

Beliefs and attitudes of immigrant African Women toward physical activity and Exercise in Jyväskylä.

Carolyne Gichuki
Claudio Scaramella

Bachelor's thesis
November 2015

Degree Programme in Nursing
Social Services, Health and Sport

| | | |
|---|--|--------------------------------------|
| Author(s) Carolyn Gichuki Claudio Scaramella | Type of publication Bachelor's thesis | Date 20.10.2015 |
| | | Language of publication: English |
| | Number of pages 44 | Permission for web publication: x |
| Title of publication Beliefs and attitudes of immigrant African women towards physical activity and Exercise in Jyväskylä | | |
| Degree programme Degree Programme in Nursing | | |
| Tutor(s) Garbrah, William & Häyrynen, Teija | | |
| Assigned by | | |
| <p>Multiculturalism has become in recent years a large part of Finnish society. In the year 2013 and 2014, a total of 31,950 people migrated to Finland. Sports, physical activities and exercise are favorable ways for integration and promoting health among immigrants in their new country.</p> <p>The purpose of the study is to identify the beliefs and attitudes towards physical activity and exercise among African women as well as investigate about their satisfaction and health benefits in relation to physical activities. Moreover, understand how the African culture shapes these values, beliefs and attitudes. The aim is to provide information and guidance that can help African immigrant women to get opportunities of engaging in physical activity and exercise in Finland and achieve health and other benefits that come as a result.</p> <p>This study was carried out through a qualitative research method. Subjects have been recruited by purposive sampling method. Data analysis was performed by coding and content analysis of the questionnaires.</p> <p>Three major findings were found. Attitude to sport: Subjects expressed that they engage more in physical activity in their home countries than in Finland. Physical and Psychological benefits: Participants value exercise and believe exercise and physical activities promote health.</p> <p>Motivating and limiting factors: Subjects reported that their exercise group, not only provided them with company but also improved their social skills and integration into the Finnish culture. Challenges included, financial matters, family responsibilities, pressure from studies and working at the same time and a harsh climate.</p> | | |
| Keywords/tags Physical activity, exercise and African women ,Immigrants and sports in Finland , African women sport's culture | | |

CONTENTS

| | | |
|-----|--|----|
| 1 | INTRODUCTION..... | 4 |
| 2 | PHYSICAL ACTIVITY AND EXERCISE | 6 |
| 2.1 | Types of physical activity and exercise..... | 6 |
| 2.2 | Physical Activity pyramid and physical activity pie | 8 |
| 2.3 | Health related benefits..... | 11 |
| 2.4 | Social benefits of physical activity..... | 12 |
| 3 | THE CULTURE OF PHYSICAL ACTIVITY AMONG AFRICAN COUNTRIES | 13 |
| 3.1 | History of Physical Activity and Exercise in African Countries | 13 |
| 3.2 | African Women and Physical Activity and Exercise | 15 |
| 3.3 | Physical Activity among Migrant Women | 16 |
| 4 | PURPOSE and AIM OF THE STUDY | 20 |
| 5 | IMPLEMENTATION OF THE STUDY | 21 |
| 5.1 | Research Methodology (Qualitative) | 21 |
| 5.2 | Participants And Data Collection..... | 21 |
| 5.3 | Data Analysis | 22 |
| 6 | FINDINGS | 23 |
| 6.1 | Attitudes to sport | 23 |
| 6.2 | Health benefits (Physical and Psychological) | 26 |
| 6.3 | Motivating and Limiting Factors..... | 26 |
| 7 | DISCUSSION | 27 |
| 8 | ETHICAL CONSIDERATION..... | 30 |
| 8.1 | General Principles..... | 30 |
| 8.2 | Informed Consent..... | 31 |
| 8.3 | Credibility, Dependability, Transferability, Conformability | 32 |
| 8.4 | Data handling and record keeping | 33 |
| 8.5 | Conclusion, Limitations and Recommendations..... | 34 |
| 9 | REFERENCES..... | 35 |
| | Appendix 1..... | 39 |
| | Appendix 2..... | 40 |

1 INTRODUCTION

Multiculturalism has become in recent years a large part of Finnish society. Finland continues to witness rising levels of immigrants every year with different cultural backgrounds and varying languages. In the year 2014, statistics indicated that there were 221,900 persons living permanently in Finland with a foreign back-ground. (Tilastokeskus 2014, 6.) In the same year, a total of 31,950 people migrated to Finland and the number was at the same level as in the year 2013. There has not been comprehensive data on African immigrants, who move to Finland on the basis of education, marriage, work, family ties or asylum seeking however. Nevertheless, the number of Somali immigrants who moved to Finland in 2014, was 656. (Annual Report on Migration and Asylum Policy, 2014.)

Therefore, promoting acculturation and integration into the Finnish way of life is essential. Sport has been proved to play an important role in teaching the Finnish language and culture, enhancing feelings of self-respect and well-being to immigrants and to wider immigrant networks. Not only in Finland is this technique used, but it has been adopted in other 20 countries in the European Union. In Norway for instance, it was reported that sports gave women a feeling of belonging, respect from others, promoted self-image and identity in the host country and that it was kind of refuge from family obligations. (Statistics Finland, 2015; Zacheus, 2010.)

Moreover, it is well known that physical activity has a big positive impact on health. The major effects are visible on energy expenditure, energy balance and body composition. Therefore, regular physical activity lowers risk factor for cardiovascular disease (CVD), stroke, type 2 diabetes, colon and breast cancers, and is also associated with other important health outcomes such as mental health, injuries and falls prevention. Physical inactivity remains a public health problem in many areas of the world, including many countries of Europe. Usually, low activity is also correlated with high percentage obesity among a population. Reasons of inactivity among people

can be explained by psychological barriers and issues related to body image, poor confidence and lack of immediate rewards. (Milles, 2007.)

However, physical activity is not only beneficial for the physiological health of the body but also for mental health. A number of studies show indicate that vigorous physical activity has positive effects on mental health in both clinical and nonclinical populations. Therefore, some researchers suggest that regular exercise could alleviate symptoms associated with mild or moderate depression or anxiety and improve self-image, social skills, and cognitive functioning. The following study will investigate the perceptions of African women towards physical activity and exercise, including their feelings and thoughts related to the same. (Taylor et al. 1985.)

2 PHYSICAL ACTIVITY AND EXERCISE

Physical activity refers to any body movements produced by skeletal muscles where energy is produced as a result. This energy can be measured in terms of kilojoules. Levels of physical activity vary considerably from person to person and over time, but all members of the community exhibit some physical activity. Physical activities can be classified into, occupational (work), leisure time activities like, dancing, gardening, skiing, walking, swimming, among others, household chores, routine exercises and games to mention a few. (WHO, 2015.)

According to WHO (2011), physical inactivity has been established as the fourth leading risk factor in global mortality. It results in approximately, 27% of diabetes, 21–25% of breast and colon cancers, and 30% of ischemic heart disease (WHO, 2015.) To achieve significant health benefits, adults including women aged between 18-64 years, should engage in at least either 150 minutes of moderate physical activity or 75 minutes of vigorous intensity aerobic physical activity in a week or an equivalent combination of both with aerobic activity performed in 10 minutes episodes spread throughout the week. (Physical Activity Guidelines for Americans, 2008.)

Exercise on the other hand is a sub category of physical activity but it is usually planned and repetitive and is set in order to reach a certain goal or objective, such as health promotion. (Caspersen, Powell, Christenson, 1985; WHO, 2015.)

2.1 Types of physical activity and exercise

Physical activities and exercise can be classified into four main types, that is, aerobic, muscle strengthening, bone strengthening and stretching. Aerobic activities, involves the movement of the large muscles, such as those in the arms and legs like, running, swimming, walking, biking, dancing, and doing jumping jacks. These activities, which can be with light, moderate, or vigorous

intensity, strengthen the heart and lungs enabling them to work better. (National Heart, Lung and Blood Institute, 2011.)

Muscle-strengthening activities enhance the strength, power, and endurance of the muscles for instance, pushups and sit-ups, weight lifting, climbing stairs, and digging in the garden. In bone-strengthening activities, the feet, legs, or arms support the weight of the body and the muscles push against the bones like, running, walking, jumping rope, and lifting weights. Stretching helps the movements of the joints thus improve flexibility, for instance, touching the toes, yoga and side stretches. (National Heart, Lung and Blood Institute, 2011.)

Aerobic activities can be done with light, moderate, or vigorous intensity. Those of light-intensity are common daily activities that do not require much effort. Moderate-intensity activities exercise the heart, lungs, and muscles more compared to light ones. (National Institutes of Health, 2011) They should be performed daily if not several times in a day. 30 minutes a day is recommended for adults. Vigorous aerobics activities are done for a continuous long time leading to increased heart rate, faster breathing, and sweating. They are done for at least 20 minutes a day, in 10 minutes intervals, at least for three days a week. (Corbin & Masurier, 2014.)

The pyramid of physical activity for adults, indicates examples of physical activities that we should all engage in on a daily regular basis and those other activities that we should do less often throughout the week in order to promote health. From the base, it indicates non vigorous activities that should be done several times a day or at least daily for at least 30 minutes for adults. Activities at the top of the pyramid are those that we should spend less time on. (Georgia State University, 1999.)

Physical Activity pyramid and physical activity pie

The pyramid of physical activity and physical activity pie have been developed to aid and promote different parts of fitness and produce different health and wellness benefits for adults. The principle of the pyramid is that moderate physical activities further down in the pyramid are done more often and at a lower intensity than the activities higher up. As indicated earlier, 30 minutes a day of these activities, most days in a week, is recommended for adults. Some examples of these activities include, walking, cleaning the house and the car, taking the stairs, to name a few. (Georgia State University, 1999.)

Moving upper the pyramid indicates vigorous activities that are more intense than moderate activities. They aid in improving aerobic fitness, strength and flexibility. 3-5 days is recommended for aerobic exercises with at least 20-60 minutes per activity, for instance, running, cycling, running, cross country skiing, among others. 2-3 days in a week is recommended for flexibility exercises such as stretching of major muscles groups (20-30 seconds), and in addition, strength exercises with at least 8-10 movements, repeated 8-12 times, recommended for the same days in a week. Suitable examples include, push-ups, squats, and lunges, to name a few. Recreational activities are commended also for 2-3 days per week. Activities at the top of the pyramid are those that we should spend less time on. (Georgia State University, 1999; Sundberg, 2010.)



Fig. 1 Adapted by: Board of Regents of the University System of Georgia by Georgia State University (1999)

The physical activity pie is more precise and recommends a moderate-intensity aerobic activity of at least 10 minutes throughout a week totaling to at least 2 h 30 min per week, particularly for beginners and those engaging in physical activities to enhance health. Walking, cycling, Nordic walking, or heavy house and yard work are good examples. A more demanding vigorous-intensity aerobic activity totaling to at least 1 h 15 min per week is recommended for physically fit persons

or those used to engaging in physical activities. Suitable examples include, running, cross-country skiing, walking uphill, climbing the stairs, water running, running ball games, and aerobics, among others. Similar to the physical activity pyramid, muscle-strengthening and balance training is recommended for at least 2 times per week with at least 8 to 10 movements that strengthen the large muscle groups and repeated 8 to 12 times. Some examples include, skating, ball games, aerobics and dancing to enhance coordination, balance and flexibility. (UKK Institute, 2009.)

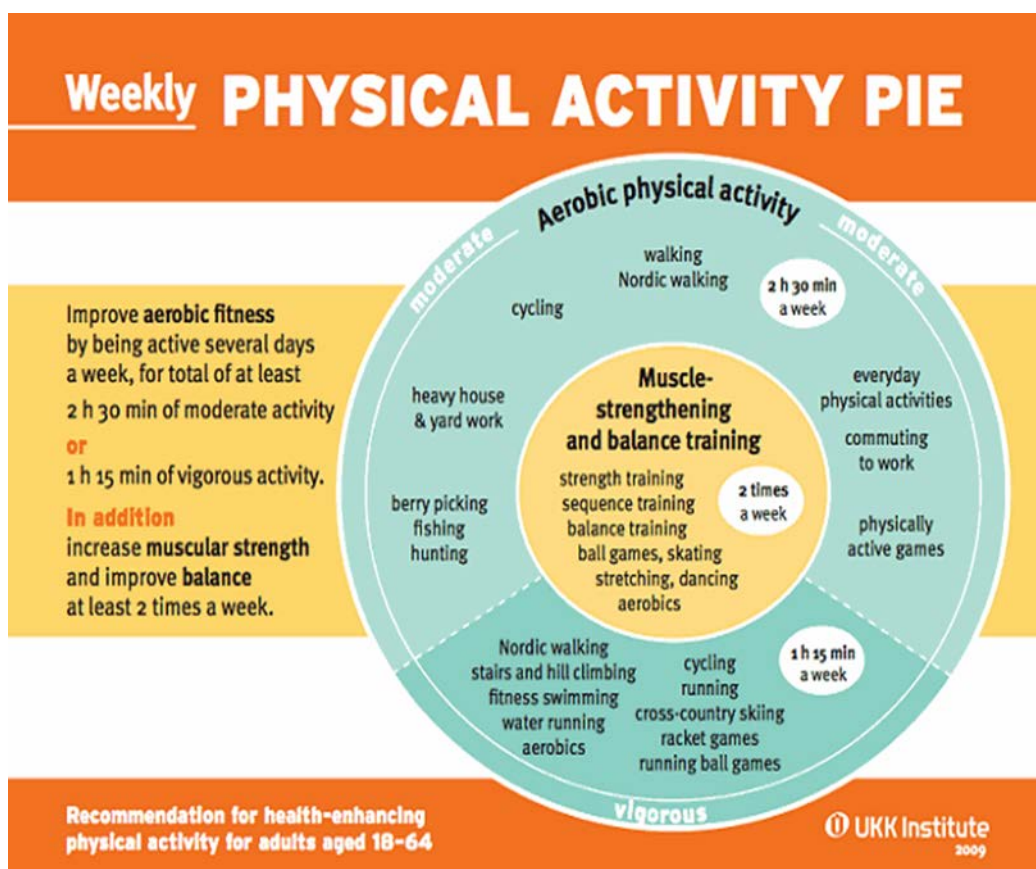


Fig. 2 Adapted by: UKK Institute (2009)

2.2 Health related benefits

It is common knowledge that physical activity has a very important role in respect to healthy lifestyle. Scientific evidence has proven how regular physical activity and exercise can be associated to many of physical and mental health benefits. Some of these benefits lead to improvements of psychosocial health and well-being (including stress, anxiety, depression, premenstrual syndrome, self-efficacy, mood state, cognitive functioning, well-being and quality of life). Moreover, physical activity is associated with a good body image and an improved self-esteem, which if not taken into account leads to a resolution of eating disorders in some cases. (Biddle, Fox & Boutcher, 2000.)

Biddle et al (2000), states that exercise in general demands a good cardiorespiratory capacity hence smoking cessation and drug rehabilitation need to be put into consideration. On the other hand, prevention of cardiovascular disease, hypertension and osteoporosis have a greater chance of achievement with regular physical activities particularly with older adults. It also plays a positive and important role in prevention of estrogen-related cancers, attenuation of menopausal symptoms and prevention of fibromyalgia and slowing of chronic fatigue syndrome. In fact, research points out that 12% of the total number of annual deaths in the United States are attributable to a lack of regular physical activity. (Chilibeck & Cornish, 2008.)

It is about 40 years ago there was a debate about the right amount of physical activity in order to achieve some of the benefits mentioned above. Starting in the late 1970s, the American College of Sports Medicine (ACSM) promoted the '20 minutes of vigorous activity 3 times a week' which was the formula to improve fitness. About 20 years later the same organizations promoted a formula which contains at least 30 of vigorous activity 3 times a week. (Wimbush 1994.) Nowadays, the same organization recommends that every adult should have at least 30-60 minutes of moderate-intensity exercise (five days per week) or 20-60 minutes of vigorous-intensity exercise (three days

per week). Nonetheless today, it is difficult to determine a standard for the measurement of “moderate” physical activity in the context of daily life, such as for chores like laundry, childcare and grocery shopping. (American College of Sports Medicine, 2014.)

2.3 Social benefits of physical activity

Some researchers expand the definition of health to include the social determinants of health. In an article on women’s health and the contribution of physiotherapists, McComas and Harris (1996) use a definition of health that considers the social context of women’s health:

“Women’s health involves women’s emotional, social, cultural, spiritual and physical well-being, and it is determined by the social, political and economic context of women’s lives as well as by biology. This broad definition recognizes the validity of women’s life experiences and women’s own beliefs about and experiences of health” (Phillips, 1995; cited in ref. Mc Comas and Harris 1996.) The term “wellness” or “well-being” implies that there is more to health than the absence of disease or disability. Well-being may be considered to involve the following: improved quality of life, efficient functioning, the capacity to perform at more productive and satisfying levels, and the opportunity to live out one’s life span with vigor and stamina [39].

Although well-being has often been equated with mental health, the “emerging consensus among researchers is that the term ‘well-being’ implies an emphasis on the individual’s perception or sense of wholeness of self, groups or community” (Frankish et al. 1996.) Granting that health may contribute to high-level wellness, health is not necessary for general well-being. For example, a woman with a debilitating disease such as multiple sclerosis may struggle with poor health but may have a strong sense of well-being. (Shaw, 1994.) Still, some researchers argue also that there is still a serious lack of hard evidence in the area of psychological health to support the equivalence between health and mental benefits supplied by physical activity (Scully et al. 1998.)

According to Coalter et al. (2000), a case study done on Scottish women affirmed that, sociability and a reduction of a sense of social isolation were regarded as very important by the participants. A young female participant in a keep-fit programme said that physical activity is a good way to make new friends, in fact she says that before joining the exercise's group, she only had one friend, after which she made many other friends particularly from the same programme. On another programme with more than 50 women participants, regular attendance had resulted in the establishment of friendship networks and a holiday group (Coalter et al. 2000.) Sport clearly has the potential to provide a variety of social and recreational networks and a regular routine, which promotes social interaction – elements central to community development, social inclusion and mental health. (Thomas, 1995; Forrest and Kearns, 1999.)

3 THE CULTURE OF PHYSICAL ACTIVITY AMONG AFRICAN COUNTRIES

3.1 History of Physical Activity and Exercise in African Countries

African community possesses a rich tradition of culture, sport, history and social institutions as seen in different countries. Traditional games, plays, dances and arts were used for the purposes of socialization, initiation, ceremonies, recreation, and education, among others. In addition, physical prowess was traditionally essential for the ability to perform practices such as hunting, gathering, inter-tribal conflicts, wrestling sports and pastoral activities. (Amusa, 2010.)

With reference to old literature like, the Basden study of the Ibos of Nigeria (1921), shooting, dancing, wrestling and swimming was the most common for adults with less wrestling and shooting for women. Another study done among the Southern Sotho people of South Africa, indicated cattle raiding and fighting as the major sports among adults. The author goes further to

describe how stick fighting between a mother and a son was like playing with a ball of the English. However it was neither violent nor causing any damage to the body as compared to boxing or other European sports. (Blacking, 1987.)

Wrestling heritage has been recorded and preserved as an important sport in the Egyptian culture. This has been confirmed with accurate dating found in the burial tombs of Egyptian elites or specific Pharaohs, particularly the Beni Hassan tombs, dating 2000 – 1500 B.C. With the rest of the vast continent and lack of sufficient recorded information especially with sub Saharan part of the continent, most authors writing about precolonial African traditions depend on word of mouth from the older generation of the African people, the explorers and colonists, where the latter two's contact with the local people was even limited. (Craig, 2002.)

With the arrival of the colonialists and missionaries, colonial and missionary models of education were introduced therefore suppressing indigenous physical activities which they regarded as primitive, immoral and anti- Christian. As a result, sport and physical education was formalized and emphasis was placed on gymnastics, golf, cricket, netball, football, cricket, and athletics which included mostly running, to mention a few. Furthermore, this led to training of teachers and sports masters to train in physical education or activity. This western model faced several challenges in that, it did not put into consideration, the traditional activities and games of the indigenous people, there lacked sufficient facilities and equipment to perform the westernized sports and overall, it lacked relevance to the indigenous people. (Amusa, 2010.)

In the 1950's, African nations began to gain independence. This period was filled with chaos and not peaceful, hence sports was not given first priority. It was not until African athletes began winning in Commonwealth Games and Olympic Games that the African governments began to pay attention. Therefore, sports served as an opportunity for international recognition and promoting

national pride and unity. This has also led to the establishment of sports focused schools, institutes and colleges. Currently, sports are also used to promote humanitarian relief, anti-tribal conflicts and post war reconciliation, playing for peace for instance. (Li, MacIntosh & Bravo, 2012.)

3.2 African Women and Physical Activity and Exercise

Traditionally, African women have been physically active with regard to the roles they play in the society. Some of these roles have been participating in the village dance ceremonies, farming, fetching water and chopping wood. According to the Basden study of the Ibos of Nigeria mentioned before, women were actively involved in dance ceremonies, mostly for religious functions to express joy and thanksgiving. (Blacking, 1987.)

Women have not only continued to perform these traditional physical activities, but are now involved in national and international sports despite the many challenges that have previously faced women sports in Africa. Fears of harassment, violence, intimidation and the domestic and reproductive responsibilities lead to low priority in sport among the women. This has gradually changed and women can engage in various forms of sports, including football, netball, volleyball, athletics, among others (Cornelissen, 2011.)

Moreover, women can engage in planned exercise, like aerobic classes. Lesseth (2014), describes an aerobics class she attended in Tanzania during her study.

“There were 50 women lined up in rows in the room. The training started with warm up exercises of stretching and rhythmic exercises to prepare the body for the more vigorous activities. It was then followed by different kinds of endurance activities, like running, jumping and power activities. Finally they performed activities meant to loosen up the body and increase flexibility.”

On the other hand, movement to the urban centers to seek white collar jobs has hindered the continuation of physical activities and many women have been affected. For instance, high crimes in the cities restrict free movements, hindering walking as a form of exercise. Also, overpopulation in these urban centers leads to lack of employment opportunities hence poverty. Studies conducted in these poor areas show that the inhabitants have not much activities to do, and spend most of their times watching television as compared to the rural counterparts. (Steyn & Demasceno, 2006.)

A study carried out in Cameroon compared the level of physical activity among people aged 15 years and above in rural and urban areas. In the urban areas, it was found out that 83% of women aged 55 years or older led sedentary lifestyles compared to 50% of women in the rural areas. (Sobngwi, Mbanya, Unwin, Kengne, Fezeu, Minkoulou, Aspray, Alberti, 2002.)

As seen in many African settings, an office woman drives a car or takes a bus to work where she sits in her office the whole day and takes a bus or drives home after, and this goes on for the whole week or working month. This schedule provides no room for enough exercise and physical fitness. According to a study conducted in Nigeria, senior civil servants, had lower levels of physical activity compared to their juniors, this study linked ascending social mobility to reduced levels of physical activity. (Forrest, Bunker, Kriska, Ukoli, Huston, Markovic, 2001.)

3.3 Physical Activity among Migrant Women

With reference to a study done in the US, migration affects the normal ways of living and health of the immigrants. For instance, immigrants and refugees arrive to their host countries healthier and with time develop health complications like obesity, cardiovascular diseases, hypertension and diabetes. Low levels of physical activity is usually a common risk factor to these health complications. Often, engagement in physical activity and exercise is influenced by several factors in the host countries, including cultural/religious factors, socioeconomic challenges, and environmental factors. In particular, gender norms, country of origin, educational background, competing priorities like academics, lack of safety, weather barriers, marital status, length of stay in the host country and how fluent they become with the host language. (Wieland, Tiedje, Meiers, Mohamed, Formea, Ridgeway, Asiedu, Boyum, Weis, Nigon, Patten, Sia, 2013.).

Marital status and domestic responsibilities

Reproductive and domestic responsibilities pose a hindrance to perform physical activities or planned exercise. This is because women lack time to engage in physical activity outside their homes as they are taking care of their families, unlike men who have more opportunities even after work. It is a cultural norm for African women to perform domestic duties, often without the help of their husbands. These duties include cleaning, cooking and taking care of young babies. (Caperchione, Kolt, Tennent & Mummery, 2011.)

Length of stay in a host country/Fluency of the language

The longer the immigrants reside in a host country, the higher the prevalence to engage in physical activity and exercise. This is as a result of adapting to the cultural norms and patterns of physical activity of the local people. Furthermore, they have gradually learnt the communication skills and system of things of the host country (Dawson, Sundquist & Johansson, 2005.) In contrast, language barrier and unemployment may hinder the understanding of the norms and lack of finances, respectively, to enroll in fitness facilities. Moreover, it becomes difficult for an immigrant

to enroll in a fitness class or session if they cannot understand the language of instruction. (Karanja & Njambi, 2013.)

Country of origin

Often, immigrants are more active in their home countries because of the physical nature of everyday life. For example, unlike high economy nations, people do not rely on buses as they walk to school and to work, water is fetched from rivers or boreholes downhill or taps situated at distance, at the shopping centers, there are not many malls, therefore one has to walk from shop to shop, the distance from home to the bus stops can be quite far as well, the better part of the day especially in the rural areas could be spent in the farms, taking farm products to the factories, many apartments lack lifts hence one has to use the stairs and finally, with lack of vacuum cleaners, dish washers and washing machines, cleaning work is done manually with daily sweeping of bare floors. (Caperchione et al. 2011.)

According to Caperchione et al. (2011), immigrants are also faced with post war trauma and stress that hinders socialization in the host countries leading to depression and overeating and lack of motivation to exercise. However in some cases, physical activity and exercise is used to prevent depression and stress and promote psychological health. Also in other societies, weight loss resulting from physical activities is not always positive. Most African societies consider that the bigger one is, the better. It is a sign of health, wealth, happiness and prosperity, contrary to being thin or slim which could be assumed to be ill health, lack of happiness or wealth.

Environmental factors

Immigrants from warmer countries feel that it was easier to participate in outdoor physical activities compared to when they reside in countries experiencing winter season. During winter the body feels tired and one just wants to rest, furthermore, it is usually cold outdoors and filled with snow. (Caperchione et al. 2011.) They are also concerned about their safety especially if they live in high crime areas in the host country. As a result they can only exercise during the day or not exercise at all depending on the situation. Another limiting barrier is long time illnesses resulting to pain and swelling, particularly among the older generation. (Wieland, Tiedje, Meiers, Mohamed, Formea, Ridgeway, Asiedu, Boyum, Weis, Ni-gon, Patten, Sia, 2013.)

4 PURPOSE and AIM OF THE STUDY

The purpose of the study is to identify the beliefs and attitudes towards physical activity and exercise among African women. And also investigate about satisfaction and health benefits in relation to physical activities. Understand how African culture shapes those values beliefs and attitudes. The aim is to provide information and guidance that can help African immigrant women to get opportunities of engaging in physical activity and exercise and achieve health and other benefits that come as a result.

RESEARCH QUESTIONS:

1. What are the attitudes and beliefs of African women living in Jyväskylä towards physical activity?
2. What are the experiences of African women about physical activity in Finland compared to their country of origin

5 IMPLEMENTATION OF THE STUDY

5.1 Research Methodology (Qualitative)

This study was carried out through qualitative research method. The strength of qualitative research is its ability to provide complex textual descriptions of how people experience a given research issue. In this study it provides information about the “human” side of an issue that is, the often contradictory behaviors, beliefs, opinions, emotions, and relationships of individuals. Qualitative methods are also effective in identifying intangible factors, such as social norms, socioeconomic status, gender roles, ethnicity, and religion, whose role in the research issue may not be readily apparent. (Denzin et al. 2005.)

Thereby, we believe that interview it is the most useful data-gathering tool if we think about sport related issues. For examination of changes in physical activity levels, of a group of people, over a certain period of time or to understand what could influence exercise adherence in another group of population (different age, sex or health status) interviews can provide deep information that may not otherwise be available through other methods for data-gathering. (Denzin et al. 2005.)

5.2 Participants And Data Collection

In this study, subjects were recruited by purposive sampling method. Purposive sampling relies on the judgment of the researcher when it comes to selecting the units (e.g., people, cases/organizations, events, pieces of data) that are to be studied. Usually, the sample being investigated is quite small. The main goal of purposive sampling is to focus on particular characteristics of a population that are of interest, which will best enable researchers to answer the research questions.

Therefore, all the subjects taking part to this study were African women coming from different countries of Africa. Subjects have been recruited inside a group “MonaLiiku sports group Jyväskylä”. The person in charge of this sport group was approached and told about the idea of enrolling the group in the study. After giving the go ahead, the participants were approached. Their interest was sought and it was explained that taking part was voluntary and anyone could quit at will. The criteria for recruitment was to have subjects with a previous physical activity background in their home country. This characteristic best matched the needs of our study. Only women with a previous sport background were able to give us details on their attitudes and beliefs toward sport in their home country and here in Jyväskylä. Therefore, this is also the reason why we selected individuals regularly taking part in “MonaLiiku sports group Jyväskylä” events. (Natasha Mack et al. 2005.)

Data collection was carried out using questionnaires and using purposive sampling in regards to the subjects. The use of questionnaire was preferred compared to the interviews considering the difficulty to get the participants at one place for the interview. Therefore, use of questionnaires was most convenient for the participants. There was a total of six participants where each filled up an open ended questionnaire made of seven questions. The surveys were based on the two main research questions. The researchers thereafter collected the questionnaires at venues most convenient to individual participants. The time participants used to fill up surveys was about 30 minutes. The language used in this research was English because both subjects and researchers spoke English (Natasha Mack et al. 2005.)

5.3 Data Analysis

Data analysis was managed by Interpretation of questionnaire. The method used for this scope was “Interpretive techniques”. When using “Interpretive techniques” observers examine the data, interpret it via forming an impression and report it in a structured form. (Jane Ritchie et al. 2003.)

In this research, the first step was to organize the data. All the seven questionnaires' answers were read and differentiation made between the question/topic of study in which answers were being sought. After that, common ideas, coming up from same questions answered from different subjects, were identified. (Jane Ritchie et al. 2003.)

Therefore, answers were organized by codes / themes. Coding is a process for both categorizing qualitative data and for describing the implications and details of these categories. Initially we have open coding, which means considering the data in minute detail while developing some initial categories. Later, more selective coding where only the selected information related to research was performed. (Jane Ritchie et al. 2003.)

6 FINDINGS

Six African women participated in the study. Our research has identified different points of view concerning beliefs and attitudes of immigrant African women towards physical activity and exercise. The results below are categorized in three main themes, which are attitudes to sports; physical benefits and psychological benefits; motivating and limiting factors.

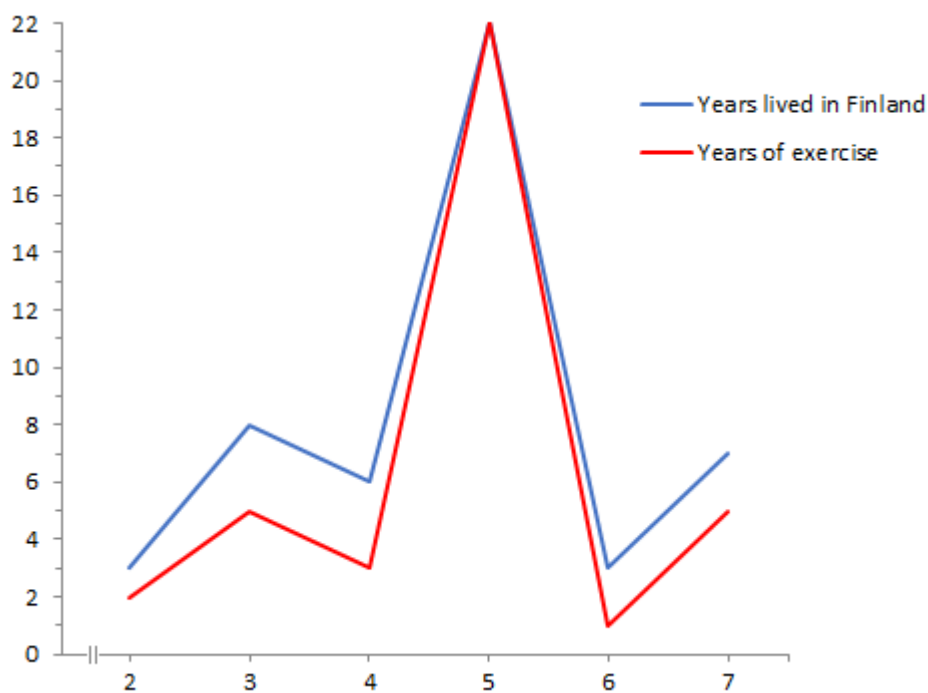
6.1 Attitudes to sport

Question 1: How long have you been in Finland and how long after your arrival to Finland did you start engaging in physical activities?

From this question we got different responses. It is possible to see from the graph 1 that for African women coming to Finland it took certain time, between 1 and 3 years, before starting to engage in physical activity or exercise. Only an exception among the women we interviewed said to have started physical activity quite immediately after arriving in Finland. Some gave lack of

knowledge of where to engage in the sports as a reason of lack of exercising immediately after arrival to Finland.

"I have been in Finland since August 18th 2012. I had to figure out where to exercise, that took me 6 months but since then I have never stopped."



Graph 1. Relation between years lived in Finland and years of exercise.

Question 5: Describe how often or regular you participate in the physical activities

The regularity of exercise and physical activity varied among the participants. In average the common result was that African women are engaging exercise between one and three times a

week. In addition, the answers to these questions also highlighted that during summer time it is easier for African women to engage in any kind of physical activity than during winter.

The women indicated engaging in various physical activities and exercise, both in their sports group and individually. The activities included swimming, dancing, going to the gym and walking, which was the main individual activity among the participants.

"I go to the gym at least 5 days a week. I walk for at least 30 minutes every day. I use five-minute-shaper to exercise every day."

"I participate in the physical activities once a week. For example in a particular week, we could have activities like swimming and dancing while in another week, we could do gym and/or walking depending on the programming."

From question 7: Do you have any different feelings and attitudes toward exercise or physical activity here in Finland than you had in your home country? Please explain

Majority of the women expressed that they engage more in physical activity in their home countries as compared to when they are in Finland. This is as a result of women having a responsibility of household chores, for instance, washing clothes with their hands, walking long distances to get to market places, fetching water and firewood, farming activities, like digging, planting, weeding and harvesting which occurs throughout a whole year depending on a crop, as well as dancing.

One woman expressed that she was embarrassed by her physique and size of the body while in Finland, unlike in her home country. Therefore, she felt the need to engage in exercise in order to lose some weight. One woman pointed out that climate was also an influencing factor hence engages in exercise daily during summer and once weekly during winter. Still, one woman reported that there existed no differences when attitudes towards physical activity and exercise were compared between Finland and her home country, this was because she still engages in similar kinds of physical activities in Finland as her home country.

6.2 Health benefits (Physical and Psychological)

From question 2: How does doing physical activities/ exercise make you feel?

All participants identified a positive relationship between exercise, physical activity and good health. They pointed out that it makes them feel good, healthy and active. Majority affirmed that exercise help them keep their weight under control, sleep better relief back pains and avoid other illnesses.

“ I had added weight for the six months I didn’t engage in any physical activity but after I started, I lost the added weight. ”

Psychological benefits were also identified as participants noted that engaging in sports helped them overcome their depression. The other benefits experienced include, boosting of the mood and energy, increased concentration, happier feelings, a confidence boost, anxiety relief as well as stress reduction. Nonetheless, only two of the participants reported to feel exhausted after engaging in physical activities. With the new environments and a cold dark climate during winter, participants expressed the need to find ways to fight stress and depression.

Psychological benefits were also closely related to participant’s social benefits, particularly increase in confidence towards the local Finnish people and improved organizational skills on the part of the leaders of the group.

6.3 Motivating and Limiting Factors

From question 6: What are your limiting or motivating factors to participate in the physical activities?

The women reported some motivating and limiting factors towards physical activities and exercise. Moreover, involvement in a sports/exercise group, not only provided them with company but also improved their social skills and integration in the Finnish culture.

On other hand, one of the group directors involved in the study, pointed out that financial matters were the most challenging. Especially acquiring sports equipment and paying for the group's trainer. Most of these women had families and they felt that family responsibilities took most of their time hence limiting the time available for exercise. Some of the participants who were students felt pressured by studies and working at the same time and they lacked time for planned exercise.

Moreover, they felt that enrolling in a gym, was expensive. Especially for those that were students or those that were not working. In fact if a person did not feel the need for physical activity once here in Finland and is not engaging in exercise often, most probably perception of the benefits related to that will be poor and the need of paying a fee would be a limiting factor. On the other hand, women who exercise more and are aware or experience the benefits after exercise may be more prone to pay a fee.

7 DISCUSSION

This study has used a qualitative approach with the purpose of identifying the beliefs and attitudes of African Immigrant women towards physical activity and exercise. According to existing theory and as reported in the literature review, there exists evidence suggesting that physical activity has been and is still an important part of daily routine life for African women. Noteworthy, the participant's physical activity was more prevalent as a daily routine compared to the repetitive and planned characteristics of exercise. The women were able to differentiate between physical activity and planned exercise. This was a result of their energy consuming household chores, like digging for long hours or walking for long distances to get some chores done, or cultural activities

like dances, to name a few. (Caperchione et al, 2011.) Therefore as a common practice in their home countries, engaging in physical activity or planned exercise in a new country was easy to adapt for the women.

From a health practitioner perspective, this study is relevant. Preceding studies indicate that physical activity and exercise promotes health and enhances an individual's physical and psychological wellbeing as well as prevent chronic diseases like cancer, cardiovascular diseases, diabetes and obesity. (WHO, 2015) The results of this study also reveal that all the participants value exercise and believe exercise and physical activities to be related to good health. As a result, all the women currently engaged in forms of exercise and physical activity, as individuals and in groups therefore meeting the recommendations of the physical activity pyramid of the Georgia State University (1999) and physical activity pie of the UKK Institute (2009). Benefits ranged from physical benefits like, weight control, prevention of illnesses, to psychosocial benefits of boosting moods and confidence, reducing stress, feeling happy, reducing depression and anxiety, as well as social benefits like social support, companionship and family involvement as pointed out by most of the participants. On the other hand, older participants expressed that the regularity and amount of exercise was less after they moved to Finland, compared to when they were in their home countries. This is similar to previous research done in Western countries in that, the extent to which ethnic minorities meet the recommendations for weekly leisure time is lower and the levels of leisure time activity are also lower. (Sagatun, Kalle, Sigmund, Thoresen, & Sjøgaard, 2008.)

It took time, more than one year, for the participants in this study before enrolling in a gymnasium or taking part in physical activities and exercise elsewhere. Beginning exercising immediately after moving to Finland seemed to be an exception among them. This shows that exercise is not always a priority to African women particularly when they are moving to a new country. Evenson et al. (2003), argues that among ethnic minorities, physical activity on an individual level is influenced by

a number of factors, for instance, socioeconomic status, education, and marital status. Various factors act as barriers to engaging in exercise to many immigrants. According to a study done on Nigerian immigrants to the United States, it portrayed limited time and long work hours as threats to being physically active. In a similar study on Somali and Sudanese immigrants to the US, activities like household work and walking to school were considered as exercise while extended work schedules and lack of time were barriers to physical activity among these two African immigrant groups. Lack of information about the relationship between health and exercise could also hinder individuals from exercising. After a period of time, immigrants get accustomed to the local's way of life. They therefore can start taking part in sporting activities. (Turk, Fapohunda & Zoucha, 2015.)

Financial problems also arose among the participants as a hindrance to engaging in physical activity. A study conducted in Helsinki among immigrant women, cited unemployment and language barrier as hindrances to exercise. Gymnasiums are costly and this proves to be a big challenge to the unemployed and students who find it difficult to meet the cost. Most instructors at the gymnasiums instruct using Finnish language, especially in group activities involving Finnish local people. This poses as a demotivation for immigrants with language barrier to attend the gymnasiums. Fortunately, existence of MonaLiiku sports group, which is a non-profit sports and culture group for women based in different parts in Finland, comes as a sigh of relief for all immigrant women geared to promote their health through physical activity and exercise. (Karanja & Njambi, 2013.)

It is intriguing that poor health contributes to an inactive life style, while on the other hand, it serves as a motivator to become more physically active. One participant stated that back pains prevented her from engaging in physical activities and exercise. On the other hand, a deteriorating health status, may lead one to adopt a healthier lifestyle. This study therefore proves that various factors, particularly an individual's physical health, could act as both facilitators and barriers of

physical activity. Another main limiting factor expressed was the harsh climate during winter which demotivated the participants to get out of their houses to exercise. One study suggests that, women could engage in indoor exercise activities like, walking in malls, swimming and dancing indoors. Compared to African climate, Finland experiences less months of warm weather. Immigrants should learn alternatives forms of physical activity, especially indoor activities, in order to remain healthy for the whole year. (Basia, Walwick, Schwartz, LoGerfo, Shiu-Thornton & Taylor, 2004.)

8 ETHICAL CONSIDERATION

8.1 General Principles

Qualitative research and particularly involving collection of data from individuals or a group of people, should put into consideration how these people are ethically treated by the researchers during the process of implementing the research. In other words, a researcher has a responsibility towards the participants of the research as well as the people to whom the findings might be presented. (Oliver, 2010.)

According to the Finnish Advisory Board on Research Integrity, researchers should act in accordance with the principles approved by the research community, including accuracy, respect and integrity while conducting the research, as well as recording, presenting, evaluating, citing and publishing the research findings. Furthermore, all the parties involved in the research, particularly the authors and their supervisors, should comply with the rights, responsibilities and obligations with respect to the storage and accessing of data. (Finnish Advisory Board on Research Integrity, 2012.)

Dealing with human subjects carries an obligation to protect the health, life, dignity, privacy, integrity, autonomy and confidentiality of the subject's personal information. This research involves participants from different nationalities, therefore, legal and ethical norms and principles that are internationally accepted and that protect each participant as a whole will be considered during the whole process of this research. In addition, the purpose and the aims of this study will be explained to the participants and be allowed to participate at their free will. Therefore, the principles of informed consent and confidentiality will be an important key in this research. (World Medical Association, 2015.)

8.2 Informed Consent

It refers to a voluntary agreement to participate in a research. First of all, the research participant should be made to understand the research and if there are any risks involved before and after participation. He or she should be informed about his or her rights, the purpose of the study, procedures to be undertaken, length of the time they should participate as well as benefits of participation and risks involved. Thereafter, they can decline, withdraw or participate willingly. (Shahnazarian, Hagemann, Aburto, Rose, 2013; World Medical Association, 2015.)

Shahnazarian et al, (2013), argues that informed consent, is not only a signed form but it is a process. We will approach the director of the group first in order to get the permission to interview the members as well as get the most convenient dates as to when we can participate in one of their events. We also hope to seek consent for participation from our participants verbally. For instance, our participants are involved in a sports group. They will be informed of the dates and they will be asked to attend at will. It will be made known to them that the whole process will take approximately half an hour while the rest one hour and half will be free for their group activities. If not possible, another place of convenience to the participants will be provided and made suitable for collection of data. The option of being informed of the outcomes of the study will also be provided.

8.3 Credibility, Dependability, Transferability, Conformability

Qualitative researchers use various methods, including credibility, transferability, dependability, and conformability to establish trustworthiness. Credibility involves establishing that the results of the research are believable. It depends more on the quality of the information gathered rather than the quantity of the data. Techniques in which credibility is achieved include, continuous engagement in the field, persistent observation, use of various methods to collect data, categorizing and theorizing and sharing developed analysis with peers. In other, words, only the participants or readers can reasonably judge the credibility of the results. (Nicholls, 2009.) Moreover, credibility should be used to avoid bias, otherwise it may lead to premature conclusions, themes based on isolated data and inaccurate interpretation of data. To enhance trustworthiness of our research, we ensured that we used a reliable method of data collection. Close ended questionnaires will be used in the research preventing the limitation of our participants answers hence get as much information as possible. (Houser, 2013.)

Transferability refers to the degree in which the research findings can be transferred to other contexts or settings, usually defined by readers of the research. It is important to provide a clear description of the selection and characteristics of the respondents, their culture and context as well as collection and analysis of data. A rich and vigorous presentation of the findings together with appropriate quotations will also enhance transferability. (Zhang & Wildemuth, 2009.)

Dependability ensures that the research findings are consistent .There is a risk of inconsistency during collection of data if the collection extends over time and data becomes extensive. Dependability of the findings is also achieved through questioning the same areas for all the participants. New perceptions may arise during the study thus influencing follow-up questions or

narrowing the focus for observation. Each process in the study should be reported in detail to enable an external researcher to repeat the inquiry and achieve similar results. (Rolfe, 2006.)

Conformability questions how the research findings are supported by the data collected. Here steps must be taken to help ensure as far as possible that the work's findings are the result of the experiences and ideas of the informants, rather than the characteristics and preferences of the researcher. The role of triangulation in promoting such conformability must again be emphasized, in this context to reduce the effect of investigator bias. , beliefs underpinning decisions made and methods adopted should be acknowledged within the research report, the reasons for favoring one approach when others could have been taken explained and weaknesses in the techniques actually employed admitted.(Shenton, 2004.)

8.4 Data handling and record keeping

Data protection is an important concept in research ethics. This is more so where personal data is collected from individual or group of people concerning their ways of life. Caution should be taken to ensure their privacy rights and confidentiality. Personal Data Act (523/1999), section 3, by the Finnish constitution, defines personal data as any information derived on private individual, their characteristics, circumstances, concerning them, their family members or household. (Finnish Advisory Board on Research Integrity, 2012.)

Confidential handling of data is a constitutional right that protects the citizens especially against measures taken by public authorities hence the research data collected should not be revealed to the media, tax authorities, social welfare authorities or the police. Which may influence their position, evaluation and treatment. On the other hand, data should not be carelessly stored in paper or unprotected electronic data transfers. Therefore the researcher should consider where data on paper materials will be stored, what stage to destroy unnecessary data and take measures on storage for the purposes of secondary research. (Finnish Advisory Board on Research Integrity,

2012.) Data collected and our findings will be stored for the purposes of future or secondary research. Therefore, we will use anonymity measures in a way that secondary users will not immediately identify individual participants. Our research findings will be stored in the schools' website and a secondary user can only access it for research purposes.

8.5 Conclusion, Limitations and Recommendations

This study has a limitation in the data collection. The authors would have preferred using interviews contrary to the questionnaires. Questionnaires provided enough information all the same, however, authors felt that use of interviews would have created an opportunity to probe further and clarify or explain the questions for the participants in case of misunderstandings as well as following up incomplete answers.

The results of this study can be applied to promote the health of not only immigrant African women but also all immigrant women in Finland. They can be applied by the organizations dealing with immigrants in Finland in their efforts to accustom the immigrants into the Finnish culture. Health practitioners providing care to immigrant women can assess the levels of their physical activity and provide information of how to improve those levels. The sports group involved in this study could be one option that immigrant women can be encouraged to enroll in to keep themselves physically fit.

This study provides room for future research where a similar study can be done on immigrant African men or adolescents. One important issue that also arose in this study was about how religion can affect physical activity and exercise. Particularly the beliefs and attitudes of Muslim women with an African origin, towards physical activity and exercise.

9 REFERENCES

- Amusa, L. O. 2010. The Changing Phases of Physical Education and Sport in Africa: Can a Uniquely African Model Emerge? Vol. 2, Nº 1
- Basia, B., Walwick, J., Schwartz, S., LoGerfo, J., Shiu-Thornton, S., Taylor, M. 2004. Older Adult Perspectives on Physical Activity and Exercise: Voices from Multiple Cultures. Centers for Disease Control and Prevention.
- Biddle, S., Fox, K. R., & Boutcher, S. H. 2000. Physical activity and psychological well-being. London: Routledge.
- Caspersen, C. J, Powell, K. E. & Christenson, G. M., 1985. Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research, Public health reports, Vol. 100, No. 2 131
- Chilibeck, P. & Cornish, S. 2008. Effect of estrogenic compounds (estrogen or phytoestrogens) combined with exercise on bone and muscle mass in older individuals. Applied Physiology, Nutrition, and Metabolism, 33, 200-212.
- Corbin, C. & Masurier, G. L. 2014. Fitness for Life 6th Edition with Web Resources-Paper <http://www.humankinetics.com/excerpts/excerpts/the-physical-activity-pyramid> Accessed 03.02.2015
- Cornelissen, S. 2011. Prologue: Sport past and present in South Africa: Transforming the nation? The International Journal of the History of Sport, pg. 138-139
- Denzin, N. K. & Lincoln, Y. S. eds., 2005. The Sage Handbook of Qualitative Research (3rd Ed.). Thousand Oaks, CA: Sage
- Family Health International, Mack, N., Woodsong, C. & United States. 2005. Qualitative research methods: A data collector's field guide. North Carolina: FLI.
- Finnish Advisory Board on Research Integrity (TENK), 2012. Responsible conduct of research and procedures for handling allegations of misconduct in Finland - RCR guidelines,pg.30-33. <http://www.tenk.fi/en/responsible-conduct-research-guidelines> Accessed 30.01.2015

Ford, A.R. 1990. Working Together for Women's Health: A framework for the development of policies and programs. Canada: Federal/Provincial/Territorial Working Group on Women's Health.

Forrest, K. Y., Bunker, C. H., Kriska, A. M., Ukoli, F. A., Huston, S. L., & Markovic, N. 2001. Physical activity and cardiovascular risk factors in a developing population. *Medicine and Science in Sports and Exercise*, 33, 9, 1598-604.

Frankish, C.J., Milligan, D., Reid, C. 1996. Active Living and Mental Health: Their relations in the context of life circumstances and determinants of health. Report by the Institute of Health Promotion. Research, University of British Columbia for the Canadian Fitness and Lifestyle Institute and Health Canada.

Georgia State University, 1999, the Exercise and Physical Fitness Web Page <http://www2.gsu.edu/~wwwfit/physicalactivity.html> Accessed 03.02.2015

Heath W., King G. W., Kriska A. C., Leason, Marcus A. S., Morris B. H., Paffenbarger J., Patrick R. S., Pollock K., Rippe M. L, Sallis J. M. & Wilmore J. 1995. Physical activity and publichealth: A recommendation from the Centers for Disease Control and Prevention and the American College of Sports Medicine. *Journal of the American Medical Association*. 273:402-407

Houser, J. 2013. *Nursing Research: Reading, Using and Creating Evidence*, Third Edition

Lewis, J. & Ritchie, J. 2003. *Qualitative research practice: A guide for social science students and researchers*. London: Sage Publications.

Leseth A. B. 2014. Experiences of moving: a history of women and sport in Tanzania, Special Issue: Women's sport and gender in sub-Saharan Africa, Volume 17, Issue 4, 2014

McComas, J. & Harris, S.R. 1996. Women's health research and practice: What can physiotherapists contribute? (Editorial). *Physiotherapy Canada*. 48:5-7.

National Heart, Lung, and Blood Institute (NHLBI), 2011 & USA National Institutes of Health, 2011. Types of physical activity <https://www.nhlbi.nih.gov/health/health-topics/topics/phys/types> Accessed 30.01.2015

Nicholls, D. 2009. *International Journal of Therapy & Rehabilitation*, Dec; 16 (12): 638-47. (Journal article - tables/charts) ISSN: 1741-1645

Njambi, M. & Karanja, J. 2013. Effects of Language Barrier on the Health of African Immigrant Women living in Helsinki, a Study on Prevention and Promotional Tools. Master's Thesis 2013

Oliver, P. 2010. *Student's Guide to Research Ethics* (2nd Edition)

Physical Activity and Sport in the Lives of Girls, 1997. The President's Council on Physical Fitness and Sports Report: physical and mental health dimensions from an interdisciplinary approach. The Centre for Research on Girls and Women in Sport, University of Minnesota.

Rolfe, G. 2006. Methodological Issues in Nursing Research: Validity, trustworthiness and rigour: quality and the idea of qualitative research. *Journal of Advanced Nursing*, 53, 3, 304-310.

Sagatun, Å., Kolle, E., Sigmund, A. A., Thoresen, M., & Sjøgaard, A. J. 2008. Three-year follow-up of physical activity in Norwegian youth from two ethnic groups: associations with socio-demographic factors. *BioMed Central*.

Scully, D., Kremer, J., Meade, M.M., Graham, R., Dudgeon, K. 1998. Physical exercise and psychological well-being: A critical review. *British Journal of Sports Medicine*. 32:111-120.

Shahnazarian, D., Hagemann, J., Aburto, R. S. 2013. Office for the Protection of Research Subjects (OPRS); Informed Consent in Human Subjects Research

Shaw, S.M. 1994. Gender, leisure and constraint: Towards a framework for the analysis of women's leisure. *Journal of Leisure Research*. 26:8-22

Shenton, A. K. 2004. Strategies for ensuring trustworthiness in qualitative research projects. Division of Information and Communication Studies, School of Informatics, Lipman Building, Northumbria University, Newcastle upon Tyne, NE1 8ST, UK

Sobngwi, E., Mbanya, J. C., Unwin, N. C, Kengne, A. P., Fezeu, L., Minkoulou, E. M., Aspray, T. J., Alberti, K. G. 2002. Physical activity and its relationship with obesity, hypertension and diabetes in urban and rural Cameroon, *International journal of obesity and related metabolic disorders*. Jul; 26(7):1009-16.

Steyn, K. & Damasceno, A. 2006. Chapter 18, Lifestyle and Related Risk Factors for Chronic Diseases: Disease and Mortality in Sub-Saharan Africa. 2nd edition

Sundberg, C. J. 2010. Physical Activity in the Prevention and Treatment of Disease; Professional associations for physical activity (Sweden) pg. 41-42

Swain, D. P., American College of Sports Medicine, & American College of Sports Medicine. 2014. ACSM's resource manual for Guidelines for exercise testing and prescription. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins.

Taylor, C. B., Sallis, J. F., & Needle, R. 2001. The relation of physical activity and exercise to mental health.

Tilson, E., McBride, C. M., Albright, J., & Sargent, J. 2002. Smoking, Exercise and Dietary Behaviors Among Mothers of Elementary School-aged Children in a Rural North Carolina County. *The Journal of Rural Health*, 18, 4, 547-555.

Turk, M. T., Fapohunda, A., & Zoucha, R. 2015. Using Photovoice to Explore Nigerian Immigrants' Eating and Physical Activity in the United States. *Journal of Nursing Scholarship*, 47, 1, 16-24.

U.S. Dept. of Health and Human Services, 2008. Physical Activity Guidelines for Americans. <http://www.health.gov/paguidelines/guidelines/chapter4.aspx> Accessed 30.01.2015

UKK Institute, 2014. Products/ Physical Activity Pie http://www.ukkinstituutti.fi/en/products/physical_activity_pie Accessed 19.02.15

World Health Organization, 2011. Information sheet: Global recommendations on physical activity for health [pdf 182kb]

World Health Organization, 2015. Global Strategy on Diet, Physical Activity and Health; Physical Activity <http://www.who.int/dietphysicalactivity/pa/en/> Accessed 01.02.2015

Wieland, M. L., Tiedje, K., Meiers, S. J., Mohamed, A. A., Formea, C. M., Ridgeway, J. L., Asiedu, G. B., Boyum, G., Weis J. A., Ni-gon, J. A., Patten, C. A., Sia, I. G. 2013. Perspectives on Physical Activity among Immigrants and Refugees to a Small Urban Community in Minnesota, *Journal of Immigrant and Minority Health*, Volume 17, Number 1

Wimbush, E. 1994. A moderate approach to promoting physical activity: The evidence and implications. *Health Education Journal*. 53:322-336.

World Medical Association, 2015. Declaration of Helsinki - Ethical Principles for Medical Research Involving Human Subjects <http://www.wma.net/en/30publications/10policies/b3/> Accessed 18.02.2015

Zhang, Y., & Wildemuth, B. M. 2009. Qualitative analysis of content. In B. Wildemuth (Ed.), *Applications of Social Research Methods to Questions in Information and Library Science* (pp.308-319). Westport, CT: Libraries Unlimited.

Appendix 2

INTERVIEW QUESTIONS:

1. How long have you been living in Finland? How long after your arrival to Finland did you start engaging in physical activities?
2. How does doing these physical activities/exercise make you feel?
3. Do you gain any health benefits, either physically or psychologically, by participating in these exercises? Please give us some examples.
4. Has being a part of this physical activity group affected your social skills in Finland?
5. Describe how often or regular you participate in the physical activities.
6. What are your limiting or motivating factors to participate in the physical activities?
7. Do you have any different feelings and attitudes towards exercise or physical activity here in Finland than you had in your home country? Please explain.