



## DANCE, PHYSICAL FITNESS AND NATION BUILDING: WHAT RELATIONSHIP?

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### **Abstract:**

This position paper examines the relevance of dance and dance aerobics to attainment of physical fitness and nation building. Literature reviewed indicated that dance as a subset of physical activity is correlated with improvement of both health and performance-related physical fitness. From the Physical and Health Education standpoint, the use of aerobic dance as a preventive and therapeutic intervention in many health, psychological, and social issues was confirmed. It concluded that dance develops physical fitness which in turn builds a socially, psychologically, physically and economically healthy nation.

**Keywords:** dance, physical fitness, national development, health

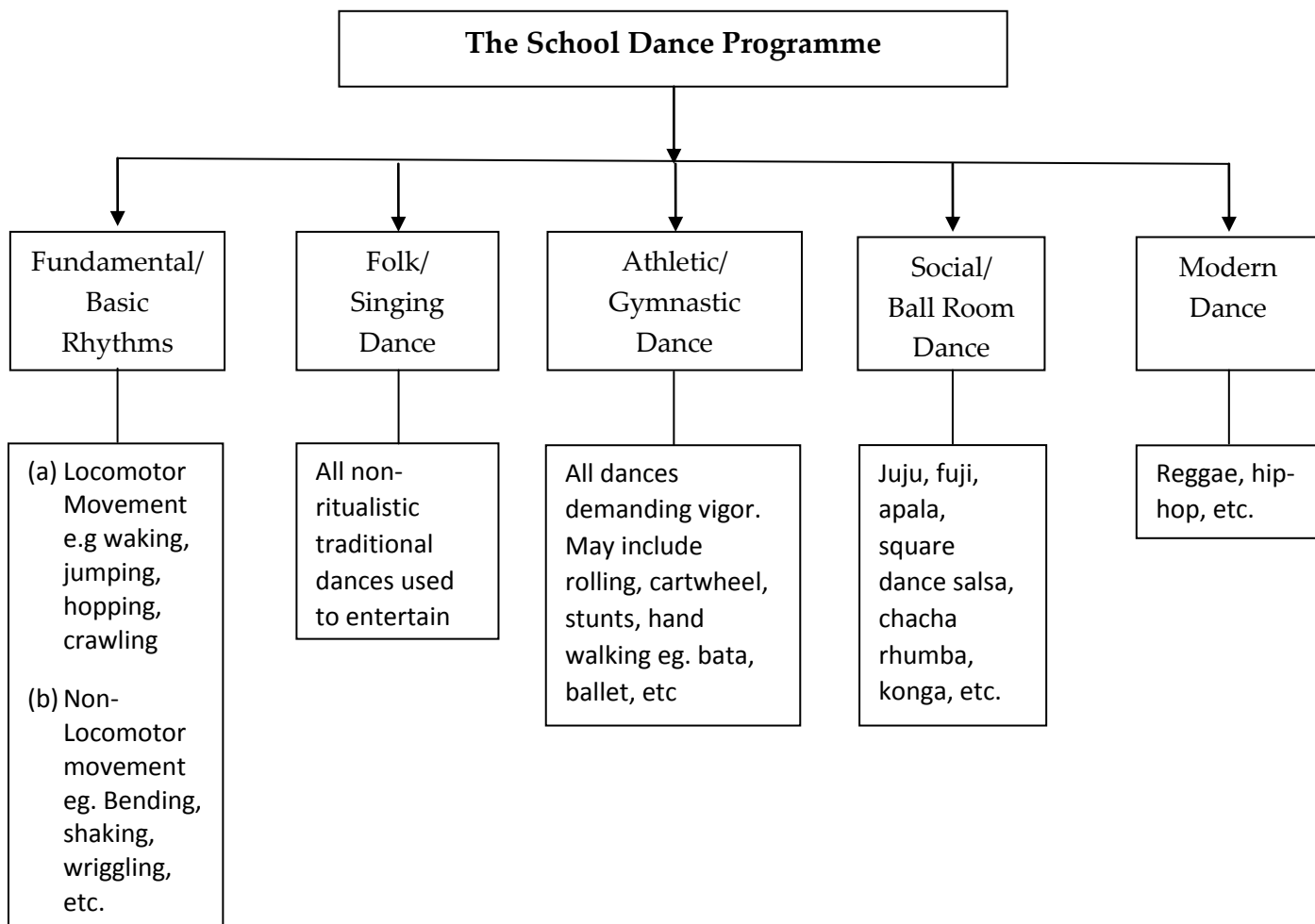
### **1. Introduction**

Dance as a form of physical activity means movement to agreeable noise. Movement here may either be locomotive or non-locomotive. While the former are those movements that involve transference of the whole body from a position to another (walking, running, sliding, rolling, cartwheeling etc.), the latter entails the movement of one or more body parts in any direction while on stationary position (e.g. bending stretching, nodding etc.). The use of agreeable noise in this definition also emphasizes the difference between organized, structured and harmonized noise generated from music and the industrial, vehicular noise or even the noise from the cry of a baby or wailing from the bereaved. Noise is agreeable when one can enjoy it, comprehend it, read meaning to it and lures one to move the body to it as it sounds. Although, there could be other categories of dance, but the total school dance programme is limited to five main categories as shown in Figure 1.

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**Figure 1:** Components of the Total School Dance Programme



While some of these dances require slow movements, others like the gymnastic dances require very fast movements and are performed with vigor. Such dances involve a great deal of stunting, running, jumping forward and or backward rolling, head and hand stand and rotating movements. Today, dance has become so popular among children, adolescents, and young adults of both sexes, much that even the unborn child dances in its mother’s womb. However, the trend of dance among Nigerian youths has significantly drifted from the slow-tempo social Owambe dances of yesteryears to fast-tempo dances. Considering the nature of these dances, it could be concluded that dance is another form of physical exercise different from ball games.

Unfortunately, many adults and the aged term such rigorous dances as ‘dances of the devil’ which signify the end times’. Of course, this notion could be true, because of the body-revealing costumes worn by many female dancers and the sensuous messages sent across to their audience. However, beyond this thought, the impacts of such dances (either competitive or recreational) on the total wellbeing of the individual dancer and the economic, social and, psychological implications for the community and nation at large cannot be underrated. Whatever the situation, one thing is clear; either Nigerians like it or not, these dances have become part of the youth’s daily routine,

much that the negative influence of many parents on children involvement in competitive dancing is fast giving way for the children interest in dance. Today, 'dance is everywhere and everywhere is dance'. Dance is now used as a tool to address religious, social, political, educational and economic issues. Dance as an exercise and a form of sport is also pacing fast with other competitive sports including football, basketball and the like, though, Nigeria has not been following this pace as it should, perhaps its relevance to improving nation's health and economy has not been well comprehended. It is therefore the intention of this study to:

- (a) highlight the importance of aerobic dance in improving physical fitness; and
- (b) provide insight on how dance can impact on nation building.

## **2. Dance aerobics**

From the standpoint of Physical and Health Education, a physical activity can be aerobic (presence of oxygen) or anaerobic (no or little presence of oxygen). Dance as an aerobic exercise can be described as continuous movements, carried out at a prescribed pace requiring the body to utilize increased amount of oxygen, over an extended period of time. It utilizes large muscles and as a high calorie burner, aerobic dances demand a lot of energy. Compared to the risks in contact sports, aerobic dance seems safer, and friendlier because it creates fun and accompanied by preferred music.

### **2.1 Guidelines for effective aerobic dance**

- a. Warm up: In an aerobic dance session, a warm up of 5 -10minutes is sufficient enough to prepare the body;
- b. Progression (simple to complex);
- c. Dance routine: Three times (alternate days) a week; 30 – 60 minutes a session depending on your target: and for eight-week duration. Oduyale (2007) found that the effect aerobic training started to manifest after the eighth week of consistent and intensified dance training and by the 12<sup>th</sup> week, a complete manifestation of the dance effect should be evident enough to certification. It should be noted that exercise may not be stopped following positive results, but continue on individual basis to sustain the gains of aerobics. In his study, involving application of a 12-week intensive aerobic exercise, Astrand (1960) found a significant improvement in the maximum oxygen uptake (which is linked with respiratory efficiency) at posttest as compared to the pretest. Such correlation was also confirmed in current literature as shown in the study of (Dania, 2016);
- d. Timing and Regularity: It is often advised that aerobics is better performed 6pm to 7pm. and the timing should be maintained for every session.
- e. Medical check-up before starting: This is to confirm the physical fitness level, medical conditions and Body Mass Index (BMI) before starting dance regime. Medical information about the heart rate of dancer will also be used to determine the intensity of exercises that to be prescribed by the dancer.

- f. Proper Clothing: Smart and firm-soled footwear to prevent hindrance to movements;
- g. No-magic issue: It is erroneous to think that involvement in aerobic dance will perform magic, as people do expect that achieving their objectives of becoming physically fit or reduction in weight within a day of exercise. It requires dancer to religiously adhere to the principles of aerobics. Some of the guidelines highlighted here were stated by Adewumi, Amaechi Ajibola (2012).
- h. Space: Adequate and ventilated space should be used to avoid emergencies.
- i. Nutrition: Food should be adequate and well balanced, but must not be eaten later than 2 hours before aerobic dance session commences to allow proper digestion before dance activity.
- j. Cool down: These will include neck, shoulder, trunk, hip, lower limbs mobility and stretching activities. According to Adewumi, Amaechi Ajibola (2012), cool down after aerobics helps effective recovery from workout. Normally, the cool down has two phases designated for low intensity exercises like walking and stretching respectively. Table 2 presents a typical 45minute aerobic dance session for one week.

**Table 1:** A Typical 45 minute Aerobic Dance Session for One Week

Dance activity	Duration (minutes)	Dance Intensity	Affected body parts
Warm up stretching activities	10		All body parts
Elbow boxing	4 – 5		Shoulder, chest, arms, upper back
Rock marching	4 – 5	90% of MHR	Arm, shoulder, lower back and upper limbs
Joggler jack	4 – 5		Lower limbs torso, upper limbs
Hop-twist	4 – 5	4-5 TTHR of 147-181 bpm	Lower limbs, lower back, torso
Backing	4 – 5		Lower & upper limbs, chest, abdominals
Digger	4 – 5		Lower & upper limbs, chest,
Cool down	10		All body parts

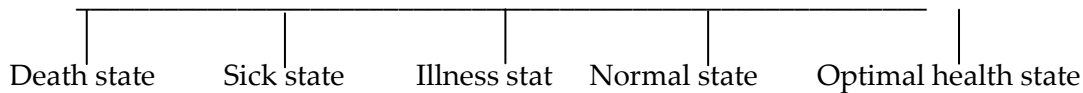
Source: Oduyale, (2007).

### 3. Dance and Physical Fitness: What relationship?

The effects of dance have been viewed from the health, economic and social perspectives.

#### 3.1 Health perspective

The World Health Organization (WHO, 1948) defined health as a condition of physical, social, psychological and emotional wellbeing of a person and not merely the absence of disease or infirmity. Though difficult to achieve, this definition, should challenge any human being to seek all avenues to attain and maintain an optimal health on the health-line continuum represented in Figure 2.



**Figure 2:** The Health Line Continuum

At the optimal health level, the individual is at the height of Physical fitness (PF) and researchers have found a strong relationship existing between dance and attainment and maintenance of physical fitness. Physical fitness as a part of total fitness (Ajeigbe, Ibraheem, Obiyemi & Muhammed, 2014) is the ability to perform daily activities in a continuum without undue fatigue (Asikhia and Blavo, 2007). Other definitions of PF went beyond ability to do daily tasks to further stress the ability of a person to have enough energy in reserve (after daily tasks) to recreate and satisfactorily meet the emergencies that call for physical exertion (Igbanugo cited by Nabofa (2012)). Physical fitness has eleven components sub-divided into two categories:

- (a) Health-related components (5) ; and
- (b) Performance-related components (6)

**Table 2:** Physical Fitness Components

Health related Physical fitness	Performance-related physical fitness
<ul style="list-style-type: none"> <li>• <b>Flexibility:</b> Range of motion that is allowed during movement</li> <li>• <b>Muscular strength:</b> The maximum force that can be exerted when muscles contract (e.g. energy cost or required to perform different activities</li> <li>• <b>Muscular endurance:</b> Ability to contract muscles several times without excessive fatigue</li> <li>• <b>Body composition:</b> The ratio of water, bone, Muscles and fat in the body which can be Measured by Body Mass Index</li> <li>• <b>Cardiovascular endurance:</b> Ability to continuously work for extended periods of time</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Agility:</b> Ability to change and control direction and position of the body and still maintain constant rapid motion</li> <li>• <b>Balance:</b> ability to control or stabilize your equilibrium while moving or staying still</li> <li>• <b>Coordination:</b> Ability to use both eyes and ears to determine, direct smooth movement of the body especially legs and arms</li> <li>• <b>Speed:</b> Ability to move body parts swiftly</li> <li>• <b>Power:</b> Ability to move body parts swiftly while at the same time applying maximum force of your muscles</li> <li>• <b>Reaction time:</b> ability to react/respond quickly to stimuli (i.e. what one sees, hears, feels, etc.)</li> </ul>

Achieving all of these components is bound to aerobic dance as an exercise. This was earlier revealed by the American National Red Cross (1999), Gavallini, Wendt & Rice (2007) that involvement in activities like dance affords the dancer to attain high level physical fitness. However, achieving high level fitness through dance largely depends on the type of dance, the frequency/regularity and intensity of dance.

### 3.2 Dance and Physical Fitness benefits

- a. Diseases prevention: As stated by Ismail, Abdullahi, (2012) and Ayoade & Blavo (2012), sedentary living, caused by modernization and automation and which have resulted in chronic health conditions like hypertension, diabetes, chronic back pain, obesity, heart diseases in many people have been found to be

prevented by regular dance exercises. Specifically, aerobic dance has been confirmed to be a major preventive (Ajayi & Olukokun, 2014) and rehabilitative approaches.

- b. Accident prevention: In their study, Ajayi & Olukokun (2014) found that aerobic dance involving intermittent movements of the arms and continuous movements of the legs exercise programme for duration of 20 minutes (with 5 minutes warm up and 10 minutes cool down thrice weekly for 8 weeks resulted in improved balance, agility and strength of old women. It was further found that aerobic dance reduced the risks of falling among the women. Other physical and physiological effects of dance include: appetite boosting; weight reduction through burning of body fats; strengthens bones and keeps muscles very firm.

### **3.3 Psychological/Emotional Fitness benefits**

In his definition of emotional health, Ademiju (2013) said it is concerned with the ability to have feeling for oneself and others. Dance helps team spirit, and contributes to the mental health of the dancer in many ways: Dance eliminates depression; anxiety (Yanda, 2006), and creates fun and entertainment, which often result in happiness. Awomodu reported that some mood altering brain chemicals like dopamine, epinephrine and serotonin can be affected too. Dance also reduces tension and creates room for relaxation. It was also found to improve self-control, self-confidence and helps promote self-esteem and positive self-image. In addition, the relationship between exercise and improvement in academic outcomes has been confirmed. Studies conducted by Chomitz, Slining, McGowan, Mitchell, Dawson & Hacker (2009) revealed that exercise has positive effects on cognition and concentration. This result could be explained by both physiological and psychological mechanisms. For instance, exercise is related to stress and anxiety reduction and building of confidence which are all related to enhanced academic performance.

### **3.4 Economic benefits**

At individual level, dance has been a major factor responsible for individual's upward social mobility. The rate at which youths reach the peak of the social mobility ladder (e.g. from poverty to richness and from zero level to hero level) through the medium of dance is now comparable to sports. Currently, many are making their living as professional dancers who perform at shows, clubs, churches, etc., some dancers have been found to be proprietors and proprietresses of dance schools, some are employed as teachers and dance instructors, scorers at dance competitions, choreographers thus making their earnings in clean manner. In addition, winners at dance competitions have gone home with fantastic financial and materials prizes and gifts. At national level, dance is a preventive and therapeutic approach that is cost effective. According to Olubayo, Ayodele & Olorunsola (2014), the cost of diagnosis, treatment of ailments, hospitalization, ambulance services, rehabilitation costs and pharmacological services during or illnesses and emergencies can be prevented by merely engaging in regular aerobic exercise.

### 3.5 Dance and Social Wellness

Social wellness according to Ademiju (2013) is the ability to maintain healthy relationship. Dance has been found to improve communication (face-face). Ogwu (2013) attested that dance builds social networks and effective communication. Dancers establish friendship easily and are mostly opportune by their art to meet great persons. They are never shy to express themselves in public and they go places. They are usually well admired and many youths see them as models to be emulated because of their fame. Dancers create fun and provide avenue for others to relax after the stress placed on them by work and family issues etc.

### 4. Dance, fitness and Nation Building: Connection Point

Dance either as a school subject or used as a profession, works towards some specific standards which Adedeji (2007) enumerated as follows

- a. Movement competence and proficiency;
- b. Knowledge and application of movements;
- c. Health enhancing fitness;
- d. Physically active lifestyles;
- e. Improved personal and social behavior.

Each of these set standards has a stake in nation building as well as providing avenue by which a nation achieves its goals. For instance, the Nigerian millennium development goals which include eradication of poverty, promoting gender equality, reducing mortality, and developing global partnership can be achieved through participation in dance being a social weapon in many ways:

- a. Dance, fitness, and national health: Dance is positively related to fitness and the higher the level of fitness of a population, the better the national health.
- b. Dance, fitness and economy: In his submission, Oloyede (1995) maintained that high level of fitness does not only increase the individual's energy, but also empowerment and productivity. In essence, productivity of individuals in a nation means national wealth. In support, Ayoade & Blavo (2013) said that a healthy and physically fit population is an economic asset, since the nation will guarantee a ready supply of strong labour force, which is important in national development. Dance is not only a means to empower youths, but a strategy to increase nation's productivity.
- c. Dance, fitness and national unity: Dance can be used as a powerful tool of communication. It is a social connector. Oloyede (2012) asserted that dance is a silent but effective means of promoting national integration and international cooperation. Dance gives the assurance of peace, unity and cooperation among nations of the world and a good measure to fight against racism.
- d. Dance, fitness, and crime prevention: If the energy used to perpetrate crimes such as terrorism, hooliganism, etc. are converted to structured activities like dance, the community and the entire nation will greatly change and its image will be well portrayed to the outside world.

## 5. Conclusion

It is concluded that dance develops physical fitness which in turn builds a socially, psychologically, physically and economically healthy nation.

### 5.1 Recommendations

The following were recommended to boost the interest of youths and adults in dance in order to build a healthy and physically fit nation:

- a. Curriculum planners should integrate dance programme into the general school curriculum at every level (primary, secondary and tertiary institutions including polytechnic and technical schools)
- b. Dance therapy should be introduced in all health institutions including hospitals, clinics, maternity homes, etc. to be used as preventive and therapeutic approaches to solving health problems
- c. Governmental, non-governmental bodies and interested individuals should collaborate to establish dance schools and colleges that will assist youths to realize their potentials to dance and explore it.
- d. Gymnasia in Nigeria should expand their activities to cover dance.

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