

Research Article

Factors Influencing Gymnastics Sport Development in Zambia: A Case of Bauleni Compound in Lusaka District

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Abstract

The study investigated into factors influencing gymnastics sport development in Zambia a case of Bauleni compound in Lusaka district. It was guided by the following research objectives; to identify social factors that influenced individual participation in gymnastic as a sport, to establish the economic factors influenced gymnastic sport in Zambia and to investigate the physical factors influenced gymnastic sport. The development of gymnastic sport was very cardinal because of the benefits experienced by gymnasts which includes increased flexibility, enhanced general health, as well as improved postural control. Descriptive research design was used where both qualitative and quantitative research methods were employed. The estimated total population size was 456 youths from Bauleni compound in Lusaka district of Lusaka province and out of which a sample size of 120 respondents were selected using Snowball method. The questionnaire was the instrument used to conduct the study that comprised closed ended and Likert rated scales format questions. There was a 100% return rate and the data was coded and analyzed using Statistical Package for Social Sciences version twenty-five (SPSS V25). The findings of the study were that the youths in Bauleni compound are not involved in any form of sporting activity including gymnastics. There is lack of physical education (PE) in relation to the gymnastics in schools and that the environment plays a significant role in contributing to a decrease in gymnastics as a sport. Parents have also a significant role to play in influencing their children's sport and physical participation by emphasizing on the academic pathway. Traditional structure of family (father and mother) has a more positive influence on sport and recreation participation of children, than a non-traditional family (single parent family, or guardians) that is predominant in Bauleni compound. Lack of facilities and equipment for the sport and no proximity to sporting facilities was another challenge noted in Bauleni compound. The researcher made the following recommendations; introduce sports education including gymnastics through physical education (PE), during the teacher-parents meetings (TPM) learners should perform some gymnastics as to develop the sport aimed at providing the significance of gymnastics to their children and also for health, socioeconomic gain and development of sports.

Keywords: Gymnastics, Youth, Health, Sport, Environment, Development.

1. Introduction

The researcher was compelled to undertake this research study because for over 15 years of my teaching career, I have not come across a group of youths or people participating in gymnastics in Bauleni compound of Lusaka. What I have seen is more people participate in major sports activities such as football, Rugby, Boxing, Athletics, Volleyball, Swimming, Judo and Netball within various sports facilities in Lusaka such as Showgrounds, Government Complex, Heroes Stadium, National Sports Development Centre Hall (NSDCH), Olympic Youth Development Centre (OYDC), just to mention a few. In the same vain, you see a lot of youths, both male and female, participating in these major sports disciplines than in the minor sports such Gymnastics, Squash, Tennis, Badminton, Polo, just to mention a few. According to the National Youth Policy (2006), The Zambian Government attaches value to sport as a tool for social, economic and political development, hence its adoption and launch of the first comprehensive National Sports Policy in 1994. Its main overall objective was to promote youth participation in sport, leisure and recreation and to use sport for development and to achieve healthier living among youths. Gymnastics is unique in human movement in that it demands complex gravity defying body movements that require specific joint actions to be carefully aligned with the gymnast's space, direction, time and rhythm (Dowdell, 2011). The sport of gymnastics is

reported to have been practiced by the Ancient Greeks as a tribute to the gods of the arena (History of Modern Gymnastics, 2014). Gymnastics, is a form of physical activity, and is an all-inclusive sport code that develops basic motor skills, hand-eye coordination and provides gymnasts an opportunity to socialize and learn new skills. According to Dowdell (2011), fundamental motor patterns, experienced by children participating in gymnastics are: static shapes and static-dynamic balance, jumping and landing, rolling, turning and twisting, hopping, skipping and galloping, crawling and climbing, and stepping and leaping.

1.1. Background of the Study

Sports are an important part of the Zambian people that include the youth population in Bauleni compound of Lusaka. There are several sports disciplines in Zambia that attract different age groups of society to be engaged in at any given time. In Bauleni compound, the evident sports disciplines where youths are found participating in open spaces or grounds is mainly football. They are not seen engaged in sport like gymnastics. Despite the benefits offered by gymnastics that include the opportunity to largely develop gross motor skills, and encourages exercise which aids in combating obesity and reducing the risk of coronary heart disease. This scenario is the same even in government institutions such as schools and local government owned council community centres and grounds where you expect gymnastic. This state of affairs has contributed to the factors influencing the development of gymnastics in Bauleni compound. The Federation International of Gymnastics (FIG) is the oldest international sports federation that was established in 1881. The FIG has participated in the modern Olympic Games since its revival in 1896 (History of Modern Gymnastics, 2014). The FIG exclaims that the 1976 Olympic Games, which were held in Montreal, Canada, was when the attention of media started to focus on the sport (History of Modern Gymnastics, 2014). At present, the FIG has grown to host and govern seven disciplines of gymnastics namely; Men's Artistic Gymnastics, Women's Artistic Gymnastics, Rhythmic Gymnastics, Aerobic Gymnastics, Trampoline Gymnastics and Gymnastics for All. Each of these gymnastics disciplines requires the participant to perform exercises, skills and routines at competitions, with high levels of strength, balance and control (History of Modern Gymnastics, 2014).

The participation in sport provides young children and adolescents with an opportunity to develop on a physical, mental and social domain, thus resulting in the experience of many health benefits (Department of Health, 2010). Gymnastics is an excellent vehicle for the teaching basic motor skills and promoting health-related fitness in children of all ages (Donham-Foutch, 2007; Coelho, 2010). Adopting and leading a physically active lifestyle can assist in the prevention of heart diseases, obesity, cancer, osteoporosis, diabetes type 2, and depression (Jansen and LeBlanc, 2010). These well-known advantages are experienced by people who participate in sport and physical activity, and it would appear that a lack of physical activity may result in being at higher risk for coronary heart disease and other chronic conditions known as diabetes. Habitual physical activity contributes to an all-round quality of life, psychological health and increases the ability to participate in activities at work, and during leisure time (Moore and Werch, 2005). Furthermore, participation in physical activities and sports among young people promote social well-being, physical and mental health, academic achievement and skills such as team work, self-discipline and socialization (Moore and Werch, 2005).

1.2. Statement of the Problem

Sports are an important part of the Zambian people that include the youth population in Bauleni compound of Lusaka. There are several sports disciplines in Zambia that attract different age groups of society to be engaged in at any given time. In Bauleni compound, the evident sports disciplines where youths are found participating in open spaces or grounds is mainly football. They are not seen engaged in sport like gymnastics. Despite the benefits offered by gymnastics that include the opportunity to largely develop gross motor skills, and encourages exercise which aids in combating obesity and reducing the risk of coronary heart disease. This scenario is the same even in government institutions such as schools and local government owned council community centres and grounds where you expect gymnastic. This state of affairs has contributed to the factors influencing the development of gymnastics in Bauleni compound.

1.3. Purpose of the Study

The purpose of this study was to investigate into factors influencing gymnastics sport development in Zambia that was a case of Bauleni compound in Lusaka district.

1.4. Specific Objectives

- 1) To identify social factors that influenced individual participation in gymnastic as a sport.
- 2) To establish the economic factors that influenced gymnastic sport in Zambia.

- 3) To investigate the physical factors that influenced gymnastic sport.

1.5. Specific Research Questions

- 1) What were the social factors that influenced individual participation in gymnastic as a sport in Zambia?
- 2) Which economic factors influenced gymnastic sport in Zambia?
- 3) What were the physical factors that influenced gymnastic sport in Zambia?

1.6. Significance of the Study

The development of gymnastic sport was very cardinal because the benefits experienced by gymnasts included increased flexibility, enhanced general health, as well as improved postural control. Thus, investigating the factors that influence the gymnastic sport development in Zambia would enhance the participation in gymnastics as a sport by the youths that were seen roaming the streets of Bauleni compound. Prolonged physical inactivity can pose a threat to livelihood due to conditions such as obesity, diabetes, hypertension, poor joint mobility and functionality, back pain due to poor posture alignment, and psychosocial problems (Sallis and Patrick, 1994). Therefore, understanding factors influencing participation of the youths in gymnastic sport would alleviate them and eventually contribute to overall health of the participants resulting in a decreased risk of several chronic diseases. Stakeholders like the Ministries of Education, Youth and Child Development and Community Development will use this information to improve internal systems, and align efforts, funding and human resources to promote continued participation, as well as to promote the benefits of sport participation, thus creating a community of active and healthy children, mentally and physically, resulting in increased participation in gymnastics and enabling children to develop sport-specific life skills. In turn, an increase in participation in sport may possibly create a decrease in negative social activity and behaviour taking place within communities around Lusaka district and provide an economic engagement for the youth.

1.7. Limitation of the Study

The researcher anticipated that the study would be influenced by financial challenges during data collection from the compounds especially transportation. However, frantic efforts were made to raise financial resources to enable the study being conducted. Being a study that directly involved the youths as the respondents, the researcher foresaw non-responsiveness in the questionnaires because it was feared that the researcher would receive minimal cooperation from the respondents. To mitigate this problem, the individual youths were politely approached and explained the purpose and benefits of the survey to them. The research however was surprised to find that the respondents were more than willing to participate in the study when they were approached.

1.8. Delimitations of the Study

The study investigated further targeted to the youths who were time and again noticed roaming the streets and many times involved in unproductive vices. Lastly, the activity was an academic study whose findings were treated as such.

2. Literature Review

2.1. Conceptual Framework

The study's literature review was guided by the conceptual framework. Three concepts, namely; social, economic, and physical factors were discussed at length related to the development of gymnastic sport and participation in it. The identified concepts according to other scholars have stated that they had a bearing on the development and participation of the youths more especially into minor sports such as gymnastics.

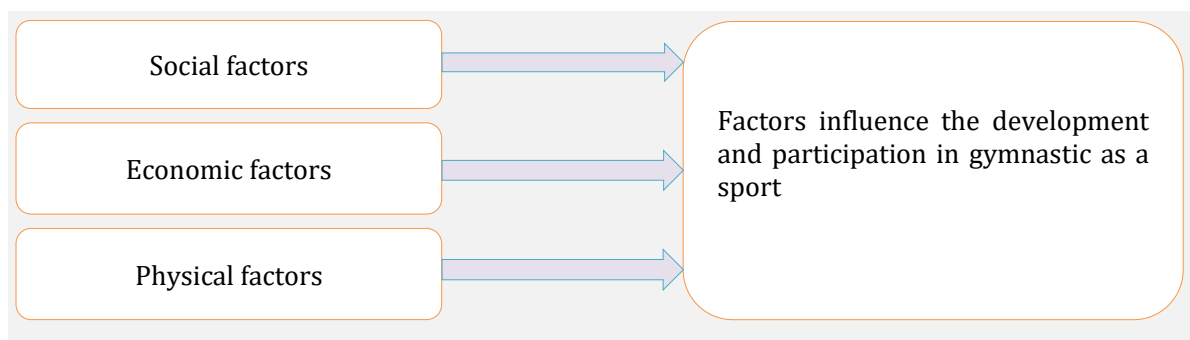


Figure 1. Conceptual framework (Source: Research writing, 2022).

The conceptual framework shown in Figure 1, above has both the independent and the dependent variables that interrelate with regards to the development of gymnastic sports that were identified to be dependent on the following independent variable; social factors, economic factors and the physical factors. It was argued that depending on how the identified factors were manipulated, gymnastic sport would be developed and the youths participate in it. Using the three factors as themes, published literature was identified and discussed in relation factors influencing the development of gymnastics as a sport.

2.2. World View on Promoting Gymnastic as a Sport

Today, sport, in particular, public sport, has been accepted as a social phenomenon in the world, and it is highly considered by sports managers and scholars of physical education and sports science as a multidimensional tool with wide impact on the health of individuals, healthy social relationships (Motameni *et al.*, 2014), promoting physical and psychological health, happiness, expanding social interactions and enriching leisure time, positive effects on promoting quality of life in different people (Mozafari *et al.*, 2010), increasing life expectancy, strengthening solidarity and participation, consolidation of social relations (Faraji *et al.*, 2014), positive social relationships, enhancement of physical activity and development of psychological and social dimensions (Shabani *et al.*, 2014), feeling goodness and general health (William, 2008).

Considering reduced mobility and physical activities, World Health Organization and International Federation Medicine Sport in a joint statement declared that almost half of the world population lack physical activity and mobility, and asked the governments to support physical activities and physical readiness as part of their health policies (Kolman, 2006). Leaving current status and achievement of a relatively optimal status requires appropriate tools such as exercise as a multifaceted tool with wide health, economic, and social impacts. Undeniable educational role of sports activities, especially in adolescents and youths, is valuable in preventing from diseases, hindering most social harms, and ethical distortions (Roshandel, Arbatani, 2007).

2.3. Regional View on Promoting Gymnastics as a Sport

Both researchers and the sport community have expressed interest in using sport to promote positive youth development (Coalter, 2013). However, when critically looked at the evidence linking sport to positive development, the results are often mixed. For example, systematic reviews assessing the relationship between sport participation and alcohol and illicit drug use among youth show conflicting evidence: youth sport participation can protect against the use of illicit drugs, but presents a higher risk of increased alcohol consumption. The positive association between sport and alcohol use is concerning as alcohol use is related to negative developmental outcomes and harms among youth including poor school performance and health-compromising behaviours (Thompson *et al.*, 2012). Understanding the connections between sport participation and youth alcohol and drug use could advance efforts to prevent alcohol and drug use among youth, which is a topic of widespread interest (Catalano *et al.*, 2012). Furthermore, the link between sport participation and alcohol and drug use is particularly important during adolescence as sport participation, alcohol use, and drug use are the social factors that influence sports participation including gymnastics (Young *et al.*, 2011).

Current perspectives on youth development emphasize that behaviour is influenced by multiple factors within the individual and their developmental and social context (Masten *et al.*, 2008). Similarly, research on youth alcohol and drug use identifies a number of factors organized across the individual, social, and environmental contexts that influence alcohol and drug use (Stone *et al.*, 2012). From this perspective the relationship between sport and alcohol and illicit drug use is likely impacted by psychological and social factors, and the sport context. Youth alcohol and drug use as an umbrella term that includes the use, risky patterns of use and problematic use of psychoactive substances including alcohol and illicit drugs are a social phenomenon that influences gymnastic involvement by youths. Much of the research on sport participation and alcohol and drug use has measured substance use.

2.4. Zambian View on Promoting Gymnastic as a Sport

The development of Zambia, particularly in the area of sports development reflects wider trends in the country's political governance and development approaches. Some aspects of these trends are specific to Zambia, but others are shared with other African countries. Broadly speaking, the governance of development across various international contexts has progressed through three phases (Batley and Rose, 2011), Foremost is a historical timeline which considers firstly, Zambia's immediate post-independence period in which expanded social and welfare services were state-provided; secondly, the subsequent

imposition of neo-liberal reforms and policies; and thirdly, more recent developments in the relationships between the Zambian state and civil society. As with all such analyses, the temporal boundaries between phases are blurred.

No examination of sport in post-independence Zambia is complete without recognizing the influence of the preceding period of colonial rule. From 1911 to 1963, Northern Rhodesia, as it was then known, had been administered alongside other southern African countries, firstly by the British South African Company and then the British Colonial Office. Colonial rule entrenched deep inequalities both across the wider region and within the country itself (Batley and Rose, 2011). Resource distribution and development of infrastructure such as schools and social amenities explicitly favoured British interests in Southern Rhodesia (now Zimbabwe) and South Africa to the expense of those in Zambia. Within the country, racial segregation and exploitation severely influenced the life chances and opportunities of the indigenous Africans who made up the majority of the population (Batley and Rose, 2011). The contours of colonial rule also applied to sports, which were divided into 'expatriate sports' and 'African sports', with white settlers and natives having separate sports governing federations. In white-settler residential areas, white expatriates played golf, rugby, cricket and bowls. Amongst the African population, sports such as football and boxing gained significant popularity despite vastly inferior facilities (Simutanyi, 2006). Provision of and access to sport and recreation were thus distributed unequally according to race and class, and also clearly gendered.

In the late 1950s, Zambia's nationalist movement emerged alongside those in other sub-Saharan countries, fueled not only by the injustices of colonial rule within the country but also its exploitation relative to its neighbours (Noyoo, 2008). After the end to British rule was announced on 29 March 1963, the first multiparty democratic elections held in January 1964 were won by an overwhelming margin by Kenneth Kaunda's UNIP. Influenced by fellow leaders of African independence and nationalist movements, Kwame Nkrumah of Ghana and Julius Nyerere of Tanzania, Kaunda introduced the philosophy of 'humanism' to the people of Zambia (Simutanyi, 2006). In terms of social policy, Kaunda's humanist socialism sought to rectify some of the imbalances in human development and provision that were present under colonial rule (Simutanyi, 2006). As in other newly independent African countries (Batley, 2006), there was significant expansion of government social provision, with services such as education and health provided free of charge to the Zambian public.

Aspects of national policy orientated towards sport show both similarities and differences with Kaunda's broader agendas. Although sport was not a particular policy priority, in Zambia as in many other former colonies it became part of the desire to redress some of the consequences of colonialism. Zambia's first two NDPs, covering the period from 1966 to 1974 included proposals to construct new sports facilities in rural areas (GRZ, 1971)—part of the broader aspiration to bridge urban-rural divides by improving rural infrastructure and diversifying Zambia's economy. Although many of these rural facilities were never built, a 30,000-capacity National Independence Stadium was constructed in Lusaka to host celebrations of the transition from colonial rule. The stadium also represented the government's prioritization of elite sport and signaled its intention that its construction would enable Zambia to host the all Africa games. From the earliest days of independence, sport was therefore seen as a symbol of Zambia's developing national identity, aspirations which were shared with many other African countries emerging from colonialism (Nugent, 2004).

In sport, immediately prior to and post-independence, this led to the reconstitution of those sport associations that were previously white only. For example, in football, the Northern Rhodesia National Football League was formed shortly before independence, incorporating white and native teams and leagues, and was then renamed the Zambia Football Association (later Football Association of Zambia) on independence. However, in some sporting associations, such as golf, gymnastics, and tennis, white settlers were resistant to relinquishing their leadership positions (Liwena, 2005).

Moreover, the process of Zambianization was constrained by the widespread shortage of qualified native personnel, which influenced sport as it did the public and private sectors more generally. The issue continued beyond the early years of independence, compounded by the importance the government attached to Zambia's successes in international sport. By the time of the third NDP, covering the period 1979–83 (GRZ, 1979), the government was negotiating on behalf of national governing bodies of sport for experts from abroad to train Zambians as sports coaches and administrators. This import of external expertise reflected the government's desire to maintain and extend elite sporting success after Zambia emerged runner-up to Zaire in the final of the 1974 African Cup of Nations.

There were attempts in the early years after independence to create a Department of Youth Development and Sport in government, and both a National Sports Advisory Council (subsequently the NSCZ) and National Olympic Committee of Zambia were established. However, upon the instigation of the one-party state, the UNIP Central Committee became the party's, and thus the governments, supreme policy-making body. Under the Central Committee, the Youth and Sport Sub-Committee comprised political appointees who wielded their power to influence all sport policy-related matters. Government officials were answerable to the Sub-Committee, which had the mandate to appoint or dismiss board members of statutory bodies such as the National Sports Advisory Council (Banda, 2010). There was frequent interference by UNIP party members in the running of NSAs, particularly in relation to the selection of the Football Association chairman. With the Sub-Committee also having substantial influence on the distribution of resources to sporting organizations, policymaking for sport was highly centralized and implemented in a top-down fashion.

Nationalization of key industries had significant implications for the implementation of sport policy. Alongside the Zambian uniformed security wings (army, air force and police), the newly formed SOCs became key providers of opportunities across all levels of sport, from participation to elite. SOCs, as well as the uniformed security wings, formed and sponsored sport and recreation departments that funded the development and maintenance of facilities, ran annual sports festivals and entered teams in competition across various sporting codes. For example, in elite sport, approximately 65% of the football teams in the Zambian premier league were owned by different mining operations. The standard of coaching in mining communities was considered to be high, partly as a result of white expatriate mineworkers who volunteered to coach local teams. Nevertheless, there remained significant inequalities in sporting opportunities and participation. Based on the geographical positioning of mining areas and most SOCs, sporting opportunities were skewed in favour of the Copperbelt region and locations along the line of Zambia's single railway, which runs from there, through Lusaka and onwards to Livingstone. Similarly, there remained strongly gendered dimensions to sport provision, reinforced as a result of the occupational orientation of SOCs' provision. Female participation was dependent on the employment status of male family members, with those native Zambians whose relations were in relatively well paid senior posts being more likely to become involved in expatriate sports, such as golf or bowling (Dowdell, 2010).

2.5. Factors Influencing Gymnastic Development as a Sport

2.5.1. Social Factors

Social constructs that have demonstrated a relationship with youth alcohol and drug use, including self-concept, self-regulation, life skills, pro-social attitudes, and pro-social behavior have influenced the development of sports such as gymnastics (Dowdell, 2010). Both theory and a significant body of empirical research indicate that psychological and social factors are critical in understanding health-related outcomes including alcohol and illicit drug use among youth as these constitute the social factors that may influence the development of gymnastics as a sport. Social relationships such as positive relationships with adult mentors and pro-social peers are associated with reduced alcohol and drug use (Wormington *et al.*, 2013).

Positive relationships with both adults and pro-social peers are believed to facilitate the development of pro-social values and attitudes that decrease the likelihood of problem behaviour such as alcohol and drug use hence get involved into sports such as gymnastics. Pro-social values are characteristics shared by members of a specific society that enable people to feel fulfilled and live cooperatively with others. Specific cultural examples in Western nations include fairness, empathy, loyalty, respect, and honesty. Pro-social behaviour includes positive actions taken by youth as active leaders in the development of the self-pursuing higher education), the family (e.g., caring for elderly relatives), the community volunteering at a community centre), and civil society. Research has reported that as youth endorse more pro-social values and engage in more pro-social behaviours, the likelihood that they will use alcohol and illicit drugs decreases.

2.5.2. Physical Factors

Vandorpe *et al.*, (2012) shows that the physical performance of a gymnast reflects their current ability rather than their potential to excel later on in their athletic career. According to Dorgo (2009), the purpose of coaching is to improve the physical, mental and emotional aspects in athletes and to prepare them for competition. From these two statements we can conclude that a coaching and athletic preparation can be used interchangeable. Hence the gymnast's current physical abilities and results have little or no correlation with previous performance. Therefore, a coordination test must be able to distinguish between elite and non-elite gymnasts and are a better predictor of future success than sole test only measuring the athletes' current physical abilities. On an elite level, performance is more attributed to better coordination than physical abilities, compared to on a lower level of competition where lack of coordination can be

compensated with an increase in and better physical abilities than the other competitors at the same level. This difference suggests that in lower levels of competitive gymnastics, emphasis should be placed on increasing the gymnast's physical abilities, while in higher levels, coordination is key. No matter what level the athletes competing at, it is important to develop their athletic physical abilities (McGuigan *et al.*, 2012). Expert coaches have extensive knowledge that is usually accumulated over many years of coaching, knowledge that is sport-and athlete-specific, including different communication strategies (Dorgo, 2009). If physical abilities are what differentiates high-level gymnastics from low level of performance (Vandorpe, *et al.*, 2012) these would be factors worth additional consideration from coaches when planning training sessions.

Strength training and conditioning is an essential part of athletic preparation and necessary to achieve high performance and to avoid injuries (Dorgo, 2009). Strength training has been shown to increase the strength, power, acceleration, vertical jump, and speed of athletes as well as increasing muscle mass and decrease the risk of injury. The physical abilities that can be trained through strength training separate athletes and their performance from each other, even though there is limited research on transfer of strength to motor performance. The transfers of physical abilities are very sport-specific insofar as how much they will enhance the performance of the individual event and importance depends on the activity performed (McGuigan *et al.*, 2012).

3. Methodology

3.1. Research Design

This study used descriptive research design. Gustafson (2017) explained that descriptive research asks the "what" questions. The researcher had chosen descriptive research design in order to describe in context and holistically factors influencing minor sports development, in particular gymnastics, in Lusaka district. Both qualitative and quantitative research methods were employed in this research in order to maximize on the strength and minimize the limitations of each research method.

3.2. Population

The estimated sample population size was 456 youth from Bauleni compound in Lusaka district of Lusaka province. According to Best and Khan (2003), population was defined as any group of individuals who had one or more characteristics in common that were of interest to the researcher. Also according to Sekaran (2005), population referred to the entire group of people, events or things of interest that the researcher wished to investigate.

3.3. Sample

The research study used 120 respondents who were youth community members of Bauleni compound in Lusaka district.

3.4. Sampling Technique

Snowball sampling is a sampling method used by researchers to generate a pool of participants for a research study through referrals made by individuals who share particular characteristics of research interest with the target population (Experiment-resources.com, 2011).

3.5. Research Instrument

The researcher used the questionnaire as a data research instrument. The questionnaire comprised closed ended questions and Likert rated scales format questions. The researcher had chosen the questionnaire because this data collecting instrument was able to gather data over a large sample and a wide geographical area. Martha *et al.*, (2009) further elaborated that the questionnaire upholds respondents' confidentiality and had no opportunity for the researcher's bias in the study.

3.6. Reliability

According to William (2016), reliability was a measure of the degree to which a research instrument yields consistent data after repeated trials. Furthermore, Orodho (2009) defined reliability as the consistency of an instrument in producing a reliable result. In order to achieve reliability of the research instrument, the researcher conducted a pilot study in the same compound where the study was carried out.

3.7. Validity

Validity entails the research instrument was measuring what it was intended to measure (Kombo and Tromp, 2011). Further, validity was the degree to which the test items measured the traits for which the test

was designed (William, 2016). To enhance content validity of this study, the supervisor appraised the instrument.

3.8. Data Collection Procedure

After getting an introductory letter from the university, the researcher had to make appointments with respective respondents for questionnaire distribution and collection. Adequate days were given for the respondents to respond to the question.

3.9. Data Analysis

Descriptive statistics was used to analyze the data using statistical package for social sciences version twenty-five (SPSS V25). Percentages and proportions were also used to investigate factors influencing gymnastics sports development in Bauleni compound of Lusaka district.

3.10. Ethical Consideration

The Researcher ensured that ethical consideration were upheld throughout the research process among them; ensuring that the respondents participated willingly to be respondents of the research and that respondent's confidentiality was upheld. The identities of the respondents were not availed to anybody. Additionally, the findings of the study were used for the academic purpose only and nothing beyond that.

4. Data Presentation and Analysis

4.1. Personal Information

4.1.1. Gender Representation of the Respondents

Table 1 below is indicative of the gender representation of the respondents.

Table 1. Gender.

| | Gender | Frequency | Percent | Valid percent | Cumulative percent |
|---------------------------------|--------|-----------|---------|---------------|--------------------|
| Valid | Male | 98 | 81.7 | 81.7 | 81.7 |
| | Female | 22 | 18.3 | 18.3 | 100.0 |
| | Total | 120 | 100.0 | 100.0 | |
| Source: Research writing, 2022. | | | | | |

Table 1 above shows that 81.7% (n=98) were male while 18.3% (n=22) were female who took part in the research.

4.1.2. Age Range

The age range of the respondents were tabulated and represented in table 2.

Table 2. Age range.

| | Age range | Frequency | Percent | Valid percent | Cumulative percent |
|---------------------------------|--------------------|-----------|---------|---------------|--------------------|
| Valid | 10-15 years | 13 | 10.8 | 10.8 | 10.8 |
| | 16-20 years | 37 | 30.8 | 30.8 | 41.7 |
| | 21-25 years | 54 | 45.0 | 45.0 | 86.7 |
| | 26 years and above | 16 | 13.3 | 13.3 | 100.0 |
| | Total | 120 | 100.0 | 100.0 | |
| Source: Research writing, 2022. | | | | | |

Table 2 above shows the age range of the respondents that took part in the research. A frequency of 10.8% (n=13) were between the age range of 10 to 15 years, 30.8% (n=37) were between the age range of 16 to 20 years, 45% (n=54) were the respondents that fall between the age range of 21 to 25 years and 13.3% (n=16) had 26 years and above.

4.1.3. Education Qualification

Data on the education qualification of the respondents was presented in table 3.

Table 3 below shows the education qualification of the respondents. A total number of 25% (n=30) respondents were grade 9 (nine) school leavers, 65% (n=79) respondents were grade 12 (twelve) school leavers and 9.2% (n=11) had attained tertiary education.

Table 3. Education qualification.

| | Education | Frequency | Percent | Valid percent | Cumulative percent |
|-------|------------------------|-----------|---------|---------------|--------------------|
| Valid | Grade 9 school leaver | 30 | 25.0 | 25.0 | 25.0 |
| | Grade 12 school leaver | 79 | 65.8 | 65.8 | 90.8 |
| | Tertiary education | 11 | 9.2 | 9.2 | 100.0 |
| | Total | 120 | 100.0 | 100.0 | |

Source: Research writing, 2022.

4.2. Are You Involved in Any Form of Sports Activity?

The question was asked to the respondents whether they were involved in any sporting activity. The respondents to this question are shown in table 4.

Table 4. Are you involved in any form of sports activity?.

| | Are you involved in any form of sports activities? | Frequency | Percent | Valid percent | Cumulative percent |
|-------|--|-----------|---------|---------------|--------------------|
| Valid | Yes | 102 | 85.0 | 85.0 | 85.0 |
| | No | 18 | 15.0 | 15.0 | 100.0 |
| | Total | 120 | 100.0 | 100.0 | |

Source: Research writing, 2022.

Table 4 above shows information on the respondents' involvement in sports activity. From the total number of the respondents, 85% (n=102) stated that 'Yes' and 15% (n=18) stated that 'No' with regard their involvement in any form of sports activity.

4.3. The Lack of Physical Education (PE) at Schools

The researcher wanted to find out whether one of the factors that influences the development of gymnastics as a sport was due to the lack of physical education as a subject at school. The responses to this question are shown in table 5.

Table 5. The lack of physical education (PE) at schools.

| | Responses | Frequency | Percent | Valid percent | Cumulative percent |
|-------|--------------------|-----------|---------|---------------|--------------------|
| Valid | Strongly disagreed | 11 | 9.2 | 9.2 | 9.2 |
| | Disagreed | 22 | 18.3 | 18.3 | 27.5 |
| | Neutral | 9 | 7.5 | 7.5 | 35.0 |
| | Agreed | 68 | 56.7 | 56.7 | 91.7 |
| | Strongly agreed | 10 | 8.3 | 8.3 | 100.0 |
| | Total | 120 | 100.0 | 100.0 | |

Source: Research writing, 2022.

Table 5 above shows that 9.2% (n=11) strongly disagreed that the factor that influence participation into minor sports such as gymnastics was as a result of the lack of physical education at schools, 18.3% (n=22) disagreed, 7.5% (n=9) were neutral, 56.7% (n=68) agreed and 8.3% (n=10) of the total sample strongly agreed that the factor that influence participation into minor sports such as gymnastics was as a result of the decline or lack of physical education at schools.

4.4. The Role of Environment

Table 6. The environment is said to play a significant role in contributing to a decrease in gymnastics as a sport.

| | Responses | Frequency | Percent | Valid percent | Cumulative percent |
|-------|--------------------|-----------|---------|---------------|--------------------|
| Valid | Strongly disagreed | 17 | 14.2 | 14.2 | 14.2 |
| | Disagreed | 19 | 15.8 | 15.8 | 30.0 |
| | Neutral | 18 | 15.0 | 15.0 | 45.0 |
| | Agreed | 54 | 45.0 | 45.0 | 90.0 |
| | Strongly agreed | 12 | 10.0 | 10.0 | 100.0 |
| | Total | 120 | 100.0 | 100.0 | |

Source: Research writing, 2022.

When the respondents were asked whether the environment play a significant role in contributing to a decrease in gymnastics as a sport?. Table 6 above show the responses.

As table 6 above shows, 14.2% (n=17) strongly disagreed, 15.8% (n=19) disagreed, 15% (n=18) were neutral, 45% (n=54) agreed and 10% (n=12) agreed that the environment was said to play a significant role in contributing to a decrease in gymnastic as a sport.

4.5. The Role of Parents

The respondents when asked if their parents had a significant role to play in influencing their child's sports and physical activity participation by emphasizing on academic pathway. The responses to this question are shown in table 7.

Table 7. Parents are said to have a significant role to play in influencing their child's sport and physical activity participation by emphasizing mainly on academic pathway.

| | Responses | Frequency | Percent | Valid percent | Cumulative percent |
|---------------------------------|--------------------|-----------|---------|---------------|--------------------|
| Valid | Strongly disagreed | 4 | 3.3 | 3.3 | 3.3 |
| | Disagreed | 14 | 11.7 | 11.7 | 15.0 |
| | Agreed | 68 | 56.7 | 56.7 | 71.7 |
| | Strongly agreed | 34 | 28.3 | 28.3 | 100.0 |
| | Total | 120 | 100.0 | 100.0 | |
| Source: Research writing, 2022. | | | | | |

Table 7 above shows that 3.3% (n=4) respondents strongly disagreed, 11.7% (n=14) respondents disagreed and none of the respondents were neutral. A frequency of 56.7% (n=68) agreed and 28.3% (n=34) strongly agreed that, parents were had a significant role to play in influencing their child's sport and physical activity participation emphasizing on academic pathway.

4.6. Traditional Versus Non-Traditional Structure of Family

Responses were sought from the respondents to determine whether one of the social factors influencing the development of gymnastics as a sport in Bauleni compound of Lusaka was as a result of traditional structure of family (father and mother) having a more positive influence on sport and recreation participation of children, than a non-traditional family (single parent family, or guardians) that was seen to be most predominant a family structure in the compound. The responses are shown in table 8.

Table 8. Traditional structure of family (father and mother) has a more positive influence on sport and recreation participation of children, than a non-traditional family (single parent family, or guardians).

| | Responses | Frequency | Percent | Valid percent | Cumulative percent |
|---------------------------------|--------------------|-----------|---------|---------------|--------------------|
| Valid | Strongly disagreed | 32 | 26.7 | 26.7 | 26.7 |
| | Disagreed | 70 | 58.3 | 58.3 | 85.0 |
| | Agreed | 12 | 10.0 | 10.0 | 95.0 |
| | Strongly agreed | 6 | 5.0 | 5.0 | 100.0 |
| | Total | 120 | 100.0 | 100.0 | |
| Source: Research writing, 2022. | | | | | |

The table 8 above shows that 26.7% (n=32) strongly disagreed that traditional structure of family (father and mother) had a more positive influence on sport and recreation participation of children, than a non-traditional family (single parent family, or guardians), 58.3% (n=70) disagreed while none of the respondents was neutral. A frequency of 10% (n=12) agreed and 5% (n=6) strongly agreed that traditional structure of family (father and mother) had a more positive influence on sport and recreation participation of children, than a non-traditional family (single parent family, or guardians).

4.7. Lack of Facilities and Equipment for Sports

The researcher wanted to find out whether one of the factors that influenced gymnastic development was as a result of the lack of facilities and equipment for sports. In response to the question, table 9 below show the raw data. Table 9 below shows that, 7.5% (n=9) disagreed while none of the respondents strongly disagreed, 7.5% (n=9) respondents were neutral, 31.7% (n=38) respondents agreed and 53.3% (n=64) respondents strongly agreed that there was lack of facilities and equipment for sports and that influenced the participation into minor sports such as gymnastics.

Table 9. There is lack of facilities and equipment for sports that influence the participation.

| | Responses | Frequency | Percent | Valid percent | Cumulative percent |
|---------------------------------|-----------------|-----------|---------|---------------|--------------------|
| Valid | Disagreed | 9 | 7.5 | 7.5 | 7.5 |
| | Neutral | 9 | 7.5 | 7.5 | 15.0 |
| | Agreed | 38 | 31.7 | 31.7 | 46.7 |
| | Strongly agreed | 64 | 53.3 | 53.3 | 100.0 |
| | Total | 120 | 100.0 | 100.0 | |
| Source: Research writing, 2022. | | | | | |

4.8. Proximity to Sport Facilities

Proximity to sport facilities impacted a combination on actual travel times or distances to facilities and influences participation. A question was posed whether the proximity to sport facilities impacted a combination on actual travel times/distances to facilities and influenced participation. Table 10 has the responses as shown below.

Table 10. Proximity to sport facilities impacted a combination on actual travel times/distances to facilities and influenced participation.

| | Responses | Frequency | Percent | Valid percent | Cumulative percent |
|---------------------------------|--------------------|-----------|---------|---------------|--------------------|
| Valid | Strongly disagreed | 6 | 5.0 | 5.0 | 5.0 |
| | Disagreed | 8 | 6.7 | 6.7 | 11.7 |
| | Neutral | 3 | 2.5 | 2.5 | 14.2 |
| | Agreed | 51 | 42.5 | 42.5 | 56.7 |
| | Strongly agreed | 52 | 43.3 | 43.3 | 100.0 |
| | Total | 120 | 100.0 | 100.0 | |
| Source: Research writing, 2022. | | | | | |

As shown in table 10 above, 5% (n=6) respondents strongly disagreed, 6.7% (n=8) respondents disagreed, 2.5% (n=3) respondents were neutral, 42.5% (n=51) respondents agreed and 43.3% (n=52) respondents strongly agreed that proximity to sport facilities impacted a combination on actual travel times/distances to facilities and influenced participation.

4.9. Economic Status

The economic status of a child was the economic status of his/her parents and had a significant influence on sport. The respondents were asked whether the economic status of a child was the economic status of his/her parents and had a significant influence on sport. Table 11 below show the responses.

Table 11. The economic status of a child was the economic status of his/her parents and had a significant influence on sport.

| | Responses | Frequency | Percent | Valid percent | Cumulative percent |
|---------------------------------|--------------------|-----------|---------|---------------|--------------------|
| Valid | Strongly disagreed | 20 | 16.7 | 16.7 | 16.7 |
| | Disagreed | 17 | 14.2 | 14.2 | 30.8 |
| | Neutral | 35 | 29.2 | 29.2 | 60.0 |
| | Agreed | 30 | 25.0 | 25.0 | 85.0 |
| | Strongly agreed | 18 | 15.0 | 15.0 | 100.0 |
| | Total | 120 | 100.0 | 100.0 | |
| Source: Research writing, 2022. | | | | | |

Table 11 above show that 16.7% (n=20) respondents strongly disagreed, 14.2% (n=17) respondents disagreed, 29.2% (n=35) respondents neutral, 25% (n=30) respondents agreed and 15% (n=18) respondents strongly agreed that the economic status of a child was the economic status of his/her parents and had a significant effect on sport participation.

5. Discussion

5.1. Gender Representation of the Respondents

Table 1 above is indicative of the gender representation of the respondents.

5.2. Age Range

The age range of the respondents were tabulated and represented in table 2.

5.3. Education Qualification

Data on the education qualification of the respondents was presented in table 3.

5.4. Are You Involved in Any Form of Sports Activity?

The question was asked to the respondents whether they were involved in any sporting activity. The respondents to this question are shown in table 4 above. It was concluded that the youth in Bauleni compound were not involved in any form of sporting activity including gymnastics. This finding is supported by Kolman (2006) who stated that considering reduced mobility and physical activities, World Health Organization and International Federation Medicine Sport in a joint statement declared that almost half of the world population lack physical activity and mobility, and asked the governments to support physical activities and physical readiness as part of their health policies.

However, today, sport, in particular, public sport, has been accepted as a social phenomenon in the world, and it is highly considered by sports managers and scholars of physical education and sports science as a multidimensional tool with wide impact on the health of individuals, healthy social relationships (Motameni *et al.*, 2014), promoting physical and psychological health, happiness, expanding social interactions and enriching leisure time, positive effects on promoting quality of life in different people. Additionally, Mozafari *et al.*, (2010), articulated that sports such as gymnastics increases life expectancy, strengthening solidarity and participation, consolidation of positive social relationships, enhancement of physical activity and development of psychological and social dimensions.

5.5. The Lack of Physical Education (PE) at Schools

The researcher wanted to find out whether the one of the factors that influences the development of gymnastics as a sport was due to the lack of physical education as a subject at school. The responses to this question are shown in table 5 above. From the responses, it was concluded that one of the factors influencing gymnastics development was as a result of the lack of physical education (PE) in relation to the sport in schools. The lack of support to PE is dated back to the pre-independence times. Batley and Rose (2011) stated that the development of Zambia, particularly in the area of sports development reflects wider trends in the country's political governance and development approaches. Foremost is a historical timeline which considers firstly, Zambia's immediate post-independence period in which expanded social and welfare services were state-provided; secondly, the subsequent imposition of neo-liberal reforms and policies; and thirdly, more recent developments in the relationships between the Zambian state and civil society. As with all such analyses, the temporal boundaries between phases are blurred. No examination of sport in post-independence Zambia is complete without recognizing the influence of the preceding period of colonial rule. From 1911 to 1963, Northern Rhodesia, as it was then known, had been administered alongside other southern African countries, firstly by the British South African Company and then the British Colonial Office. Colonial rule entrenched deep inequalities both across the wider region and within the country itself (Batley and Rose, 2011). Resource distribution and development of infrastructure such as schools and social amenities explicitly favoured British interests in Southern Rhodesia (now Zimbabwe) and South Africa to the expense of those in Zambia. In sport, immediately prior to and post-independence, this led to the reconstitution of those sport associations that were previously white only. For example, in football, the Northern Rhodesia National Football League was formed shortly before independence, incorporating white and native teams and leagues, and was then renamed the Zambia Football Association (later Football Association of Zambia) on independence. However, in some sporting associations, such as golf, gymnastics, and tennis, white settlers were resistant to relinquishing their leadership positions and the status quo has remained the same to date (Liwen, 2005).

5.6. The Role of Environment

When the respondents were asked whether the environment play a significant role in contributing to a decrease in gymnastics as a sport, table 6 above shows the responses. It was therefore concluded that the environment also play a significant role in contributing to a decrease in gymnastics as a sport. In support to the assertion, Banda (2010) said that the youth and sport sub-committee comprised political appointees who wielded their power to influence all sport policy-related matters. Nationalization of key industries had significant implications for the implementation of sport policy. Alongside the Zambian uniformed security wings (army, air force and police), the newly formed State Owned Companies (SOCs) became key providers of opportunities across all levels of sport, from participation to elite. SOCs, as well as the uniformed security wings, formed and sponsored sport and recreation departments that funded the development and maintenance of facilities, ran annual sports festivals and entered teams in competition across various sporting codes. For example, in elite sport, approximately 65% of the football teams in the Zambian premier

league were owned by different mining operations. The standard of coaching in mining communities was considered to be high, partly as a result of white expatriate mineworkers who volunteered to coach local teams. Nevertheless, there remained significant inequalities in sporting opportunities and participation. Based on the geographical positioning of mining areas and most SOCs, sporting opportunities were tilted in favour of the Copperbelt region and locations along the line of Zambia's single railway, which runs from there, through Lusaka and onwards to Livingstone. Similarly, there remained strongly gendered dimensions to sport provision, reinforced as a result of the occupational orientation of SOCs' provision. Female participation was dependent on the employment status of male family members, with those native Zambians whose relations were in relatively well paid senior posts being more likely to become involved in expatriate sports, such as golf or bowling (Dowdell, 2010).

5.7. The Role of Parents

The respondents when asked whether their parents had a significant role to play in influencing their child's sports and physical activity participation by emphasizing on academic pathway. The responses to this question are shown in table 7. It was concluded that parents had a significant role to play in influencing their children's sport and physical participation by emphasizing on the academic pathway. Social relationships such as positive relationships with adult mentors and pro-social peers are associated with reduced involvement in sports (Wormington *et al.*, 2013).

5.8. Traditional Versus Non-Traditional Structure of Family

Responses were sought from the respondents to determine whether one of the social factors influencing the development of gymnastics as a sport in Bauleni compound of Lusaka was as a result of traditional structure of family (father and mother) having a more positive influence on sport and recreation participation of children, than a non-traditional family (single parent family, or guardians) that was seen to be most predominant a family structure in the compound. The responses are shown in table 8 above. It was concluded that traditional structure of family (father and mother) had a more positive influence on sport and recreation participation of children, than a non-traditional family (single parent family, or guardians). Current perspectives on youth development emphasize that behaviour was influenced by multiple factors within the individual and their developmental and social context (Masten *et al.*, 2008).

5.9. Lack of Facilities and Equipment for Sports

The researcher wanted to find out whether one of the factors that influenced gymnastic development was as a result of the lack of facilities and equipment for sports. In response to the question, table 9 above show the raw data. It was concluded that one of the factors influencing gymnastics development in Bauleni compound was due to the lack of facilities and equipment for the sport. Simutanyi (2006) stated that provision of and access to sport and recreation were thus distributed unequally according to race and class, and also clearly gendered. Thus, communities like Bauleni compound had little or no facilities for gymnastics that led to its youth sport participation less while alcohol and drug predominant being exploited (Young *et al.*, 2011).

5.10. Proximity to Sport Facilities

A question was posed whether the proximity to sport facilities impacted a combination on actual travel times/distances to facilities and influenced participation. Table 10 has the responses and was concluded that youth in Bauleni compound had no proximity to sporting facilities that impacted a combination on travel time and distance to facilities such as the Olympic Youth Development Center (OYDC) that was situation kilometers away from the compound.

5.11. Economic Status

The respondents were asked whether the economic status of a child was the economic status of his/her parents and had a significant influence on sport. Table 11 shows the responses. It was concluded that the economic status of the parents influenced the participation of the children into sports such as gymnastics. The predominant economic status of Bauleni community parents was that which was low and sports such as gymnastics was considered a luxury other than a necessity for socio-economic growth.

6. Findings of the Study

- 1) The youth in Bauleni compound were not involved in any form of sporting activity including gymnastics.
- 2) There was lack of physical education (PE) in relation to the gymnastics in schools.
- 3) The environment also plays a significant role in contributing to a decrease in gymnastics as a sport.
- 4) Parents had a significant role to play in influencing their children's sport and physical participation by emphasizing on the academic pathway.

- 5) Traditional structure of family (father and mother) had a more positive influence on sport and recreation participation of children, than a non-traditional family (single parent family, or guardians) that was predominant of Bauleni compound.
- 6) Lack of facilities and equipment for the sport.
- 7) Bauleni compound had no proximity to sporting facilities that impacted a combination on travel time and distance to facilities such as the Olympic Youth Development Center (OYDC) that was situation kilometers away from the compound.

7. Recommendation for the Study

- 1) Introduce minor sports education including gymnastics through physical education (PE) to enable youth in Bauleni compound involved in the sport.
- 2) Through the Constituency Development Fund (CDF), develop facilities and equipment for gymnastics so that the environment also plays a significant role in contributing to gymnastics as a sport.
- 3) During the Teacher-Parents Meetings (TPM), education programmes aimed at providing the significance of gymnastics to the children should be made available to the parents so that they play a role to encouraging their children get involved in gymnastics not only for health but socioeconomic gain.
- 4) Develop Olympic Youth Development Centers (OYDC) in Bauleni compound to improve on proximity to sporting facilities for the youth.

8. Recommendation for Further Study

- 1) Carry out a study on how to introduce minor sports education including gymnastics through physical education (PE) in schools to enable youth in Bauleni compound involved in the sport.
- 2) Develop a study on how the Constituency Development Fund (CDF), would be sourced to develop facilities and equipment for gymnastics so that the environment also plays a significant role in contributing to gymnastics as a sport.
- 3) Carry out a study on how to formulate teaching material for parents that should be used during the Teacher-Parents Meetings (TPM), to provide the significance of gymnastics to the children not only for health but socioeconomic gain.
- 4) Develop a study on how the Olympic Youth Development Centers (OYDC) can be constructed in Bauleni compound to improve on proximity to sporting facilities for the youth.

9. Conclusion

The study investigated into factors influencing gymnastics sport development in Zambia that was a case of Bauleni compound in Lusaka district. It was guided by the following research objectives; to identify social factors that influenced individual participation in gymnastic as a sport, to establish the economic factors influenced gymnastic sport in Zambia and to investigate the physical factors influenced gymnastic sport.

The development of gymnastic sport was very cardinal because the benefits experienced by gymnasts included increased flexibility, enhanced general health, as well as improved postural control. Thus, investigating the factors that influence the gymnastic sport development in Zambia would enhance the participation in gymnastics as a sport by the youths that were seen roaming the streets of Bauleni compound.

Additionally, prolonged physical inactivity can pose a threat to livelihood due to conditions such as obesity, diabetes, hypertension, poor joint mobility and functionality, back pain due to poor posture alignment, and psychosocial problems. Therefore, understanding factors influencing participation of the youths in gymnastic sport would alleviate them and eventually contribute to overall health of the participants resulting in a decreased risk of several chronic diseases.

The researcher had chosen descriptive research design in order to describe in context and holistically factors influencing minor sports development, in particular gymnastics, in Lusaka district. Both qualitative and quantitative research methods were employed in this research in order to maximize on the strength and minimize the limitations of each research method. The estimated population size was 456 youth from Bauleni compound in Lusaka district of Lusaka province and out of which, 120 respondents were selected by use of Snowball method.

A pilot study was carried out to ascertain the reliability of the study questionnaire as well as its validity. The questionnaire that the researcher used to conduct the actual study comprised closed ended and Likert rated scales format questions. There was a 100% return rate of the questionnaires from all the 120 respondents

that had been sampled. The data was coded and analyzed using Excel and Statistical Package for Social Sciences version twenty-five (SPSS V25).

Declarations

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