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ACADEMIC STATUS OF THE COACH AND TEAM PERFORMANCE IN THE KENYAN NATIONAL SOCCER AND VOLLEYBALL LEAGUES

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Abstract

Purpose: The study sought to establish whether academic status of the coach predicted team performance in the Kenyan national soccer and volleyball leagues.

Methodology: The Cross-Sectional survey used a population of the 53 head coaches handling team in the Kenyan soccer and volleyball leagues in the 2020-2021 season. Census sampling was used to pick the 53 coaches for the study. Data collection instrument was a self-administered questionnaire. The Leadership Scale for Sport questionnaire (LSS) was used to capture player's perception on coach competence. The coaches' questionnaire was divided into sections which captured demographics and academic background. The study used Statistical Package for Social Sciences (SPSS Version 22) for data analysis. Information was organized and presented using descriptive statistics and was analyzed at 0.05 significance level. Chi-Square and Fisher's Exact test was used to predict coach academic status on the team's performance. Data was projected in figures and tables and relevant discussions were made.

Findings: Chi square and Fisher's Exact Test results showed that coaches academic status had a significant effect on team performance ($\chi^2 = 18.419, 0.031 \leq p < 0.05, 9df$). The fisher's exact test had a p value of 0.016 which was also less than 0.05 confirming that there was a significant relationship between coaches' academic status and team performance.

Conclusion and Recommendation: The study concluded that coaches' academic status had a significant effect on team performance. Team managers, owners and other stake holders in sports need to take up educated coaches. This is because educated coaches learn a diverse way of communication including humor, which in turns benefits communication between coaches and players which enhances team performance in the long run. In addition, coaches that are not educated need to go back to school and further their education. This will enable them to gain more skills that will be help in their teams' performance.

Keywords: *Academic status, team performance, national league, coach.*

1.0 INTRODUCTION

1.1 Background of the Study

Attaining education enables people to take control of their lives and by extension the lives of others in the current ever-changing global trends. Obtaining appropriate qualification whether academic or professional expands opportunities for individuals and may lead to career attainment and better performance (Grace, 2014). Education qualification expands the opportunities for career attainment and better performance by improving capacity in the application of academic and professional skills for connecting, discerning and interpreting needs of a task (Koch, 2014; Milner & Mearthy, 2016).

Coaching is a multifaceted and mammoth undertaking which encompasses the principles of maximizing team or player performance. It also involves cognitive activities that enable decision making in the midst of dynamic situational factors and environmental setups (McAlpin & Vaagenes, 2016). In sports, coaches undertake professional courses for several reasons, including the development of skills and knowledge to enhance their coaching in team performance and competition (John *et al.*, 2010). While it is mandatory in developed countries to have acquired a certain level of qualification to practice coaching, in most developing countries, Kenya included, such requirement may not be necessary (Sproule & Nash, 2013). Nevertheless, there are coaches who have attained both academic and professional training in their respective sports. However, it has not been ascertained so far whether there is a relationship between the academic status and performance of a team in competitions. In addition, the knowledge would stimulate discourse on role of the coach education in team performance especially in developing countries (Devine *et al.*, 2013). According to Grace (2014), educating coaches is an integral part of satisfying and promoting the eminence of coaching in sports and in the coaches' competence build-up.

1.2 Problem Statement

According to Sproule and Nash (2012), coaching role is enormous and complex and many factors determine performance of teams in competitions. Grace (2014), posited that educating coaches is an integral part of satisfying and promoting the eminence of coaching in sports and a build-up in the coaches' competence. In Kenya, like in many parts of the world, sport is a highly structured industry and boasts of competitive leagues and tournaments. Kenya has representation in competitions at regional, continental and world competitions in various sport disciplines for both gender (Science of sport, 2014). Coaching training programs for different levels in respective sports are available for coaches and do not make reference to the academic qualification.

The Agape volunteers 2010-2020 edition reported that proper sport coaching in Kenya lacked, making it essential to set up a coach education program (Cassidy, Jones & Potrac, 2015) more so on the technical and tactical coaching attributes. Further review of literature attests to a dearth of studies on the academic status on the team performance in sport competitions not only in Kenya but in the rest of the world. After all, in Kenya, there is lack of a structured coaching education program for any sport. In order to provoke coach education practice in Kenya, there was need for a scientific study on whether coach academic predicts performance of teams in competition.

1.3 Objectives of the Study

1. To establish the academic status of coaches in the Kenyan national soccer and volleyball leagues

2. To establish whether academic status of the coach predicted team performance in the Kenyan national soccer and volleyball leagues.

1.4 Research Hypothesis

This study was guided by the following hypothesis:

H₀₁: Academic status of the coach does not significantly predict team performance in the Kenyan soccer and volleyball leagues

1.5 Theoretical Framework

The study was based on the experiential learning theory that stipulates that learning process involves creating knowledge from inquisitive and by transforming experiences (Cherry, 2019). The theory advocates for holistic approach in learning by underscoring the influence of cognition, environmental factors, and emotional experiences in the learning process. According to the experiential learning theory, grasping and transforming experiential theoretical models can explain the processes of knowledge creation which are basically in two models. The two models in turn produce four learning cyclic modes that include grasping experience made by concrete and conceptualization, reflective observation and transforming experience which involve active experimentation. Proponents of experiential learning theory argue that concrete experience provides knowledge that serves as basis for reflection, from which assimilated information form abstract concepts. Then, through the active and continuous testing of concepts, new theories about the world are developed to produce new ideas that are further tested and process begins again. According to the experiential learning theory, learning process can start at any point (Marin, 2015).

For purposes of this study, academic status of the coach continually generate personal experiences that keep changing with times and situations. By the virtue of its continuous and cyclic knowledge generation learning process, experiential theory was to back this study. Accordingly, through the coaching process, the coach gathers new knowledge which he/she conceptualizes and packages for players needs during practice and competition. As the approach of this theory is holistic, it then applies to the holistic nature of coaching, which is a blend of the physical, technical, tactical and psychological coach education. The current study focused on the academic, technical and tactical aptitudes of the coach education on the team performance in competition which have not been a focus of research in many realms of sport performance so far.

1.6 Conceptual Framework

Based on the experiential learning theory a conceptual framework linking the variables of this study was generated. The conceptual framework shows how the variables interact to bring out the outcome which was the ranking of teams in the respective National Leagues. The independent variable was coaches' academic achievement while the outcome in the league ranking was the dependent variable.

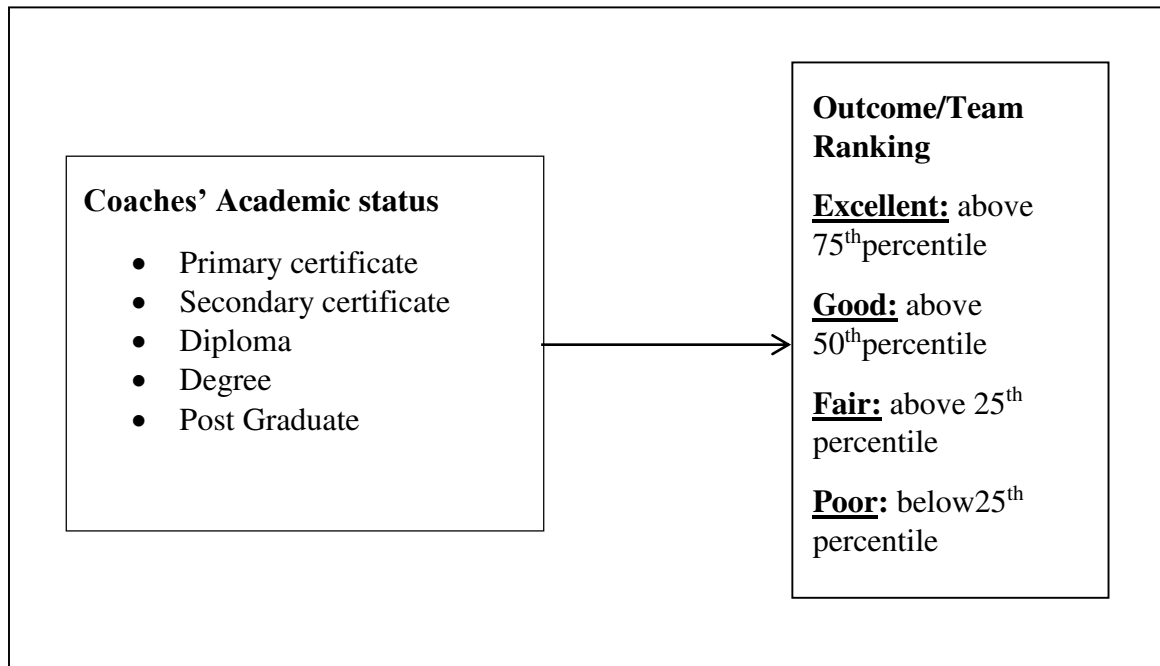


Figure 1: Technical and Tactical Coach Education Attributes and Team Performance

2.0 LITERATURE REVIEW

2.1 Coach Education and Team Performance

It is a general agreement that educational reform is desirable to meet the challenges of the 21st century. Sports coaching can impact positively in such settings and has been of interest in the recent discussions. This is because educational formations provides people with essential skills and competences to succeed in the dynamic world. The academic goal remains a significant facet of education, and a more holistic approach in education is critical for transformative education model that would achieve the desired outcome (Odabaşidoi, 2013). Accordingly, the importance of coach education in sports cannot be overemphasized.

Sports coaching has evolved over the years and has witnessed sophisticated design models in the approach of the coach's pursuit of competence with a view to meet increasing demands of players to fit in the highly competitive environment (Grant, 2012). According to (Sproule & Nash, 2012), a coach who possess knowledge in the different learning styles and has experience tend to be effective in their coaching. Obtaining the appropriate qualification therefore expands their opportunities for career attainment and better performance (Grace, 2012), as the power of education lies in the person's capacity to apply the skills learnt to connect, interpret and discern the needs of a task effectively (Koch, 2014). According to Livingstone (2010), coaches undertake professional courses to develop their knowledge and skills and enhance their coaching. It is therefore mandatory for the coach in the developed countries to acquire a certain level of qualification in order to practice coaching (Sproule & Nash, 2012). However, such requirements are alien in most developing countries including Kenya. Therefore to keep in tandem with the best practice in coach education, it was necessary to establish the status of the coaching education by highlighting specific coaching education attributes in relation to coaching and team performance

in competitions. This study sought to establish the academic qualifications of coaches in the Kenyan national soccer and volleyball leagues and their effects in predicting team performance in competitions.

According to Nash and Sproule (2012), there was no relationship between coach education and professional qualifications with the actual team performance. The findings were based on their investigation of the impact of coach education qualification on coaching practice across a range of coaching levels by investigating the perceptions of 621 practicing sports coaches. The findings were procured from the coaches' perception of their coaching which might suffer from personal preferences and biases. This study may unearth alternative view with reports on the coach competence emanating from the academic status of the coaches.

In the United Kingdom, a coaching certificate course (UKCC) was introduced to professionalize coaching because the initial course was criticized for its failure to appreciate the complexity of coaching role (Sproule & Nash, 2012) as the coach has to acquire many skills as well as develop knowledge in a number of areas (Nash and Sproule 2009). In realizing the short coming of coaching expertise, the UK government formed a task force to develop a criterion to define expertise and select the best coaches for representative positions. The task force found that previous research examined sport expertise from the view of the expert performer and neglected the impact of the coach education (Trudel & Gilbert, 2009). It is also necessary to shed light on the coaches' status in Kenya as well as inquire about the coach education.

In Kenya, education of coaches has expanded, albeit unplanned and often driven by individuals within a sport organization rather than from the technical (sport federation) the academic (higher education or the policy developers (government ministry). The volunteer status of many coaches in Kenya could be the reason why coach education in Kenya has received less attention than other professions. Nevertheless, coach education is essential as learning the styles of coaching and preference of players would enhance coach effectiveness. The education would also improve coaching behaviors which is an important tool of the coaching process (Grace, 2014). According to the United Kingdom task force, coaching curriculum emphasized more on sports science with little pedagogical training of coaches (Cassidy, Mallett & Tinning, 2008). The education tended to focus on monitoring the fitness and conditioning of players than the other aspects of practice and instruction in competition. The task force recommended for an objectively holistic approach in coaching on skill progression and a greater understanding of the performance controlling mechanisms that are inherent in modern coaching. Therefore, coach education should be treated as cognitive activity which has unique competences and skills with clear approach in presentation and assessment. The program should contextualize the knowledge presented and highlight the practical application for holistic coaching (Clarke, 2019).

Nevertheless, Cassidy & Kidman (2010), averred that there is scarcity of research on how coaches perceive coach education. They also claimed that existing reports about coach education are subjective because a number of researches have reported that it is coaches themselves who have been used to report on practical coaching experience and observing other coaches performing coaching as the preferred methods of coach teaching (Mesquita *et al.*, 2010). Thus, the acquisition of skills by coach is linked to programs taught through a classroom-based curriculum, which is easily understood better by coaches who possess some form of higher academic standing than the lowly educated. On the other hand, Sfard (1998) coined the participation metaphor which was

related with learning through day-to-day active participation in the coaching context including such activities as mentoring and community practice (Lave & Wenger, 1991). The recognition of the role of both ideologies in the advancing coach proficiency seem to be assumed by researchers. This is in the attempt to develop cognitive structures which are inclusive of the coach skills that comprises of mediated, unmediated and internal learning situations which are complementary between the acquisition and participation metaphors (Werther & Trudel, 2006).

Further claims on coach education and team performance were advanced by Nelson et al., (2006) claimed that mediated learning which is acquired directly by working with a more educated coach, the unmediated learning where the learner decides what is important or not and the internal learning, which involve reflection about the new information within the existing ideas should take place under different types of learning situations such as formal coach education programs. Such learning attributes can also be learnt from the previous personal coaching experience and non-formal activities like coaching conferences, workshops and clinics. Cushion *et al.*, (2010) pointed that the conceptual framework of coaches' learning sources must be all round by involving connections and interaction between the different types of learning situations. Therefore, a mix of but blended learning upon the framework of skill and knowledge acquisition and participation metaphors, would appear to be beneficial in developing a coaching model for coaches.

In the recent past, coach education programs have been emphasized to enhance performance of teams in competitions. Many of such programs have been domiciled in the developed countries and have enhanced coaching skills and knowledge expertise of coaches in the respective countries (Erickson et al., 2008, Gilbert & Trudel, 1999; Lyle, 2002; Wright et al., 2007). Borrowing from these countries, research has confirmed that using curriculum-based approaches in coach education enhances coaching acumen. However, in many countries, coach education program is lacking, the major challenge being lack of funds for support. On the other hand, where there exists such programs, documentation is lacking. For example, in Portugal each sport federation takes charge of the structure and development of their coach education program. Their program has three to four coaching levels and do not limit the coach to merely the aims, context of practice and contents (Mesquita et al., 2009). The package is included in both undergraduate and post graduate studies of their sports sciences program. However, as noted earlier, adopting a classroom-based approach incorporates rigid teaching methods which may deprive the learner of the holistic development in coaching. The syllabus should accommodate activities in the different coaching dimensions as it focuses on sport-specific technical coaching concerns (Mesquita, 2010). A number of other studies have delved into coach education aspects (Reade et al., 2018; Timson-Katchis & North 2008; Wright et al., 2007; Abraham et al., 2006; Irwin et al., 2004; Jones et al., 2004; Fleurance & Cotteaux, 1999; Salmela, 1995).

This study focusing on determining coaches' academic and professional background as the vital in sport performance as confirmed in the Portugal case have a first degree. The level of education has been shown to influences knowledge and people's perception of coaching competence which are closely linked to coach performance (Gilbert & Trudel, 2001; Irwin et al., 2004; Jones et al., 2004). The study also attempted to determine how perception of the players' perception of coach competence influence team performance in competitions. According to research on comparative analysis of the coaching experience and the academic level of a coach, Almeida (2016), asserted in a study of 336 coaches (284 males and 52 females) ranging from 16 to 65 years in 22 sports that

coaches with higher physical and sport education certificate had a great potential of developing general and specific personal coaching competences. All coaches for the study had obtained their certification at the national certification program. The findings showed coaches who worked with experts were rated high in academic achievement and claimed to acquire coaching knowledge by doing, attending seminars outside the formal systems and interacting with peer coaches. The coaches with lower academic level were rated lower and claimed to obtain information from the internet, preceded in increasing order of importance by practice level as athletes, national coaching certification programs, reading books/ magazines and watching videos of coaching education thus personal experience as athletes plays a role in coaching. Education level was found to significantly influence in the two-way interaction effect analysis.

In another study, Côté et al. (2009) proposed a development model for sport participation (DMSP) approach because coaching knowledge varied with the different stages of athlete development and learning sources by the coach. By adopting the model, it would help coaches to meet athletes' needs by helping them achieve their goals in the specific context. Thus a structured coaching education program would facilitate coaching knowledge and associated learning sources that are appropriate for the context (Côté & Gilbert, 2009). According to Nelson *et al.* (2013) coach education, and its effect, has progressed toward becoming to some degree an interesting issue in coaching. The components of sports coaching include the physical, social and psychological attributes (Serrano et al., 2013). A coach with appropriate qualifications is able to incorporate different attributes of coaching to the training program and influence performance outcome in sport competitions. Such a program instils a coach with cognition, positive psycho-social temperament and techno-tactical competences that are preferable for performance in competitions (Ferguson et al., 2019; Javed, Ahmad & Naseer, 2019; Trigueros et al., 2019; Curran, Hill, Hall & Jowett, 2015; FIVB Coaches Manual Level II, 2011; Birrer and Morgan, 2010).

According to available evidence, coaches acquire coaching attributes in the process of coaching practice and competitions. Moreover, the coach education attributes plays a significant role in sport coaching. The specific values include coach past playing experience (Bykova, 2020; malete et al., 2019; Moen *et al.*, 2015; Marcone, 2017; Teatro, 2017; Grundel, 2013; Duarte *et al.*, 2014; Serrano *et al.*, 2013), competitive experience (Tozetto *et al.*, 2019; Bloom *et al.*, 2014), academic status (Nash & Sproule, 2012) and professional qualification (National Olympic committee (NOC) which singularly and collectively influence coaching efficacy (Naul, Binder, Rychtecký & Culpan, 2017). However, there is dearth of research on whether the specific coach education attributes can be able to predict performance of teams in the competition.

3.0 METHOD AND MATERIALS

The study adopted Cross-Sectional survey design. The population of the study was 53 head coaches handling teams in the Kenyan national soccer and volleyball leagues. Census sampling was used to pick the 53 coaches for the study. Data collection instrument was a self-administered questionnaire for the coaches. The coaches' questionnaire was divided into sections which captured demographics and academic background.

The study used Statistical Package for Social Sciences (SPSS Version 22) for data analysis. Information was organized and presented using descriptive statistics and was analyzed at 0.05 significance level. Chi-Square and Fisher's Exact test was used to predict coach academic status

on the team’s performance. Data was projected in figures and tables and relevant discussions were made.

4.0 FINDINGS

4.1 Coaches’ Academic Status

Figure 1 shows the coach academic status in the Kenyan soccer and volleyball leagues.

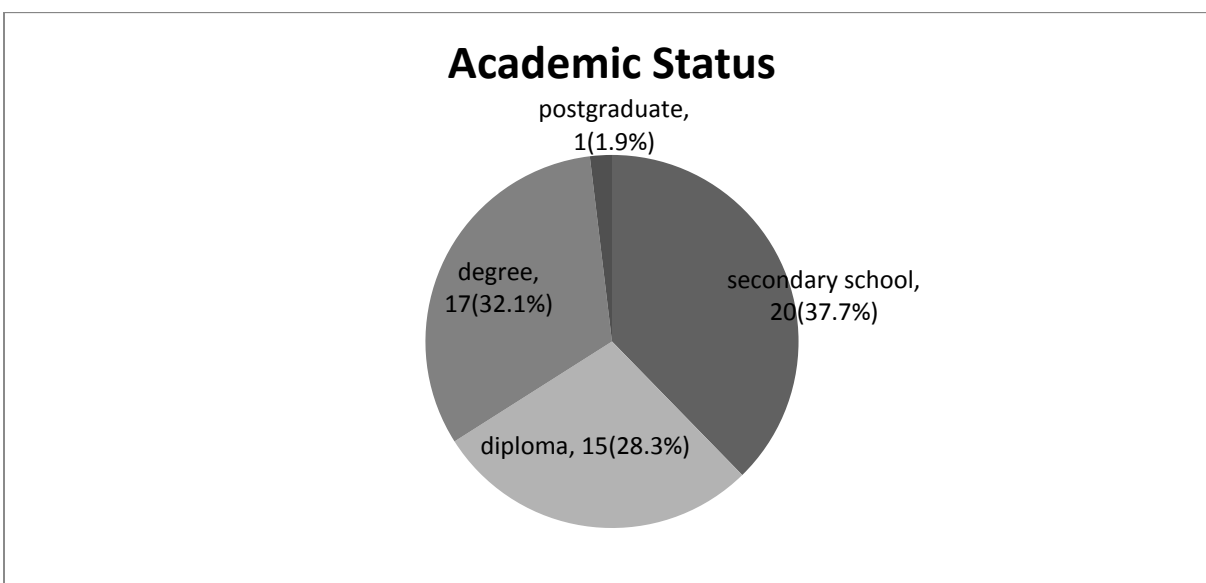


Figure 2: Coaches’ Academic Status

Figure 1 shows that, 20(37.74%) coaches had attained secondary education, with a sizable number 17(32.1%) having attained university bachelor’s degree, 15(28.3%) had attained tertiary college education while 1(1.9%) had postgraduate education.

4.2 The Influence of Coach Academic Status on Team Performance

Table 1 presented findings of the coach academic status on team performance

Table 1: Coach Academic Status and Team Performance

	Above 75 th Percentile	Above 50 th Percentiles	Above 25 th Percentiles	Below 25 th Percentiles	Total
Secondary school	3 (5.7. %)	8 (15.1%)	5 (9.4%)	4 (7.5%)	20 (37.7%)
Diploma	-	5 (9.4%)	6 (11.3%)	4 (7.5%)	15 (28.3%)
Degree	8 (15.1%)	2 (3.8%)	2 (3.8%)	5 (9.4%)	17 (32.1%)
Postgraduate	-	1 (1.9%)	-	-	1 (1.9%)
				13	
Total	11 (20.8%)	16 (30.2%)	13 (24.5%)	(24.5%)	53 (100%)

The table revealed that 51% of the teams were ranked above 50th percentile and 49% were ranking below 50th percentile. The findings indicate that more teams that were managed by coaches with a diploma and above level of education (30.2%) were placed higher in the rank than those that

were by coaches with a secondary level of education (20.8%). The findings also showed that of the teams that were ranked below 50th percentile, the teams that were managed by coaches with a diploma and above education level (32%) were still more than for those that were managed by coaches with a secondary education (16.9%).

Table 2: Analysis of the Coach Academic Status on Team Performance

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	18.419a	9	0.031	0.016
Fisher's Exact Test	17.929			0.015
N of Valid Cases	53			

Table 2 presented an analysis of the coach academic status on team performance. The hypothesis that was tested stated that academic status of the coach does not significantly predict team performance in the Kenyan soccer and volleyball leagues.

A Chi-square test indicated that $\chi^2 = 18.419 \leq p_{0.05} 9df$, implying that the null hypothesis was rejected. Fisher's exact test yielded 0.015 confirmed that the difference was significant.

5.0 DISCUSSION

H0₁: The hypothesis that academic status of the coach does not significantly predict team performance in the Kenyan soccer and volleyball leagues was rejected

These findings agreed with Bozer and Jones (2018) who indicated that coaching effectiveness is facilitated by academic status, especially in areas of psychology. The authors argued that coaches with good academic status were able to create good trainee awareness and task execution, resulting in higher performance of the trainee. The findings were also consistent with Landsberg (2015) who revealed that academic qualification of the coach plays a key role in determining the performance of a team, meaning that the coaches who have high education level tend to teach their teams technical skills of playing which in turn increases the success of the team.

Based on the records in Table 1, it can be argued that teams under a coach with secondary education were placed in lower percentile than the ones under coaches who have attained a higher level of education (degree). This implied that teams coached by graduate coaches performed excellently as compared to teams under other coaches. Coaches who had attained university degree have learnt diverse ways to enrich their players to do well in the team. These findings agreed with Agusti et al. (2020) who indicated that coaches with university education degree performed better than coaches with low levels of education. Callary, Rathwell and Young (2018) also agreed with the findings and indicated that coaches with university degree have learned a diverse way of communication including humor, which in turns benefits communication between coaches and players which further enhance performance of the teams. Bozer and Jones (2018) also argued that coaches with good academic background were able to create good trainee awareness and task execution, resulting in higher performance of the trainee.

6.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Summary of the Findings

Coaches who had a postgraduate degree as the highest level of academic education achieved had all their teams 1(1.9%) finish above 50th percentile. Amongst the coaches that had teams in the 75th percentile, 8 (15.1%) out of 11 of the teams were under the coaches with bachelor's degree. This was a clear indication that education played a role in team performance. Chi square and Fisher's Exact Test results showed that coaches academic status had a significant effect on team performance ($\chi^2 = 18.419$, $0.031 \leq p < 0.05$ 9df). The fisher's exact test had a p value of 0.016 which was also less than 0.05 confirming that there was a significant relationship between coaches' academic status and team performance.

6.2 Conclusion

The aim of this study was to establish whether coach academic would predict performance (ranking) of the teams in the Kenyan soccer and volleyball 20/21 national leagues. Literature review as highlighted emphasizes the significance of the role played by coach education background, in the overall team performance. Effective corroborations of factors including the human aspects are vital to the team performance. Based on these findings, the study concluded that coaches' academic status had a significant effect on team performance.

6.3 Recommendations for Practice and Policy

- i. Federations to collaborate with the ministry of education and the institutions of higher learning to develop a holistic coach education curriculum in Kenya.
- ii. Unified coach education curricular is essential for coaches in Kenya. Therefore, consideration of the academic qualification of the coach is necessary when recruiting a coach
- iii. Team managers, owners and other stake holders in sports need to take up educated coaches. This is because educated coaches learn a diverse way of communication including humor, which in turns benefits communication between coaches and players which enhances team performance in the long run. In addition, coaches that are not educated need to go back to school and further their education. This will enable them to gain more skills that will be help in their teams' performance.

REFERENCES

- Cherry, F. (2019). *Stubborn particulars of social psychology: Essays on the research process*. Routledge.
- Martin, C. J. (2015). Comparative clinical study testing the effectiveness of school based oral health education using experiential learning or traditional lecturing in 10 year-old children. *BMC Oral Health*, 15(1), 1-7.
- Odabaşidoi, B. F. (2013). Developing thinking skills in the course of academic writing. *Procedia-Social and Behavioral Sciences*, 93, 508-511.
- Serrano Rosa, M. A., Meharsafar, A. H., Moghadam Zadeh, A., & Gazerani, P. (2020). Stress, professional lifestyle, and telomere biology in elite athletes: a growing trend in psychophysiology of sport. *Frontiers in Psychology*, 11, 2894.

- Javed, S., Ahmad, M., & Naseer, A. (2019). The Effect Of Motivational Intensity And Coaches On Athletes Performance. *THE SPARK A HEC Recognized Journal*, 3(1), 56-69.
- Bloom, Gordon A., William R. Falcão, & Jeffrey G. Caron (2014). Coaching High-Performance Players: Implications for Coach Training.” *Positive Human Functioning from a Multidimensional Perspective* 3:107–131.
- Bozer, G., & Jones, R. J. (2018). Understanding the factors that determine workplace coaching effectiveness: A systematic literature review. *European Journal of Work and Organizational Psychology*, 27(3), 342–361.
- Callary, B., Rathwell, S., & Young, B. W. (2018). Coach education and learning sources for coaches of Masters Swimmers. *International Sport Coaching Journal*, 5(1), 47–59.
- Callary, Bettina, Diane Culver, Penny Werthner, and John Bales. 2014. “An Overview of Seven National High-Performance Coach Education Programs.” *International Sport Coaching Journal* 1(3):152–164.
- Cassidy, T., Jones, R. L., & Potrac, P. (2015). *Understanding sports coaching: The pedagogical, social and cultural foundations of coaching practice*. Routledge.
- Erickson, Karl, Jean Côté, and Jessica Fraser-Thomas. 2007. “Sport Experiences, Milestones, and Educational Activities Associated with High-Performance Coaches’ Development.” *The Sport Psychologist* 21(3):302–316.
- Gilbert, W., & Trudel, P. (2001). Learning to Coach through Experience: Reflection in Model Youth Sport Coaches. *J Teach and Phys Educ*, 21, pp.16-34. 18.
- Gilbert, W., Lichtenwaldt, L., Gilbert, J., Zelezny, L., & Côté, J. (2009). Developmental Profiles of Successful High School Coaches. *International Journal of Sports Science and Coaching*, 4(3), pp.415-431.
- Gilbert, Wade D., and Pierre Trudel. 2001. “Learning to Coach through Experience: Reflection in Model Youth Sport Coaches.” *Journal of Teaching in Physical Education* 21(1):16–34.
- Grace MCarthy (2014). *Coaching and mentoring for business*. University of Wollongong, New South Wales, Australia
- John, L., Chris, C., & Patrick, D. (2010). *Sports coaching: professionalism and practice*.
- Koch, M.J. (2014, April). Formative assessment, teachers' professional judgement, and collaborative work. In C. Suurtamm (Chair). *The teacher's role in formative assessment*:
- Koch, Margaret-Ann. 2014. “The Relationship between Peer Coaching, Collaboration and Collegiality, Teacher Effectiveness and Leadership.” PhD Thesis, Walden University.
- Mesquita, Isabel, Joana Ribeiro, Sofia Santos, and Kevin Morgan. 2014. “Coach Learning and Coach Education: Portuguese Expert Coaches’ Perspective.” *The Sport Psychologist* 28(2):124–136.

- Moen, Frode, Frank Abrahamsen, and Phillip Furrer. 2015. “The Effects from Mindfulness Training on Norwegian Junior Elite Players in Sport.” *International Journal of Applied Sports Sciences* 27(2):98–113.
- NASH, Christine, and John Sproule. 2012a. “Coaches Perceptions of Their Coach Education Experiences.” *International Journal of Sport Psychology* 43(1):33.
- Naul, R., Binder, D., Rychtecký, A., & Culpan, I. (2017). Olympic education as an academic study. *Olympic Education: An International Review*, 344.
- Tozetto, A. B., Carvalho, H. M., Rosa, R. S., Mendes, F. G., Silva, W. R., Nascimento, J. V., & Milistetd, M. (2019). Coach turnover in top professional Brazilian football championship: A multilevel survival analysis. *Frontiers in Psychology*, 10, 1246.
- Trudel, P., Gilbert, W., & Werthner, P. (2010). Coach education effectiveness. *Sport Coaching: Professionalisation and Practice*, 135–152.
- Trudel, P., Milestetd, M., & Culver, D. M. (2020). What the empirical studies on sport coach education programs in higher education have to reveal: A review. *International Sport Coaching Journal*, 7(1), 61–73.
- Vella, S. A., Oades, L. G., & Crowe, T. P. (2013). The relationship between coach leadership, the coach–athlete relationship, team success, and the positive developmental experiences of adolescent soccer players. *Physical education and sport pedagogy*, 18(5), 549-561.
- Vella, Stewart A., Lauren A. Gardner, and Sarah K. Liddle. 2016. “Coaching, Positive Youth Development, and Mental Health.” Pp. 205–215 in *Positive youth development through sport*. Routledge.