweight” with 47 or 16.0%. According to Veeram Reddy and Singh (2010) there have been over 650,000 physician visits per year in patients aged 10–21 solely due to chest pain. That may alarm parents but a serious disease does not normally cause chest pain in children, unlike in adults that may lead to coronary ischemia.

Pediatric chest pain can be divided into two: Cardiac and non-cardiac chest pain. More than 98% of the children and adolescents who complained had non-cardiac chest pain in origin. It can be inferred that chest pain is common for children and teenagers and although it is alarming, it is not as serious as the chest pain in adults [Table 2].

On the other hand, respondents diagnosed with “bronchial asthma” which ranked first with a frequency of 14 or 4.8% followed by “anemia” with 12 or 4.1% and “diabetes” with 7 or 2.4%. This supports the study of Sarkar et al. (2012) saying that children who endured pneumonia during their early years had higher risk for bronchial asthma. It presented important connections between maternal asthma and children bronchial asthma. The study also found that among secondary school students, passive smoking may have something to do with it. This passive smoking has been considered an asthmatic symptom since there is a high chance that it is the cause of a greater bronchial irritability and increase in bronchial obstruction. This only shows that respondents who were diagnosed with bronchial asthma may have worsen their illness with passive smoking.

In terms of their family medical history, respondents believe that they have “diabetes” with a frequency of 36 or 12.3% followed by “hypertension” with 32 or 10.9% and “bronchial asthma” with 27 or 9.2%. According to the Department of Health (2017) the Philippine Health Statistics discovered in 2013 that the 6th leading cause of death among Filipinos is diabetes. Also in 2016, as stated by the Philippine Center for Diabetes Education Foundation, there are over 6 million Filipinos have diabetes. This proves that diabetes is indeed a top common health issue among the Filipinos.

Current Lifestyle Habits of Student respondents

Table 3 shows that in terms of current lifestyle habits of student respondents, the respondents obtained a category rating of needs improvement in terms of “Health-Related Fitness” with a weighted mean of 11 and “Disease Prevention” with a weighted mean of 12. While in terms of “Nutrition,” “Stress Management,” “Personal Hygiene,” “Personal Well-being,” “Personal Safety,” and “Environmental Health,” the respondents obtained a category rating of good with a weighted mean ranging from 13 to 16. On the other hand, the respondents obtained a category rating of excellent in terms of “Avoiding Chemical Discrepancy,” with a weighted mean of 17. The result of the evaluation in terms of health-related fitness implicates the statement of Barler (2013) that during their 4 or so
years in college, many people find it difficult to live a healthy lifestyle that includes healthy eating and exercising. In addition, they could not balance their school and work responsibilities with sleep and going out with friends weekly. Based on the study of Eichorn et al. (2018), sleep habits, diet, social life, homework, and other extracurricular activities are some of the factors that influence how college students exercise. Even though they know these, it is not always that they do something to make their habits different. Moreover, whatever their habits in exercising during college are what would usually be their same habits even after they graduate [Table 3].

The study of De Irala et al. (2009) supported the result of item disease prevention. Based on the results of the study, it was reported by students that it was mostly from their friends that they have acquired information about love and sexuality. However, even with that being said, they revealed that the opinion of their parents has more worth for them than that of their friends. Furthermore, it was almost half of the respondents that thought wrongly about condoms giving them assurance that it can avoid STIs or pregnancies. It only implies that majority of the freshmen-respondents are not fully aware of the different sexually transmitted diseases that they can acquire during unprotected sexual intercourse.

Table 3: Current lifestyle habits

<table>
<thead>
<tr>
<th>Health-related fitness</th>
<th>Mean</th>
<th>Category rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition</td>
<td>11</td>
<td>Needs improvement</td>
</tr>
<tr>
<td>Stress management</td>
<td>14</td>
<td>Good</td>
</tr>
<tr>
<td>Personal hygiene</td>
<td>15</td>
<td>Good</td>
</tr>
<tr>
<td>Disease prevention</td>
<td>12</td>
<td>Needs improvement</td>
</tr>
<tr>
<td>Personal well-being</td>
<td>16</td>
<td>Good</td>
</tr>
<tr>
<td>Personal safety</td>
<td>15</td>
<td>Good</td>
</tr>
<tr>
<td>Environmental health</td>
<td>16</td>
<td>Good</td>
</tr>
</tbody>
</table>

Table 4: Future physical activity and physical exercise schedule

<table>
<thead>
<tr>
<th>Physical activity</th>
<th>Mean</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Badminton</td>
<td>3.7</td>
<td>1</td>
</tr>
<tr>
<td>Basketball</td>
<td>4.4</td>
<td>2</td>
</tr>
<tr>
<td>Running/walking</td>
<td>4.5</td>
<td>3</td>
</tr>
<tr>
<td>Zumba/dance aerobics/tae-bo and alike</td>
<td>4.9</td>
<td>4</td>
</tr>
<tr>
<td>Physical exercise schedule</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Every day between 4:00 and 7:00 pm (1 h daily)</td>
<td>68</td>
<td>1</td>
</tr>
<tr>
<td>Three times a week between 11:00 am and 2:00 pm</td>
<td>48</td>
<td>2</td>
</tr>
<tr>
<td>Three times a week between 7:30 and 9:30 am</td>
<td>32</td>
<td>3</td>
</tr>
</tbody>
</table>

The best physical exercise schedule is 3 times a week between 11:00 am and 2:00 pm and rank 2nd. Meanwhile, 32 respondents believed that 3 times a week between 7:30 and 9:30 am is the best schedule for physical exercise and rank 3rd on the list.

The result shows that basketball and badminton are still popular among students. Based on the survey of www.thetoptens.com (2009), basketball got the top 1 as the most popular sport and badminton obtained the top 3. It shows that basketball and badminton are some of the popular sports among students because of easiness of these sports and the availability of the facilities in different schools in the country. It is also part of the curriculum in Philippine education to educate the students about these sports for more promotion of physical fitness.

Preferred Future Physical Activity and Physical Exercise Schedule

An analysis of Table 4 shows that majority of the respondents’ preferred “Badminton” as their future physical activity obtaining a weighted mean of 3.7 and rank 1. Rank 2 is “Basketball” with the weighted mean on 4.4. Third in rank is “Running/walking” with a weighted mean of 4.5 while fourth in rank is “Zumba/Dance Aerobics/Tae-bo and alike” with a weighted mean of 4.9. The majority of the respondents feel to schedule their exercises everyday between 4:00 and 7:00 pm (1 h) with a total of 68 respondents and rank 1st in terms of physical exercise schedule while 48 respondents believed that

the best physical exercise schedule is 3 times a week between 11:00 am and 2:00 pm and rank 2nd. Meanwhile, 32 respondents believed that 3 times a week between 7:30 and 9:30 am is the best schedule for physical exercise and rank 3rd on the list.

Significant Difference between the Profile of the Respondents in Terms of Age, Sex, and School and Current Lifestyle Habits of the Respondents

As shown in Table 5, stress management, emotional well-being, and environmental and health protection have $t = -2.261, -2.027,$ and $-2.511,$ respectively. With that, we can say that it is $<0.05$, which we call that $P = 0.05$ is considered to be the assumed level of importance. For that reason, the null hypothesis is not accepted. Meaning when the respondents are grouped based on age, their assessment differs in a significant manner.

According to Ricciotti and Hur (2018), stress management is not something that one person can master at any age. For many reasons, as people get older, they tend to find it harder to cope with stress as one’s body will struggle physically. In addition to that, the heart and lungs might not be able to do what they do and the body may struggle more from stressful events. Furthermore, coping with stress mentally is also a serious task. It can be inferred from the data that the respondents’ assessment of stress management varies significantly when grouped depending on the age of the individuals.

As found in the study by Raposo et al. (2017), older adults experience better emotional well-being when they can fulfill...
emotionally meaningful goals. In situations where older adults cannot achieve their relational goals, they do not experience age-related benefits. It can be inferred from the data that perception of 17–19 years old and 20+ years old respondents on the emotional well-being is significantly different, depending on the age of the respondents.

According to Acharya (2013), the younger generation can always help to protect and improve the environment. It affects the environment when they change how they live. There are many environmental-friendly practices such as recycling, preserving water, and electricity that the youngsters can adapt in homes, schools, and youth involvements. Making the youth, the main star of this environmental switch will not only make a positive impact on their behaviors but also likely influence the people surrounding them, especially their family. It is concluded that the respondents’ assessment of environmental and health protection varies significantly when grouped according to their age.

On the other hand, health-related fitness, avoiding chemical dependency, personal hygiene, and personal safety have $t = 2.863, 3.948, 2.853,$ and $2.957$, respectively. We can say that it is $<0.05$, which we call that $P=0.05$ is considered to be the assumed level of importance. For that reason, the null hypothesis is not accepted. It just means that when respondents are grouped based on sex, their assessment varies significantly.

The result in health-related fitness was supported by the study of Hands et al. (2016). It proves that no matter the age or measure, males are more active in doing fitness activities than females. That’s why females tend to be more at risk when it comes to their health in the long run. It only implies that males are more oriented in physical activity compared to female.

Based on the report of the National Institute on Drug Abuse (2018), men are looking more into treating their substance use disorders while women are most probably looking to treat their dependence on sedatives such as anxiolytics and sleep medications. Furthermore, throughout history, as it has been reported, men pursue treatment for heroin use, but recently, the rate of women pursuing the same treatment has increased, as well.

It can be gleaned also in Table 5 that health-related fitness has $F = 3.618$ with $P = 0.028$. It is $<0.05$, which we call that $P = 0.05$ is considered to be the assumed level of importance. For that reason, the null hypothesis is not accepted. These show that when the respondents are grouped based on type of school graduated in high school, their assessment varies significantly.

The result supported the statement of Koerber (2016) saying that students studying in private and catholic schools are probably more physically active than other students, giving credit to specialist sports teachers. Furthermore, costly private schools and affordable catholic schools prioritize physical education unlike in public primary schools. Koerber even discovered in Australia that there is only one public school that has a trained physical education specialist, out of 10 public schools. Koerber even discovered in Australia that there is only one public school that has a trained physical education specialist, out of 10 public schools. It only implies that students graduated from private schools are more oriented in health-related fitness compared to graduates of public schools. Some of the factors for this reason are lack of physical education specialists among public schools.

**CONCLUSION AND RECOMMENDATION**

Based on the findings of the study, the researchers had drawn the following conclusion:

The majority of the respondents were male, belonging to 17–19 years old group. Majority also of the respondents are single, with a course of BIT, graduated from public schools and engaged in different physical activity other than PE classes such as sports (basketball, volleyball, and alike), outdoor (hiking, camping, and fun run), and dance (ballroom, Zumba, and alike).
The study concludes that chest pain, dizziness, and underweight are the most common signs and symptoms they are experiencing in. In addition, majority of the respondents were diagnosed with bronchial asthma, anemia, and diabetes, while hypertension, bronchial asthma, and diabetes are the common family health problems.

In terms of the current lifestyle habits of student respondents, finding reveals that the majority of the respondents are always aware in the category of avoiding chemical discrepancy while majority of the respondents obtained a category rating of good in terms of nutrition, stress management, personal hygiene, personal well-being, personal safety, and environmental health. On the other hand, when it comes to health-related fitness and disease prevention, most of the respondents are never aware of these factors and obtained a category rating of needs improvement.

The study also shows that in terms of preferred future physical activity, majority of the respondents preferred badminton, basketball, running/walking, and Zumba/dance aerobics/tae-bo and alike and preferred their physical exercise schedule everyday between 4:00 and 7:00 pm (1 h daily).

In terms of significance relationship between profiles of the respondents, there is a significant difference on perceived on stress management, emotional well-being, and environmental and health protection when grouped according to age. Similarly, there is no significant difference on the perceived on health-related fitness, avoiding chemical dependency, personal hygiene, and personal safety when grouped according to sex. On the other hand, there has been no significant difference on the perceived on health-related fitness when grouped according to school graduated in high school.

**REFERENCES**

Physical fitness habits as a strategy to reduce absenteeism

Vincent B. Esguerra¹, Ma. Rosita Ampoyas-Hernani², Amparo Leonila F. Esguerra³

¹Chairperson, Department of Physical Education, Palawan State University, Princesa, Philippines, ²Professor, CA-Quality Assurance Coordinator, Cebu Normal University, Cebu, Philippines, ³Faculty, College of Arts and Humanities, Palawan State University, Palawan, Philippines

ABSTRACT

In many countries, there are companies and institutions that have already integrated wellness programs as part of the professional enhancement program to help employees become more productive in the workplace. Among the prevalent problems, confronting any institution or agency is employee’s absenteeism. This study sought to answer how physical activities and other health programs can reduce absenteeism in the workplace. Specifically, it answers the following questions: What is the demographic profile in terms of age, sex, civil status, department, length of service, monthly family income, and number of children? What are the physical fitness activity habits of the employees that can help reduce absenteeism? What are the most common causes of absenteeism? Is there a significant relationship between the respondents’ demographic profile and their physical fitness activity habits? Is there a significant relationship between the respondents’ demographic profile and the causes of their absenteeism? Ninety-five employees were the respondents of the study. Statistical Package for the Social Sciences version 19 was used to process and analyze the data. The findings of the study show that there is a significant relationship between the respondents’ age and length of service and their physical fitness activity. Furthermore, there is a significant relationship between and among the respondents’ age, length of service, civil status, and number of children and the causes of their absenteeism.

Keywords: Absenteeism, Physical fitness habits

INTRODUCTION

The development of strong and healthy bodies requires many challenges. It takes effort and energy, but the result is growth for all who perseveres. Everybody wants to be fit and active. Individuals who are well are not only free from sickness and malady but are happy, vibrant, and able to solve personal problems. Physical fitness activities generally can be done for enjoyment and exercise throughout life. Participation in these activities is much needed and virtually ensures that every individual has opportunities for good fellowship and enjoy these as recreation. In this sense, activities are functional skills that can be used by the individual to enjoy and participate more fully in life in the community. Moreover, the effects of physical fitness are total and the researchers believed that it even affects the work performance of an individual. It is one factor that helps everyone tremendously to strive and to have a longer and more useful life. Kelly (2004) stated that the workplace should provide a unique setting to promote a holistic approach to health within a supportive working environment. However, Baptiste (2008) explained that the importance of employee’s well-being and fitness at work has been a neglected area of inquiry in human resource management. This was collaborated by Henley and Redmond (2006) as they cited the workplace is still underutilized as a site to promote healthy lifestyles.

Today, many employers are investing a large amount in a fitness program due to the benefits that it brings to the employees as well as the organization. Organizations that support these programs consider them an inexpensive benefit that produces the following returns: (a) Increased ability to attract competent employees; (b) improved attitudes and loyalty; (c) a reflection of the firm’s concern for the non-work aspects of the employee’s lives; (d) indirectly, increasing productivity; (e) employees’ fitness programs may reduce the impact of stress; and (f) increasing the fitness level of employees should improve productivity and reduce absenteeism.

Tiwari (2014) articulated that absenteeism is the absence made by the workers from regular work without prior permission. It
is also an employee’s intentional or habitual absence from work (Folger, 2015). It is considered as one of the most common problems facing employers in today’s workplace. Arriving late, leaving early, and taking longer breaks than allowed are considered forms of absenteeism. In addition, Folger (2015) also commented that absences made by workers might be incidental (absences such as staying home from work due to a cold) or disability (absences of more than a week and up to several years). While employers expect workers to miss a certain number of workdays each year, excessive absences can equate to decrease productivity and can have a major effect on company finances, morale, and other factors.

According to Badland and Schofield (2003), the high absenteeism turnout may have an effect on worker’s productivity. Improving physical activity may reduce absenteeism, ultimately improving employee’s quality of life and help reduce the cost to the organization. There is a growing trend for workplaces worldwide to conduct physical activity and health programs to overcome the burden of lifestyle-related illness and increase worker productivity. In support of this, Wattles and Harris (2003) recommend worksite fitness programs due to the potential to lower absenteeism and job turnover and increase job productivity and morale. Falkenberg (2007) concludes that fitness increases workplace productivity at all, as higher fitness levels do benefit the body and mind in many positive ways.

In the Philippines, more and more companies are either planning or have already integrated wellness programs into their organization’s routine. This is in response to the Civil Service Commission Memorandum Circular No. 6, s. 1995 requiring all agencies to adopt “The Great Filipino Workout.” It is the physical fitness project that promotes a healthy lifestyle and a regimen of regular physical fitness activities as a strategy to reduce the level of the risk factor of heart disease and other possible diseases and possibly can help minimize the emerging number of absenteeism in the workplace.

Based on the survey on the institution where the study was conducted, there was evidence in the significant number of sick leave applications that are considerably higher compared to other types of leaves filed by its employees. Confronted to this reality, this study finds out the primary cause of absenteeism among the employees and what are the physical fitness habits that can help reduce absenteeism in the workplace.

The Problem
This study sought to answer how physical activities and other health programs can reduce absenteeism in the workplace. Specifically, it answers the following questions:

What is the demographic profile in terms of age, sex, civil status, department, length of service, monthly family income, and number of children?

What are the physical fitness activity habits of the employees that can help reduce absenteeism?

What are the most common causes of absenteeism?

Is there a significant relationship between the respondents’ demographic profile and their physical fitness activity habits?

Is there a significant relationship between the respondents’ demographic profile and the causes of their absenteeism?

METHODOLOGY

Data collection was conducted using questionnaires adapted from the study of Folger. Total of 95 respondents distributed in the eight departments of the institution. The Statistical Package for the Social Sciences (SPSS) version 19 was used to process and analyze the data and determine the distribution of the respondents by frequency, percentage, and descriptive statistics. In the interpretations of data, the researchers used ranking and cumulative frequency. The cumulative frequency was used to determine a specific number of responses of all the respondents to particular questions or items. Multiple regressions were utilized to identify a significant relationship between the respondents’ profile, physical fitness activity, and habits and causes of absenteeism.

Findings of the Study

Demographic profile of the respondents
The demographic profile of the respondents included variables such as age, sex, civil status, educational attainment, and length of service, gross monthly income, and number of children. Frequency distribution was utilized in giving this data for a very visual presentation. The majority (25) or 26.32% of the respondents were aged 26–30 years old. In addition, there are 19 (20%) and 13 (13.68%) whose age range from 26 to 30 and 31 to 35 years old, respectively. Only 2 (2.11%) of them belong to age bracket 61–65 years old. Considering their age as one of the variables in this study, it can be concluded that most of the respondents involved in this study were still young.

The majority (75) or 78.95% of the respondents were females, while the remaining 20 (21.05%) of them were male. Therefore, the total number of female is greater than male employees. The analysis revealed that the majority, 65 or 68.42% of the employees are married, followed by 22 or 23.26% who were still single. Four or 4.21% were widowed and 3 or 3.16% were separated. Of 73 respondents who were married, 28 or 38.36% of them have only one child while 18 or 24.66% of them have two children. Fourteen or 19.18% and 13 (17.80%) of the respondents have two and three children, respectively.

The majority (54) or 56.84% of them have earned units in the master’s degree (MA/MS) while 33 or 34.74% of them finished
Esguerra, et al.: Physical fitness habits as a strategy to reduce absenteeism

baccalaureate degrees. Two or 2.11% finished their master’s degree (MA/MS) while 4 or 4.22% had already finished their doctorate degree. The majority (44) or 46.32% of them have a monthly salary between P16,000.00 and P20,000.00, followed by 27 or 28.42% whose monthly salary falls within P21,000.00–P25,000.00 or 48.42% of the respondents had been in the service for at most 5 years. This was followed by 16 or 16.84% who had been in the service between 5 and 6 years, and only 2 or 2.11% of the respondents spent 36 years and above in the institution. Forty-six or 48.42% respondents had been in the service for at most 5 years. This was followed by 16 or 16.84% who had been in the service between 6 years and 5 years, and only 2 or 2.11% of the respondents spent 36 years and above in the profession serving the institution.

Data presented on Figure 1 indicates that among the 95 respondents, 40 of them do walking like brisk walking and 30 min walking as a form of exercise to maintain fitness. Twenty of the respondents do jogging and 16 were engaged in dance aerobics (Zumba, Aero-dance, and Aerobics). It can also be gleaned from the graph that there were respondents who do or perform other physical activities such as playing sports (Basketball, Volleyball, Badminton, Soccer, Tennis, and Frisbee), swimming, power yoga, and weight training.

According to Bertera (1990), fitness significantly lowers absenteeism. Badland and Schofield (2003) supported his pronouncement as they endorsed to conduct physical activity and health programs in the workplace to overcome the burden of lifestyle-related illness and to increase worker productivity. Der-Karabetian et al. (1986) also suggested that every company should focus on employee fitness since it reduces absenteeism (sick days) and increases morale of the employees which will increase productivity. Therefore, based on the result of the study, the researchers recommend a fitness program for the employees and employers need to introduce a holistic approach as to how physical fitness program should be done in the workplace.

Table 1 shows the respondents’ absenteeism reports, as indicated by the number of days they spent in their work experience over the past 30 days (1 month). Analysis reveals that the respondents missed their classes for 3 days on the average due to problems related to sickness, ailments, or diseases involving self and/or family members. Moreover, respondents also spent 2 days missing an entire day because of stress. These findings validate the study conducted by Chaudhury et al. (2006) which disclosed that most of the employees’ absenteeism is attributed to illness. Thereby, these respondents who are sick or have sick family members will not attend school but stay at home to recover or to take care of the sick person and these may lead to persistent absenteeism.

Significant relationship between the respondents’ demographic profile and their physical fitness habits.

Table 2 analysis reveals that among the respondents’ demographic profile, age, and length of service were found

<table>
<thead>
<tr>
<th>Table 1: Respondents’ absenteeism monthly report</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Minimum number of days</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>F1: Miss an entire day due to problems with physical health (sickness, ailments, diseases, fatigue)</td>
</tr>
<tr>
<td>F2: Miss an entire day due to stress</td>
</tr>
<tr>
<td>F3: Miss part of work due to family, personal, and marital problems</td>
</tr>
<tr>
<td>F4: Miss part of a work for any other reason (attending to child’s school activities, house concerns, etc.)</td>
</tr>
</tbody>
</table>
significantly related to their physical fitness habits since P-values are less than the indicated level of significance. This result is supported by the research published in the British Scientific Journal Age and Ageing conducted by the International Council on Active Aging in 2011 as it found out that older employees are highly knowledgeable about the health benefits of physical activity, yet many remain inactive due to the many barriers to participation such as (1) Lack of interest; (2) shortness of breath; joint pain; (3) perceived lack of fitness; (4) lack of energy; and doubting that exercise can lengthen life. It can be concluded that age, length of service, and respondents’ physical fitness habits are statistically significant.

However, the analysis also shows that other employees’ demographic profile such as gender, civil status, monthly income, educational attainment, and number of children have no significant relationship with their physical fitness habits since their P-values are greater than the indicated level of significance. The indicated P-values tested at 0.05 level of significance confirms that their relationships were statistically insignificant.

Significant relationship between the respondents’ demographic profile and absenteeism.

Table 2: Respondents’ profile and physical activities and habits

<table>
<thead>
<tr>
<th>Physical activities and habits</th>
<th>Respondents’ personal profile</th>
<th>P-values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age</td>
<td>Sex</td>
</tr>
<tr>
<td>Walking</td>
<td>0.035**</td>
<td>0.088</td>
</tr>
<tr>
<td>Jogging</td>
<td>0.012**</td>
<td>0.698</td>
</tr>
<tr>
<td>Playing sports</td>
<td>0.002**</td>
<td>0.260</td>
</tr>
<tr>
<td>Swimming</td>
<td>0.008**</td>
<td>0.499</td>
</tr>
<tr>
<td>Dance aerobics</td>
<td>0.043**</td>
<td>0.882</td>
</tr>
<tr>
<td>Yoga</td>
<td>0.003**</td>
<td>0.359</td>
</tr>
<tr>
<td>Weight training</td>
<td>0.026**</td>
<td>0.391</td>
</tr>
</tbody>
</table>

**Significant at 0.05 level of significance

Table 3: Respondents’ profile and causes of absenteeism

<table>
<thead>
<tr>
<th>Respondents’ personal profile</th>
<th>P-values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age</td>
</tr>
<tr>
<td>Absenteeism</td>
<td>0.002**</td>
</tr>
</tbody>
</table>

**0.05 level of significance

significant relationship between the respondents’ demographic profile and absenteeism.

There is a significant relationship between the respondents’ demographic profile and absenteeism, as shown in Table 3. Chi-square test of independence was utilized with the aid of SPSS, tested at 0.05 level of significance. P-values confirmed that the association between the respondents’ age, length of service, civil status, and number of children was statistically significant to absenteeism. This means that old age, being married and having too many children, and working for too many long years may contribute to being absent from work. These can considerably contribute to illness and or diseases that can affect employees’ abilities and capabilities to go to work and can be a factor for them to miss their work. Guzman (2013) said that employees who are too busy in their family and work no longer have time to do physical activities. Since the nature of their work is to sit for a number of hours, they develop improper posture and create an imbalance in their system when energy intake exceeds energy expenditures. These can increase the prevalence of heart problems, overweight and obesity, and back problems among persons of ages.

These results support the hypothesis that there are variables that may contribute absenteeism among the faculty. Hence, a physical fitness activity/program may be recommended as remediation.

CONCLUSIONS

Based on findings, it is concluded that: (1) Absenteeism can be minimized if employees are healthy and sick-free; (2) aging workers, having a large family, and working too many hours at the office may impede employee to do exercise and physical activity, and therefore they are more prone to illness.
and diseases; and (3) exercising and doing PA at work can help an employee actively perform his work effectively and can help reduce absenteeism due to health-related problems.

**Recommendations**

Since the demographic profile such as age, civil status, number of children, and length of service were found to have a significant relationship with absenteeism, the researchers recommend a worksite fitness and wellness intervention programs such as personalized fitness training such as weight training, running, jogging, walking, plyometric, and swimming; and organize classes and activities such as yoga and Zumba as well. It is also recommended that playing sports such as Basketball, Volleyball, Badminton, Soccer, Tennis, and Frisbee be introduced to worksite to reduce health- and physiological-related problems.

**REFERENCES**


Civil Service Commission Memorandum Circular No. 6; 1995.


A comparative study on strength endurance and cardiovascular endurance of female athletes

D. H. Shailesh Kumar¹, T. Keshava Murthy²

¹Research Scholar, Department of Physical Education, Mangalore University, Mangalore, Karnataka, India, ²Deputy Director, Department of Physical Education, Mangalore University, Mangalore, Karnataka, India

ABSTRACT
Sport refers to any physical activity which includes movement of body muscles by excreting bodily energy by incorporating certain skills. To perform in any sport, people require certain types of physical fitness. Muscular endurance implies the ability of an athlete or person to perform muscular activities repeatedly using muscle group. Cardiovascular endurance refers to efficiency of one’s heart to work properly during any physical activity. The present study was carried out to compare the muscular endurance and cardiovascular endurance of female athletes. A sample of 270 female athletes belonging to Dakshina Kannada, Shimoga, and Dharwad zone was selected using a purposive random sampling procedure. The bent knee sit-up test and 3 min step test were administered to measure muscular endurance and cardiovascular endurance, respectively. The obtained data were analyzed using one way ANOVA. The findings of the study suggest that a significant difference in the muscular endurance and cardiovascular endurance of female athletes. Further, it was also revealed that the zone has a significant influence on the muscular endurance and cardiovascular endurance of female athletes.

INTRODUCTION
Athletic participation requires a high level of physical fitness. Physical fitness is a major requirement to become a successful athlete in any area of sports. The selection of athletes to different athletic events depends on their present physical fitness level. The fitness of athletes is measured using different physical fitness tests. The periodic measurement of physical fitness elements such as muscular strength, muscular endurance, cardiovascular endurance, flexibility, and agility helps to ensure the physical fitness standards among athletes. This further helps to get the proper training to maintain or enhance their physical fitness and achieve success in the athletic career.

Muscular strength endurance refers a person’s ability to put external force using bodily muscle groups many times or in repeated exercises. The muscular endurance can be measured by how many repetitive physical activities that an individual can perform in a given time. The most prominently used measure for this is sit-up and push-up exercises.

Cardiovascular endurance refers to the potential ability of heart and lungs to function in an optimum level when the individual is under any physical activity. It is assessed by measuring the maximum amount of oxygen intake during physical activities. It was defined by Johnson and Nelson (1988) as “the ability of the circulatory and respiratory system to adjust and to recover from the effects of exercise or work.”

The general research studies emphasize that there is a significant difference in the physical fitness of male and female athletes. According to those studies, male athletes hold higher

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dakshina Kannada (n=87)</th>
<th>Shimoga (n=88)</th>
<th>Dharwad (n=88)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muscular endurance</td>
<td>17.79</td>
<td>17.78</td>
<td>15.95</td>
</tr>
<tr>
<td>SD</td>
<td>2.95</td>
<td>2.93</td>
<td>3.36</td>
</tr>
</tbody>
</table>

Address for correspondence:
D. H. Shailesh Kumar,
E-mail: shrishailnavoor@gmail.com
physical fitness standards compare to female athletes. Many studies were carried out by researchers to study physical fitness among male athletes in India. However, there are a few studies pertaining to physical fitness among female athletes in India. In this regard, the present study gains more importance.

**REVIEW OF LITERATURE**

Karak and Mandal (2016) founded out the difference in the physical fitness between athletes and non-athlete students age ranging from 17 to 20 years. They selected 60 samples and administered AAHPER youth fitness test. The data were then analyzed using an independent t-test. The results revealed that athletes possess significantly higher muscular strength and endurance, cardiovascular endurance, speed, and agility than the non-athletes.

Kumar (2016) measured the difference in the cardiovascular fitness of athlete women and non-athlete women aged 20–24 years. Harvard bench step test was administered to assess the cardiovascular fitness of 15 athlete women and 15 non-athlete women. The data were treated using an independent t-test. The findings showed significantly higher cardiovascular fitness among athlete women than non-athlete women. Thus, it was evident that regular practice improves cardiovascular fitness among women athletes.

Another study conducted by Devi and Kumara (2014) on the physical fitness of 100 female athletes of different colleges in Patiala. Physical fitness factors such as speed, strength, endurance, agility, and explosive power among female athletes were studied by administering AAHPER youth fitness test. The results implied that on the whole, the female athletes are physically not so fit. They are found to be average in speed and explosive power; and sub-average in strength, endurance, and agility.

Kim (2010) explored the benefits of 12 weeks training on certain pi muscular strength and driver shot performance. Further, two groups were formed in which nine female golf players belonged to the training group and eight female golf players belonged to the control group. From the results, it was concluded that training enhances the physical fitness among female golf players in relation to all physical fitness variables.

**METHODOLOGY**

**Aim**

The aim of the study was to study the muscular strength endurance and cardiovascular endurance of female athletes of different zones.

**Hypothesis**

- There would be a significant difference in the muscular strength endurance of female athletes belonging to three different zones.
- There would be a significant difference in the cardiovascular endurance of female athletes belonging to three different zones.

**Research Design**

A purposive sampling research design was used for the study.

**Procedure**

The female student-athletes studying in different colleges of three different zones such as Dakshina Kannada zone, Shimoga zone, and Dharwad zone were approached for the study. The purpose of the study was explained to them. Then, their consent to participate in this study was obtained. Then, the physical fitness tests, namely, bent knee sit-up test and 3 min step test, were administered to measure muscular strength endurance and cardiovascular fitness, respectively.

**Tool Used for the Study**

Two physical fitness tests were used to measure muscular strength endurance and cardiovascular endurance among female athletes.

**Bent knee sit-up test**

It is used to measure abdominal strength endurance. After doing warm-up for 10 min, athlete lies on the mat with the knees bent, feet flat on the floor, and their hands on their ears.
Another person holds athletes feet on the ground. When the “start” signal was given, the athlete performs as many sit up as possible for the duration of 30 s. The number of correct count is considered as the score.

Three-minute step test
It was developed by two people, namely, Skubic and Hodgkins, to assess the cardiovascular endurance of females. The female athletes must step 24 steps in every minute. After this exercise, the female athletes are supposed to sit for a minute during which their palpitations are counted. Finally, these scores are compared with the established norms to determine the level of cardiovascular endurance. In the case of athletes, those who cannot complete stepping in 3 min their total time taken is noted and their pulse rate shall be counted after 1 min, usually for 30 s. Then, the scores compared with the established norms to determine the level of cardiovascular endurance.

Statistical Analysis
The descriptive statistical methods such as mean, standard deviation, and one way ANOVA was used to compare the muscular strength endurance and cardiovascular endurance among female athletes.

RESULTS AND DISCUSSION
Table 1 depicts the mean and SD scores of female athletes on muscular endurance belonging to three different zones. The results reveal that female athletes belonging to Dakshina Kannada zone have obtained a mean score of 17.79 (SD = 2.95), the female athletes belonging to Shimoga zone have obtained a mean score of 17.78 (SD = 2.93) while the female athletes belonging to Dharwad zone have obtained a mean score of 15.95 (SD = 3.36). Thus, from the mean scores, it is evident that the female athletes belonging to Dakshina Kannada zone hold significantly higher muscular endurance than the female athletes of Shimoga zone and Dharwad zone, respectively. One way ANOVA results are provided below.

Table 2 shows one way ANOVA for muscular endurance among female athletes belonging to three different zones. The obtained F ratio is 10.329, which is highly significant at 0.001 level. Thus, from the findings, it is evident that there is highly significant difference muscular strength endurance among female athletes belonging to three different zones. Thus, zone has a significant influence on the cardiovascular endurance of female athletes. Therefore, we accept the first hypothesis – “There would be a significant difference in the muscular strength endurance of female athletes belonging to three different zones” is accepted.

Table 3 depicts the mean and SD scores of female athletes on cardiovascular endurance belonging to three different zones. The results reveal that female athletes belonging to Dakshina Kannada zone have obtained mean score of 12.93 (SD = 5.93), the female athletes belonging to Shimoga zone have obtained a mean score of 14.84 (SD = 4.29) while the female athletes belonging to Dharwad zone have obtained a mean score of 11.83 (SD = 5.10). Hence, it is clear that the female athletes belonging to all three zones differ in their level of cardiovascular endurance. The female athletes belonging to Shimoga zone hold significantly higher cardiovascular endurance than the female athletes of Dakshina Kannada zone and Dharwad zone, respectively. One way ANOVA results are provided below.

Table 4 shows one way ANOVA for cardiovascular endurance among female athletes belonging to three different zones. The obtained F ratio is 8.741, which is highly significant at 0.001 level. Therefore, from the above results, it is clear that there is a highly significant difference cardiovascular endurance among female athletes belonging to three different zones. Thus, zone has a significant influence on the cardiovascular endurance of female athletes. Hence, we accept the second hypothesis – “there would be a significant difference in the cardiovascular endurance of female athletes belonging to three different zones” is accepted.

CONCLUSIONS
- There is a significant difference in the muscular strength endurance of female athletes belonging to three different zones. The female athletes belonging to Dakshina Kannada zone hold significantly higher muscular endurance than the female athletes belonging to Shimoga zone and Dharwad zone, respectively.
- There would be a significant difference in the cardiovascular endurance of female athletes belonging to three different zones. The female athletes belonging to Shimoga zone hold significantly higher cardiovascular endurance than the female athletes belonging to Dakshina Kannada zone and Dharwad zone, respectively.
• The concerned authorities and parents have to provide proper training facilities to enhance muscular endurance and cardiovascular endurance among female athletes.

REFERENCES

INTRODUCTION

Many thousands of years ago in India, Rishis explored nature and the cosmos in their meditations. They discovered the laws of the material and spiritual realms and gained an insight into the connections within the universe. They investigated the cosmic laws, the laws of nature and the elements, life on earth, and the powers and energies at work in the universe both in the external world as well as on the spiritual level. Human beings are made up of three components – body, mind, and soul corresponding these there are three needs health, knowledge, and inner peace. Health is a physical need, knowledge is our psychological needs, and inner peace is spiritual need when all three are present, then there is harmony. Yoga is a practical philosophy involving every aspect of a person’s being. It teaches the evolution of the individual by the development of self-discipline and self-awareness. Anyone irrespective of age, health circumstances of life, and religion can practice yoga.

PRESENT

Today yoga is a special subject across in India, which is given to peace of mind and sound health with wonderful career scope in all over the country. Recently, UN has declared on June 21, 2015, as the “International day of yoga.” Today Government of India has been every year to celebrate June 21 as an “International Yoga day” across the country. We are today living in a world where people have become more health-conscious than they ever were, we can also owe this sudden change due to the nature of jobs and increasing lifestyle disease. Yoga is one of the most natural ways of keeping the human body fit and in shape. It is something that has also spread its wing to most western countries as well. The current century is known as the fastest century, we are running behind success. In the race to win, we have forgotten the time, we are not giving full time to eat, sleep, and rest. Due to this, we are facing many physical and mental problems in our routine life. In short, we have forgotten physical activities in the fast life. Physical activities can reduce many physical problems. Even we have forgotten natural laugh. That’s why today, the laughing class has begun. However, natural is always natural. No doubt today people are too serious about health, all are doing lots of physical exercises to fight against physical and mental problems.

Yoga as a present and future in India

Bharat Z. Patel

Associate Professor, Department of Physical Education, K. K. Arts and Commerce College, Dhandhuka, Ahmedabad, Gujarat, India

ABSTRACT

Today yoga is a special subject across in India, which is given to peace of mind and sound health with wonderful career scope in all over the country. Yoga has gained tremendous popularity in the last few years, it is the most rapidly growing health movement despite it was developed thousands of years ago. Age, religion, caste, and sex are no bar with breathing and meditation techniques. However, yoga teaching, when compared to other professions, is less lucrative, but it is the mental satisfaction attached with the profession that draws the attention of individuals. Yoga is an art of successful healthy living. It is a tool for positive change. Yoga is recommended as physical exercise for the all-round development of human personality.

Keywords: Healthy living, Physical exercise, Yoga
of yoga is physical and mental therapy, the very essence of yoga lies in attaining mental peace, improved concentration power and a relaxed state of living. In this modern world, our environment is fighting for survival and we humans suffer from more and more physical and psychological stress, we cannot always control them but can learn how to face them and to this end, yoga is as good an invention it has ever been. The aim of yoga is attainment of physical, mental, and spiritual health.

Yoga is one of the best physical and mental exercises from which anyone could get the best mental and physical balance; it is not easy to ask what yoga is? What are the effects of yoga? Yoga is a practical science and it is an open book, to know the benefits of yoga, one should practice it. Yoga is an ancient art based on a harmonizing system of development for the body, mind, and spirit. The continued practice of yoga will lead you to a sense of peace and well-being, and also a feeling of being at one with their environment. This is a simple definition.

If, we would go to survey, we could find 7 people of 10 are doing yoga, we could see so many persons on the gardens, clubs here, and there practicing of yoga, as I have already mentioned that we are surrounded by mental, emotional, and physical problems due to ear boring routine lifestyle today in 21st century, a spiritual heritage is being reclaimed of which yoga is very much a part. Which yoga’s central theme remains the highest physical and mental cleansing and strengthening is one of yoga’s most important achievement goals of human spiritual truth, yogic practices give direct and benefit tangible to everyone regardless of their spiritual aim. In this respect, yoga is far from simply being physical exercise. It is an aid to establishing a new perception what is real, what is necessary, and how to become established in the way of life, which cannot be understood intellectually connecting with their true selves and will only become living and knowledge through Asana.

To compare with other games and exercises which provide only muscular and cardiovascular fitness, yoga gives an all-round development. Yoga are not only deals with this broad definition of health but also deals with other aspects such as healing of injury and psychological disorders and provides curative treatment of many diseases. Yoga along with Naturopathy, Ayurveda, and Acupressure provides solution of many complicated diseases. Yoga is a universal remedy for one who sincerely wants to seek it. Due to the modern lifestyle, man is suffering from various postural deformities and diseases such as diabetes, migraine, hypertension, obesity, cancer, anxiety, depression, insomnia, cardiac disease, constipation, allergy, and asthma. Various postural deformities such as kyphosis, lordosis, scoliosis, and knocked knee can be seen in the modern population. For these deformities, congenital can be there, but the acquired, especially the lifestyle of an individual, is more responsible than other reasons. The population involved in chair job and driving generally suffered from kyphosis and as a result, cervical spondylitis occurs. Yogasanas such as Bhujangasana, Matsyasana, and Chakrasana yields the best result, but in the advance stage of disease Sukshma Yoga is people generally suffer from backache, especially in the lumbar region. In lordosis, scoliosis, and knocked knee, whether acquired or genetic, yoga provides the best solution. In the present era of science, the human muscle is suffering from atrophy due to a lack of muscular activities. This results in weakness, sprain, and strain due to atrophy of skeletal muscle. Atrophy of involuntary visceral muscle results in constipation and other digestive ailments. The regular practice of yoga eradicates them forever.

As it was discussed above about the needs of YOGA is current life but the main needs, as per my view, are mental peace, satisfaction, calm, confidence, physical fitness, etc., as I have already mentioned that yoga is a practical science and hence to know the benefits of yoga one should do it regularly. To sit in the first raw of success, we have forgotten something and that is an important to our life/healthy, even we have to visit laughing club to laugh, we have forgotten many ancient practices which were used by us in our routine life and hence that all have been included in the yoga.

**FUTURE**

The future of yoga is really bright because it is bright in the present and it would be more bright because today’s life is very tough with lots of physical, mental, and emotional pain. We really want some boost either mental or physical or positive thoughts and it will be achieved through yoga only yoga gives you all-around fitness, weight loss, stress relief inner peace, improved immunity, living with greater awareness, better relationships, increased energy, better flexibility, and posture not only this but also yoga gives us physically, mentally positive-ness. I am unable to say about the future of yoga but I will definitely say that if I wish to have a bright and healthy future with joy and peace, I must follow the yoga on a regular basis.

Today the world is Fastest, then faster we all are running, and hence students of the KG or preliminary have spectacles, height problems, blood problems, different types of disease, in secondary, higher secondary, and colleges students are getting angry just for nothing and getting disturbed in that matter. Why students needed counselor because they are not doing yoga in daily life again, I will say that due to this fastest life, we all are behaving like a machine and hence each of the fields requiring physical and mental relaxation and it is available in yoga only. I do not think that there is a need to mention the benefits of yoga in physical and mental health.

Yoga is the richest and noblest legacy, the ancient Indian has gifted to the world. It is a timeless pragmatic and spiritual
Patel: Yoga as a present and future in India

science, it is a cult-cum -art – science, it is grandest of all sciences, and it is mother of all science. Yoga is the science of being’s evolution. It is the sense of activating inner energies. It is scientific study of blossoming of human potential to its fullness. It is the science of balanced intellectualism. It is the sum total of creation. Yoga is, thus, the scientific tool to get positive experience-truth to its depths and dimension. Yoga is an art of successful healthy living. It is a tool for positive change. It is the sovereign remedy for all miseries. It is science of creativity and personality development it a voyage discovering truth and knowing reality. It is a utilitarian commodity. Thus, yoga is as old as civilization. Yoga is intimate and ultimate. It is a living tradition and a proven system of realizing divinity. “Caring, sharing, and empowering” are the philosophy of yoga. People all over the world are more than 190 countries have now embraced yoga as a way of life. Yoga has a great message for mankind. The government of India established two organizations – central council for research of yoga and naturopathy at New Delhi to look after research and development in the field of yoga and naturopathy, “Morarji Desai National Institute of Yoga,” New Delhi. These organizations took several initiatives to promote yoga in the country, major activities undertaken by CCRYN the basic objectives lines in yoga and naturopathy, and to undertake any education, training, research, and other programs in yoga and naturopathy.

Yoga teacher uses yoga to help improve and people’s physical and mental health. Yoga involves simple movements and positions, as well as breathing, relaxation, and meditation. Yoga can be a form of exercise, for fitness, flexibility, and stress relief. There is also yoga therapy, which uses yoga to help specific medical conditions. Salaries in yoga field a fresher can earn Rs. 10,000–20,000 a month. With experience, the salary climbs higher at a faster pace. However, yoga teaching, when compared to other professions, is less lucrative, but it is the mental satisfaction attached with the profession that draws the attention of individuals. But also know that if good in your field, there is an option of doing better as this field has been taken to the liking of many and people have realized the importance of yoga. If we can start the debate to count and compare all the yogic exercises with the past and current work, it can take a couple of days. No doubt modernism can be said as a revolution of machines which human being can save maximum time and energy. However, we can see a reality that, today man is only running for earning, for example, someone told that “A most active person has found an alarm watch while the laziest person found snooze in the same watch.” This 5–7-min snooze habit has created stress-related problems and hence Shavasana and Yoga Nidra are more popular today. The current scenario is full of stress, tension, and mental and physical problems, we all want to get out from this trap, and we all know the best way is yoga, but we have so many excuses or exist to not follow it on regular basis, If we see some exercises for the beginners in yoga, it is same exercises which we were followed in our routine life, but due to modernization we are not following it and thus the exercises have taken plan in yoga.

CONCLUSION

However, yoga teaching, when compared to other professions, is less lucrative, but it is the mental satisfaction attached with the profession that draws the attention of individuals. But also know that if good in your field, there is an option of doing better as this field has been taken to the liking of many and people have realized the importance of yoga. If we can start the debate to count and compare all the yogic exercises with the past and current work, it can take a couple of days. No doubt modernism can be said as a revolution of machines which human being can save maximum time and energy. However, we can see a reality that, today man is only running for earning, for example, someone told that “A most active person has found an alarm watch while the laziest person found snooze in the same watch.” This 5–7-min snooze habit has created stress-related problems and hence Shavasana and Yoga Nidra are more popular today. The current scenario is full of stress, tension, and mental and physical problems, we all want to get out from this trap, and we all know the best way is yoga, but we have so many excuses or exist to not follow it on regular basis, If we see some exercises for the beginners in yoga, it is same exercises which we were followed in our routine life, but due to modernization we are not following it and thus the exercises have taken plan in yoga.

REFERENCES

- Chudasama S. The Effect on Interest, Anxiety, Stress and Personality through Yogic Exercises, Dissertation; 2016.
WORKSHOP ON EXERCISE MEDICINE - 2020
AT NIZAM COLLEGE, OSMANIA UNIVERSITY,
HYDERABAD, T.S. INDIA
ON 6TH MARCH 2020

ORGANIZED BY:
INTERNATIONAL FEDERATION OF
PHYSICAL EDUCATION, FITNESS AND
SPORTS SCIENCE ASSOCIATION