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EFFECTS OF PHYSICAL ACTIVITY AND HEALTHY NUTRITION IN IMMIGRANT WOMEN'S HEALTH

ABSTRACT

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Previous studies have highlighted the need for further research concerning Physical Activity (PA) engagement among the immigrant populations. Therefore, the aim of this research was to describe immigrant women's motivation in physical activity participation in Helsinki, Finland. The interviews took place during April and May 2019 at three different community centres in Helsinki organized by Monaliiku Organization.

There were seven participants recruited to take part in the study. Age and Finnish language proficiency were the determining factors in the recruiting process. The ages of the participants were from 20 to 50 years. Structured open-ended interview questions were used to collect data. This study used deductive qualitative content analysis and thematic analysis was used to analyse the data.

Some participants were satisfied with the exercise experience from Fit4Life sport program. Most of them however were open in exploring other exercise programs with some wishing for a women-only exercise program. What motivated the participants into joining other sport programs was if the other sport programs are free of charge, adequate knowledge about the other sport programs beforehand and a sport program that has different kinds of exercise equipment. It is very evident that most participants were motivated into joining other sport programs. The idea of using the same exercise equipment was a setback thus some went to work out in other gyms.

Keywords: Health, Healthy Nutrition, Immigrant Women, Physical Activity

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LIST OF ABBREVIATIONS

| | |
|-------|--|
| ADLs | Activities of Daily Living |
| BMI | Body Mass Index |
| BP | Blood Pressure |
| CAD | Coronary Artery Disease |
| CDC | Centres for Disease Control and Prevention |
| CRP | C-Reactive Protein |
| CVD | Cardiovascular Disease |
| ED | Endothelial Dysfunction |
| FSM | Family Stress Management |
| IADLs | Instrumental Activities of Daily Living |
| IDPs | Internally Displaced Persons |
| IL-6 | Interleukin-6 |
| IOM | International Organization for Migration |
| LLD | Late Life Depression |
| MSAH | Ministry of Social Affairs and Health |
| NCDs | Non-communicable Diseases |
| NGO | Non-governmental Organization |
| NO | Nitric Oxide |
| PA | Physical Activity |
| QCA | Qualitative Content Analysis |
| U.S | United States |
| WHO | World Health Organization |

1 INTRODUCTION

As at now, there are 244 million migrants, more than 22 million people seeking refugee asylum status and more than 40 million internally displaced persons (IDPs) globally. The world has become interconnected more than ever. Migration has helped people's lives in both their origin and destination countries and has offered opportunities to people from all walks of life find a better place to stay. However, migration does not happen voluntarily in some cases. There are people who migrate from their countries to avoid conflicts, persecution or due to lack of human security. Work is the biggest reason why people would migrate to high-income countries to find a better life. Hence, Immigration is the process by which people from a different country move to another for resettlement purposes. (IOM, World Migration Report, 2018).

According to Morrison et al. (2017) study, immigrants and refugee populations arrive to the United States (U.S) being healthier than the general population. The longer the immigrant groups stay in the U.S, the more they are at risk of developing cardiovascular diseases, obesity and hypertension. This is because, the immigrants and their children are likely to involve themselves in unhealthy eating habits and physical inactivity. It is even alarming that these children are at a much greater risk of developing obesity and other complications the more they stay in the U.S as opposed to the immigrants who arrived as adults. The same study found a relationship between negative mood and health behaviours in immigrants and refugee populations. Negative mood influences weight in immigrant youth and adults hence susceptible to overweight and obesity. Negative mood promotes overeating, physical inactivity and isolation. (Morrison et al. 2017).

South Asians with ancestral origins from Sri Lanka, Pakistan, Bangladesh and India make up the largest non-European ethnic group in Canada. Their Muslim religion is the second largest after Christianity. These women move to Canada for reasons like employment, high education, family re-unification, safety and security. For reasons not yet fully understood, the South Asian Muslim women living in Canada have a higher mortality and morbidity towards type 2 diabetes. Promoting physical activity in these communities for dia-

betes management and prevention has been there for more than ten years. Physical activity reduces the incidence of diabetes, but low level of physical activity has been reported in these women. Childcare, lack of time, fear of going out alone and religious reasons are some reasons why the women would stay physically inactive. Hence, South Asian Muslim women living in Canada are at a risk of developing type 2 diabetes. (Banerjee et al. 2017).

Whether a young adult, male or female, physical activity is important to all for a healthy lifestyle. Previous global researches have highlighted the importance of health promotion among the immigrants. Here in Finland, there is need for further research about women immigrants' healthy living practices for example physical activity engagement and healthy diet consumption. (Adebayo, 2017 & Skogberg et al. 2018).

This thesis is important in describing the immigrant women's health issues through Monaliiku organization. It also educates and informs other women from immigrant backgrounds there is a place they can attend and learn more about healthy living habits. Furthermore, the aim of this research was to describe immigrant women's motivation in sport participation in Helsinki, Finland. This topic is very interesting in a way that, it enables others to understand more about immigrants' health needs and how the society can anticipate for them in the near future.

2 HEALTH PROMOTION

Health promotion is a process set out to empower vulnerable persons or a group of people through the provision of required health and well-being interventions so as to improve their health status. The Ottawa Charter was the first international Health Promotion conference to be held in Ottawa in 1986. According to this charter, health promotion is “the process of enabling people to increase control over, and to improve their health”. (World Health Organization (WHO), 1998).

There are seven main principles that define health promotion according to WHO, (1998). These are holistic concept, intersectionality, empowerment, social participation, equity, multi-strategic actions and actions of sustainability. Hence, health promotion is a field of knowledge which is dedicated to helping people make choices that allow them to achieve the best possible state of physical, social, spiritual, emotional and intellectual balance. The main objective of health promotion is involving the person in activities that maintain a state of well-being and a high quality of life. (WHO, 1998). Health promotion programs cover primary and secondary prevention strategies. (Lima et al. 2017). Health prevention is divided into three definitions namely primary, secondary and tertiary preventions. Primary prevention is about intervening before health effects occur through measures e.g. vaccinations, altering risky behaviours such as poor eating and tobacco use and banning substances that are known to be linked with diseases or health conditions. (CDC, picture of America). Secondary prevention deals with screening to identify diseases in the early stages before signs and symptoms occur through measures such as regular blood pressure testing, Papanicolaou (pap) smear for early detection of cervical cancer, mammography for early detection of breast cancer and colonoscopy for early detection of colon cancer. (Kisling & Das, 2019). Tertiary prevention manages a disease after a diagnosis to slow or stop the disease’s progression through measures such as cardiac rehab in post-myocardial infarction in patients and diabetic foot care. (Kisling & Das, 2019).

Key components of prevention are: individual, local, state and federal. Prevention awareness and education has to have full participation from all prevention key components. There are ways of increasing awareness and education across all key components such as

informing and educating decision-makers, public health practitioners, health care providers and persons about science-based health prevention approaches that will have benefit and impact on the public health. Also, providing information on effectiveness of interventions to inform policies is key. Additionally, educating workers in and out of health field who may have daily contact with people at high risk for disease and injury is necessary. These workers could encourage healthy behaviours, screen for certain health risks and contribute generally towards educating their community. Providing the public with health information is very crucial and working with the media to highlight public health issues would extend knowledge to everyone. Lastly, establishing programs to proactively distribute information to targeted groups especially to those who are at a high risk of diseases or injury. (CDC, picture of America).

Being physically active has its advantages such as providing a healthy transition to healthy aging, reducing the burden of chronic illnesses and preventing early death. Health promotion PA awareness is beneficial so that people would have knowledge about it and perhaps be interested in participating in some form of PA. According to CDC, (2020), physical inactivity costs are high due to annual health care costs, causes numerous diseases such as breast and colon cancer, stroke, type 2 diabetes among others and affects the national security and military readiness because of lower levels of physical fitness and obesity that increase injury risks to the active military persons. (CDC, 2020).

There are benefits of joining groups that deal with physical fitness to an individual, one's family and to the community at large. Examples of the benefits are: acquiring tips and resources to help one stay physically active, connecting to a network of people who share the same purpose and be able to share successes stories, tips and what lessons one learned and be able to receive updates of what has been happening in the network. (CDC, 2020). Poor nutrition and lack of PA are risk factors for obesity and diseases such as depression, heart disease, stroke and certain cancers. Promoting and supporting breast feeding is important as it provides the infant with enough nutrients and reduces short- and long-term health conditions for the mothers and the infants. A healthy childhood can be promoted by ensuring the child gets good nutrition and is also physically active. Low levels of PA and poor nutrition lead to childhood obesity. Development of some policies could help people to generally have access to healthy foods. Some of the policies include increasing access to healthy foods in schools, cafeterias and hospitals, promoting PA by educating

the public on the health benefits of it and how much of it they should be getting and providing support for training networks to help communities make PA more convenient and safe for everyone. Moreover, funding these communities to help reduce obesity and other chronic diseases through better nutrition choices is vital. (CDC, 2020).

2.1 Psychological well-being

WHO defines well-being as ‘a positive rather than neutral state, framing health as a positive aspiration.’ (WHO, 1948). In the end of 1950’s and early 1960’s, Europe experienced an increase in post-war immigrants from non-western young adults. (Cramm & Nieboer, 2018). Some immigrants went back to their own countries at some point but some remained in their host countries. Due to this, poor physical and mental health, poor quality of life and well-being, depressive and chronic conditions and functional limitations were more prevalent in immigrant populations in Europe. (Cramm & Nieboer, 2018). These facts also reveal that older immigrant populations living in Europe require 13-20% more health services than the natives. This study also found out as immigrants became older, they had worse physical health and well-being and increased depressive symptoms. Thus, there is demand in health care services and delivery of care in Europe according to Cramm & Nieboer (2018).

Unhealthy behaviours such as smoking, poor diet and physical inactivity compromise people’s psychological well-being. People’s ability to deal with the aging process also contribute to health behaviours which in turn affect the person’s overall well-being. (Cramm & Nieboer, 2018). Physical activity was found to reduce stress, anxiety and depression from a sample of 17, 246 university students from 21 countries. It was reported that active students had lower fatigue levels and high energy levels as compared to those who were inadequately physically active. (Shrap & Caperchione, 2016). Immigrants who have left their country voluntarily have the healthy immigrant effect because they are considered healthier than the host population. Nevertheless, mental health is not considered in their healthy immigrant effect situation. (Asanin-Dean & Wilson, 2010).

2.2 Cultural factors and exercise beliefs

African American immigrants in the U.S believed that, traditional African food is healthier than American food. (Jakub et al. 2018). They reported consuming traditional African foods during holidays together with other family members and after weekly church services. And so, during these gatherings, dancing was a form of PA. Food preparation was also another example of PA especially if one had to prepare some foods which require energy and time e.g. pounding yams. (Jakub et al. 2018). Most of the participants according to Jakub et al. (2018) study did not participate in any sports rather walked leisurely. Moreover, when some started attending team sports e.g. gym workouts with their peers, they motivated each other to continue with the gym sessions.

Some immigrant communities living in Canada make use of religion for general well-being purposes. Places of worship offer health benefits and successful integration into the new culture. However, these places can also negatively or positively affect one's health either physically, mentally or socially. (Koenig, 2012).

South Asian immigrants are the largest minority group in Canada and have a higher burden of diabetes 2 mellitus than any other immigrant groups. (Tang et al. 2020). This is because they have higher insulin resistance, higher percentage of visceral fat percentage, greater beta cell dysfunction and a higher generic load for type 2 diabetes. (Tang et al. 2020). This group reportedly consume unhealthy foods such as foods high in saturated fats, carbohydrates and transfatty acids. They also consume foods low in mono- and polyunsaturated fats, fruits, vegetables and fibre. Reasons for this are due to cultural lifestyles such as inadequate adherence to monthly or yearly fasting practices, higher screen time and long-term psychological burden. They also have low PA levels. Physical inactivity and cultural lifestyles affect this group and have an impact in their general health and well-being. (Tang et al. 2020).

Less number of people in Korea do involve themselves in leisure physical Activity (PA) as compared to those in the western countries due to lack of companionship, time and money. (You & Shin, 2017). You & Shin (2017) study further explained that, 43.4% of men and 51.2% of women among the Korean people in their 30's to 50's did not partici-

pate in any regular sport activity. PA participation among the Korean people are low especially when compared to U.S; a country that has high sport activity participation rates. (You & Shin, 2017). This phenomenon can be explained by participants' demographic background and psychosocial factors such as exercise beliefs. Exercise beliefs affect exercise behaviours thus these beliefs can be divided further into method-oriented and purpose-oriented. Method-oriented exercise belief aims at one exercising to manage everyday living and work situations. Examples of method orientation are: maintaining body image, controlling weight and managing stress. Purpose-oriented exercise belief's objective is gained by pure satisfaction from the exercise itself. One's exercise behaviours can be motivated and sustained by numerous exercise beliefs. (You & Shin, 2017).

2.3 Self-determination theory in human behaviours

Motivation and self-determination theory are related in the sense that they explain more about initiation and maintenance of human behaviours. This theory suggests that the kind of motivation has a greater importance than the amount of motivation. Human behaviours can be represented on a self-determination continuum i.e. ranging from high to low levels of self-determination. (Kerner et al. 2018). This theory presents six types of motivation which have been divided further into three namely; autonomous (intrinsic, integrated and identified), controlled (introjected and external) and amotivation in that order on the continuum. Autonomous motivation is the most self-determined of the three and it is important in the sense that, a person engages in an activity because it interests him/her (intrinsic regulation), the activity suits the person's goals in life (intergrated regulation) and that the result of the participation is very important to the person (identified regulation). Introjected regulation under controlled is when a person engages in a behavior to gain social approval or to avoid guilt.

If a person engages in a behaviour to get a reward or avoid punishment is termed as external motivation regulation. Autonomous motivation is about a person's interests whereas controlled motivation is about internal or external demands. Amotivation is at the end of the continuum and it is evident that, if an individual is not motivated in either way, he/she lacks motivation to engage in some behaviours. (Kerner et al. 2018).

2.4 Sports motivation

Sport activities are essential in our daily lives. They help maintain physical and mental health by acting as a buffer to stress and they also assist people recover from stress. Benefits of leisure activities through sports can be social. These activities are mostly done in groups and so, there is interaction between people. Furthermore, WHO defines health as a ‘state of complete physical, mental and social well-being and not merely the absence of disease or infirmity’ (WHO, 1948). A person’s well-being state is referred to as a ‘positive rather than neutral state, framing health as a positive aspiration’ (WHO, 1948). Involvement is the unaware awakening or interest between an individual and sport activities. Continuous involvement in sports is being enthusiastic about a certain physical activity with a strong interest and regarding to the sport as a hobby. An individual would enhance his or her motivation to participate in a certain sport activity when perceiving the value of that activity hence enhancing living benefits of stress relief and physical health promotion. (Chang et al. 2018).

Women may be highly judged by the society and therefore may use sports as a way to meet the society’s expectations of looking thin. And so, the society’s pressure can be a reason as to why women would participate for leisure or for competition. Self-motivation can be explained by the identity of one’s self and can be split into “me” and “I”. The “me” is the social self and can relate to other peoples’ attitudes while the “I” is one’s response to other people’s attitudes. (Roessler & Muller, 2018). Furthermore, Parham et al. (2016) discuss motivation as a self-determination theory that differentiates motivation that is initiated by oneself also termed as intrinsic or autonomous and the other form of motivation is triggered by external forces also called extrinsic or controlled.

2.5 Exercise and healthy nutrition

Choosing to be physically inactive and eating unhealthy foods can cause morbidity and premature mortality. Regular physical activities promote health and well-being, restores functional capability in the long run and reduces the untimely deaths of some diseases such as heart disease, stroke and diabetes type 2. (Fleig et al. 2014). Previous researches

have discussed how participating in physical activities and maintaining a healthy diet are beneficial to one's health. Fleig et al. (2014) argue that, having a healthy diet and exercising more often, when both events are taking place at the same time, requires a lot of effort. For one to reach this objective, one has to invest their cognitive, emotional and behavioural resources.

Moreover, if one has adopted a new healthy behaviour, it must be done actively so that it becomes a habit. The insistent of a behaviour is prompted by context rather than conscious self-regulation. The authors also reveal that; a behaviour is a habit if it has automaticity features. These features are: intentionality, controllability, lack of awareness and efficiency. (Fleig et al. 2014).

Root et al. (2019) did a study that looked into a healthy diet and exercise among 45-64 year olds and checked the results after 9 years into the study. The findings revealed that a healthier diet was significant in someone's functional abilities especially as they age. Peoples' physical and cognitive functions decline as they grow older. These functions comprise of activities of daily living (ADLs) and instrumental activities of daily living (IADLs). Dressing oneself, getting in and out of bed, eating and drinking independently and walking from one room to another on the same floor are part or ADLs. IADLs are made of taking care of one's finances, doing house chores and preparing meals by oneself. A healthier diet played an important role in preventing disabilities later in life. (Root et al. 2019).

Participants following a modified traditional Korean diet consisting of lots of fruits, legumes and dairy, were less likely to experience ADLs disabilities. (Kim et al. 2013). Mediterranean diet which consists of fruits, legumes, vegetables, fish and cereals was also found to decrease ADLs and IDLs disabilities as discussed by Feart et al. (2011). Both of these diets show that, a healthy diet rich in fruits, vegetables and legumes and moderate amount of exercises positively affect aging outcomes and one's quality of life.

People with higher education levels experience lower rates of ADLs and IADLs disabilities. (Martin & Schoeni, 2014). Overweight and obese individuals reported higher increase in IADLs than individuals with normal weight. Low grip strength, low walking speed and low physical activity in one's life are factors reported to highly predict ADLs disabilities later in life. (Vermeulen et al. 2011).

2.6 The role of physical activities in disease prevention

Physical activity (PA) can be described as “an activity performed during exercise and recreation at leisure, physical activity associated work, transportation and housework.” (Cheng et al. 2014). Exercise is a planned repetitive form of PA and it is done to enhance or maintain one’s physical fitness. (Cheng et al. 2014). It is crucial to understand the factors affecting PA participation so as to come up with better interventions to improve it. Social-demographic factors such as age, country of origin, residence, years lived in Finland, municipality, education level and immigrant’s status were used in this study to describe the immigrant women’s health through physical activities.

Physical inactivity among immigrants in high income countries is not fully understood yet. According to Wieland et al. (2015) some factors contribute to the complexity of this issue namely social, cultural, socioeconomic and environmental. Social factors explore more about how low of support immigrants have in physical activity participation. For example, immigrants who know positive PA role models in their community are more likely to involve themselves in PA. (Wieland et al. 2015).

Women may prioritize doing something for their children instead of participating in PA. This is because cultural factors might dictate what is important for them. Socio-economic factors which include low literacy, low education and poverty are a PA hindrance in immigrants. It is possible that, immigrants from poverty might find themselves being poor in their new country which means a likelihood of economic barriers that bring about PA gap among the immigrant group. Lastly, environmental factors such as lack of access to sport facilities and weather can affect PA in immigrants. (Wieland et al. 2015).

There are a lot of benefits when one participates in different kinds of physical activities. Cheng et al. (2013) discuss the advantages between physical activities and cardiovascular diseases. Coronary artery disease (CAD) and stroke are some of the main cardiovascular diseases (CVD) that are also the main causes of mortality and morbidity globally. Physical activity (PA) has been studied to reduce cardiovascular disease risk factors and its burden. Endothelial dysfunction (ED) is another form of heart disease. It occurs when there is less nitric oxide (NO) in blood vessel walls and this marks the beginning of atherosclerosis. PA involvement would ensure better nitric oxide production and restore the

nitric oxide's vasodilation function. Thrombosis and blood clot are seen on the last stages of atherosclerosis. Thrombosis is associated with acute myocardial infarction, unstable angina, ischemic stroke and abrupt cardiac death. PA reduces blood coagulation in the blood vessels hence attaining healthy blood vessels. Chronic systemic inflammation is caused by an increase in proinflammatory markers for example C-reactive protein (CRP) and Interleukin-6 (IL-6). An increase in these markers have been studied to be one of cardiovascular risk factors. The studies have concluded that, physical activity and exercise can reduce CRP and IL-6 plasma levels and other inflammatory agents. (Cheng et al. 2013).

There is a strong evidence that physical exercise can reduce diabetes incidence. Diabetes is a disease that occurs when one's blood sugar levels are too high. Blood glucose is the main source of energy and comes from the food we eat. Pancreas produces insulin hormone and transports glucose into the cells for energy use. The body might have problems in producing insulin or at times, might not produce any and so, the glucose produced from the food we eat does not reach the cells. Too much glucose in the blood can cause health problems and is a major risk factor in CVD. PA and healthy diet can prevent type II diabetes. (The National Institute of Diabetes and Digestive & Kidney Diseases & Cheng et al. 2013).

Hypertension also known as high blood pressure also benefits from physical activities. Regular PA strengthens one's heart and therefore, a stronger heart can pump more blood effortlessly. This in turn ensures less pressure in the arteries and results to lower blood pressure. (Cheng et al. 2013).

According to World Health Organization (WHO), overweight and obesity are defined as excessive body fat accumulation that has a negative influence over one's health. Body mass index (BMI) is used to measure obesity as follows: one's weight in kilograms divided by the square of his or her height in metres. An obese person has a BMI of 30 and above, an overweight person has a BMI of equal to or more than 25. If a person is involved in moderate level physical activity for 150 to 200 minutes in a week, he or she is able to manage an ideal body weight. If physical activity is done to achieve weight loss,

moderate level physical activity should exceed 250 minutes in a week. Obesity and overweight are risk factors to some diseases including diabetes, cancer and cardiovascular diseases. (WHO, 2019 & Cheng et al. 2013).

WHO describes mental health as ‘a state of well-being in which the individual realizes his or her own capabilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her own community.’ WHO continues to stress that ‘mental health is not just the absence of mental disorder.’ There is a link between PA and mortality in people with poor mental health. This link was described by a study which included 5240 men aged 20-86 years and had anxiety, depression, suicide thoughts and receiving psychiatric or psychological counselling. The conclusion of this study revealed that PA was linked with 53-83% lower risk of all-cause death. Sui et al. 2017). Additionally, a clinical trial of 522 patients with CAD showed that their mortality was around four times high versus low symptoms of depression, anxiety and hostility (psychosocial stress). (Milani & Lavie, 2009). Patients who had an increase in PA through exercise intervention decreased their risk of all-cause mortality by 19% even with high level of psychosocial stress. These two examples show that PA has benefits on all-cause and CVD mortality in people with poor mental health. Physiological and psychological factors may have an influence between PA and mortality in older adults with poor mental health. PA raises the core body temperature which is responsible in reducing feelings of anxiety due to increased relaxation sensation and decreased muscular tension. (Higuera-Fresnillo et al. 2018). PA also increases the release of endorphins which brings positive mood and overall well-being results. Increase in availability of brain neurotransmitters such as serotonin, dopamine and norepinephrine that gets rid of depression thoughts is guaranteed by PA. Lastly, PA distracts one from worries and depressive thoughts and enhances self-efficacy which is responsible for an individual’s well fulfilled life. (Higuera-Fresnillo et al. 2018).

2.7 Evaluation of active program effectiveness

Physical inactivity is most often found in vulnerable groups of people. People who have settled in a new country may be less engaged in sports and physical activities. Some countries have come up with policies that enhance community based health programs that

improve physical activity behaviours and health-related quality of life. According to Herens et al. (2016), these community programs aim to change individual's physical activity behaviour and enhance physical activity maintenance and program adherence by using attitude, subjective norms, self-efficacy, social support and physical enjoyments aspects. Ecological aspects discuss highly about taking some factors into consideration such as factors within and across individual, group and community levels. The differences between physical activity initiation and physical activity maintenance and the ecological aspects create huge challenges in evaluating community based health programs. (Herens et al. 2016).

The first challenge is that; these programs focus on individual level factors. Community based health programs require multilevel approach to hypothesis testing, taking into account the interdependencies within individuals, groups and communities. Secondly, these programs target vulnerable group of people and so, identifying factors and instruments to be used to measure physical activity and health-related quality of life in this group of people might be challenging. Lastly, recent literature reveals that factors that initiate change in physical activity behaviour are different than the ones that predict physical maintenance. Till now, no standards are in use to define physical activity maintenance. What is mostly used as a definition is, physical activity maintenance is being active once a week for a period of six months.

Some studies show that relevant factors for physical activity behaviour initiation are described in terms of pre-motivational and motivation factors such as awareness, knowledge and health risk perception, attitude, self-efficacy and social influence. Post-motivational factors in physical activity maintenance i.e. psychological factors differentiate intention and behaviour such as self-regulatory processes, ability to cope with daily stressors and self-efficacy maintenance. (Herens et al. 2016).

3 IMMIGRANT'S HEALTH SITUATION IN FINLAND

Berry (2016) explains that multiculturalism is the inclusion of cultural diversity in a society. Multiculturalism contains equity as the second important aspect of it. A society that engages in diversity and equitable participation is one that attracts multiculturalism and integration. Being an immigrant in a new country can be stressful. Research has shown that immigrants experience feelings of isolation, loneliness and despair from removal from family and friends, limited job opportunities and lack of leisure activities. Moreover, access to health services was found delayed or relatively less among immigrant population groups. (Goel & Penman 2017).

The process of integrating into a new culture can involve acculturative stress according to Bekteshi et al. 2017. This is stress related to the struggle to reconcile the culture of the original country with the host culture. This stress includes maintaining continuity with the behaviours of a person's cultural practices while adopting to the characteristics of the host culture. Some people may experience psychological distress as manifested in depression, anxiety and other mental allied health issues. Family Stress Management (FSM) and family crisis models stress the importance of understanding the way stress contributes to poor mental health. These models claim that, stress becomes an unbearable experience when it disrupts the functioning of the family. Still according to these authors, risks for psychological distress includes personal and interpersonal contexts i.e. poor physical and mental health and loss of a loved one during immigration. Also family context i.e. strained family ties and family conflicts. The third risk for psychological distress is in the social context. This includes everyday racial discrimination, poverty, loss of income, being in debt, inability to get employed, cultural adjustment and being forced to immigrate. (Bekteshi et al. 2017).

Finland is becoming more and more multicultural as the years go by. Cardiovascular disease mortality and prevalence has been on the rise in Finland than most European countries. This trend has been on the decline through health promotion and improved treatment. The amount of immigrants in Finland has risen from 0.5% of the total Finnish population in 1990 to 5.5% in 2013. There is a high probability that they will make up 10% of the total Finnish population by the year 2020 states Skogberg et al. (2016).

The Finnish nutrition recommendations stress that, a healthy diet should comprise of daily intake of whole cereal products, vegetables, fruits, berries and fish intake for 2-3 days a week. Age, sex and education socio-demographic factors play a vital role in immigrants' food consumption. A study conducted by Adebayo et al. (2017) was aimed to evaluate healthy food consumption among the Somali, Kurdish and Russian immigrants living in Finland. The study found out that, women and older individuals with higher education levels consumed healthier foods. The authors recommended further research to explore more of the immigrants' healthy eating choices since some of the groups in this study had lower consumption of vegetables, fruits and berries. (Adebayo, 2017).

Another study was done in Finland about overweight and obesity in Somali, Kurdish and Russian immigrant women as compared to the Finnish population. The results showed that, obesity and overweight prevalence increased with age among these study groups. Physical inactivity among some groups in this study were due to cultural practices. Moreover, some women groups in this study rarely think of physical activity as a form of exercise. What would be acceptable in their culture is either light or moderate walking as one is undertaking different kinds of house chores outside of their home as stated by Skogberg et al. (2018). Additionally, overweight and obesity in some women in this study is seen more of a prosperity standard and good health rather than an awful situation than can attract diseases. Ultimately, cultural practices and norms dictate when and for what reasons some of the women in this study group can carry out activities outside of their home. (Skogberg et al. 2018).

Obesity was most common in women of other African regions (23%) followed by Middle East and North African region (21%). Some of these women reported chronic illnesses and health issues, mobility and visual problems which in turn had an impact on their health, lifestyle and functional capacities. (Statistics Finland).

4 MENTAL HEALTH IN FINLAND

Ministry of Social Affairs and Health (MSAH) is responsible for national planning, guiding and monitoring mental health work. MSAH's objective of the mental health work is to strengthen people's good mental health and to reduce factors that undermine it. Mental health work includes activities that promote mental health, prevent mental health disorders and provide mental health services. Mental health services include guidance and advice provision, needs-based psychosocial support, psychosocial support in crisis situations and also the study, treatment and rehabilitation of mental health problems. Mental health services are provided by health centres and specialist medical care facilities. Social services, parishes and Non-governmental Organizations (NGO's) also provide mental health services. (Finnish Institute for Health and Welfare).

Most clients who require mental health services receive outpatient care with only a few requiring hospitalization. If one experiences symptoms of anxiety, depression or more severe symptoms, they should first contact their local health centre. Numerous health centres have psychiatric nurses who work with health centre physicians in order to help people in need of mental health services. Health care centres also have psychologists and psychiatrists. In case of a personal crisis, the Finnish Association for Mental Health, parishes and NGO's offer mental health services. (Finnish Institute for Health and Welfare). Disability due to mental health disorders creates a huge burden to the health care system and the society. In 2014, Finland registered 76% of new work disability pensions given to people aged between 18 and 34 years old according to a study done by Mattila-Holappa et al. (2018). The most common mental disorders within this age limit was mood disorders (39%), schizophrenia, schizotypal and delusional disorders (24%) and 12% of this age group had mental retardation. (Mattila-Holappa et al. 2018). This study further explains that most clients of this age group with mental health disorders in Finland have had some contact with mental health service providers. Low attachment to work due to mental disorders was found in this group of young people and so, psychotherapeutic and vocational interventions are needed to enhance employment integration. (Mattila-Holappa et al. 2018).

Mental health problems are prevalent among working middle-aged people in Finland. Physical inactivity is a risk factor for mental disorders. And so, leisure PA prevents common mental disorders. (Lahti et al. 2017). Physical inactivity and lack of a balanced diet are main reasons for childhood obesity thus interfering with a healthy transition to adulthood. (Fleig et al. 2014).

Late life depression (LLD) is said to be among the most prevalent mental disorders in older adults. LLD is mostly seen as a part of the aging process and therefore it might not be recognized well. Antidepressants like serotonin re-uptake inhibitors have been used to treat depression. These medicines have been reported to have side effects such as falls, epilepsy, cardiovascular events, hyponatremia (low concentration sodium in the blood) and increased risk for all-cause mortality. A study done by Jin et al. (2019) aimed at observing the effects a long-term exercise intervention had on depressive symptoms in older Korean women. After six months, the results of the findings were that the women had a reduction of depressive symptoms as well as in their functional capabilities. Moreover, people who have an increase in PA through exercise intervention decrease their risk of all-cause mortality. (Higuera-Fresnillo et al. 2018).

5 MONALIIKU ORGANIZATION

Monaliiku is a non-governmental organization (NGO) that promotes health and well-being in multicultural women's lives and the office is based in Helsinki, Finland. It was established in 2009 and has been operating ever since to give opportunities to multicultural women to engage in different sport activities. Fit4Life is one of the sport activities offered in the organization. Monaliiku is partnering with the researcher during the whole research process and hopefully the results of the study will be able to assist the organization in the future.

Fit4Life program in Monaliiku Organization is a solution for promoting health and quality of life among women of immigrant backgrounds. Activities offered by the program are sports, discussions with professionals about health and well-being related topics, health check-ups, eating healthy snacks together and cooking courses. Immigrant women who participate in these activities can choose the ones they wish to attend. All these sport activity centres are located in Helsinki municipality.

Ultimately, the program hopes to provide an environment which is conducive for health promotion, offering new sports and hobbies, having an improved knowledge of factors that affect health and well-being, solving individual needs, expansion of social networks and also integrating women in a multicultural environment.

6 AIMS AND RESEARCH QUESTIONS

The aim of this research was to describe immigrant women's motivation in physical activity participation in Helsinki, Finland. This thesis is important in describing the immigrant women's health issues through Monaliiku organization. It also educates and informs other women from immigrant backgrounds there is a place they can attend and learn more about healthy living habits. This topic is very interesting in a way that, it enables others to understand more about immigrants' health needs and how the society can anticipate for them in the near future.

Interview questions were tested in the thesis seminar held in November 2019 in Helsinki campus with other classmates and lecturers present. Initially, the questions were three but after the discussions, the researcher chose only two of them.

Literature review revealed four specific themes under this topic. The themes are: physical activity, healthy nutrition, self and future motivation and participation hindrance.

Research questions in this study are:

1. What motivates immigrant women to participate in Fit4Life program?
2. What kind of challenges do immigrant women experience when participating in this sport program?

7 METHODOLOGY

7.1 Data collection

This research is a qualitative study and was chosen to understand the participants' thoughts and experiences about their health through PA participation. There are existing studies in Finland about this topic and the author wished to discover new thoughts and views from the participants. The interviews were structured meaning all questions were prepared in advance and all participants had same questions. These questions were open-ended as in they do not require "yes" or "no" answers rather longer responses.

The immigrant women interviewed were from two different continents namely Africa and Middle East from ages 20 to 50. Participants younger than 18 years old were not old enough to participate independently and those older than 50 years old had Finnish language limitation. All the participants have lived in Finland between 5 and 28 years, have families and live in the Helsinki municipality. All participants understand and speak Finnish language quite well. Language and age were the biggest determinants of the participation criteria. One participant did not possess any form of education background whereas most had two years of Finnish basic education. Only one participant had college education from her own country. Six participants have Finnish citizenship and one has a Finnish residence permit. Total number of interviews conducted were seven altogether. The first three interviews were done using a translator who is a project coordinator of the sport program, the author was present and took notes the whole time. The fourth interview was done by the researcher and a translator, who was the second project coordinator was present. The last three interviews were done by the researcher only without any translator present. Although, all participants were informed to ask for one if they needed at any time. The translators used were project coordinators of the Fit4Life sport program and were known to all participants. They also helped with taking some notes during the first four interviews.

Six of the participants agreed to be recorded and one did not allow it. The author however took notes the whole time during the interview. Although most of the participants agreed to be recorded, the researcher took some notes from them as well.

The length of the interviews was between 30 and 45 minutes. The number of the participants was seven and all participants were given a number for anonymity purposes. The interview had three parts; reading the consent part, asking the participants about their background information then lastly asking the interview questions. The questions were grouped into themes which arose from the literature review. Each theme had their own corresponding questions.

All participants live in Helsinki municipality and the author travelled to three community centres to conduct the interviews. Interviews took three days and were conducted in April and May 2019. The table below shows themes from the literature review, interview questions and main literature review references.

TABLE 1. A table containing themes, interview questions and references

| Theme | Research questions | Main references |
|---|---|--|
| Physical activity, healthy nutrition and self + future motivation | What motivates multicultural women to participate in Fit4Life program? | Adebayo et al. 2017, Bekteshi et al. 2017, Chang et al. 2018, Fleig et al. 2014, Higuera-Fresnillo et al. 2018 |
| Participation hindrance | What kind of challenges do multicultural women experience when participating in this program? | Cheng et al. 2013, Leblanc et al. 2013, Wieland et al. 2015, |

7.2 Data analysis

This study used deductive content analysis whereby, the researcher came up with the research questions from previous studies. Moreover, the researcher constructed their research questions according to the existing knowledge. (Kyngäs et al. 2019). In this study for example, it was known previously that immigrant women's healthy eating habits were

not largely researched in Finland. There is need for further studies for example, PA engagement and healthy diet consumption as discussed by Adebayo (2017) & Skorberg et al. (2018). And so, by having theme questions about healthy nutrition and PA participation brought out the participants' thoughts and perceptions about these themes. Structured open-ended interview questions enabled the participants to also explain freely about their experiences concerning all these questions. This approach is useful to gain more knowledge on the topic being studied. (Kyngäs et al, 2019).

In deductive content analysis, all data is reviewed for content and categories emerge from the analysis. (Elo & Kyngäs, 2008). The analysis should describe the content of the categories at the reporting phase. (Shreier, 2012).

Thematic analysis which is a form of qualitative content analysis was used to analyse the data. This analysis contains six phases: 1) data familiarization 2) generating initial codes 3) theme search 4) naming themes and 6) have illustrative data and quotations in the final report. (Uhl et al, 2018). This analysis was achieved by listening to the iPad recordings and the written notes enough times to undergo all of the six phases. (Uhl et al, 2018). These phases are illustrated on appendix 2.

8 RESULTS

The length of the interviews was between 30 and 45 minutes. The number of the participants was seven. The interview had three parts; reading the consent part, asking the participants about their background information then lastly asking the interview questions. The questions were grouped into themes which arose from the literature review. Each theme had their own corresponding questions. The interpreter used during the first three interviews was a project coordinator of the organization. More information concerning some topics e.g. check-up days was given by the project coordinators.

The immigrant women interviewed were from two different continents namely Africa and Middle East from ages 20 to 50. Most participants were married and had children and were Finnish citizens. More than half of them had basic education completed in Finland and no prior education from their home country. Participants' length of stay in Finland was between 5 and 28 years.

The table below shows the participants' demographic factors. N represents the number of participants in this study.

TABLE 2. Demographic characteristics of participants in this study

| Demographic characteristics | n=7 |
|------------------------------------|------------|
| Age | |
| 20-30 | 1 |
| 31-40 | 2 |
| 41-50 | 4 |
| Continent of origin | |
| Africa | 6 |
| Middle east | 1 |
| Level of education | |
| College | 1 |
| High school education | 1 |
| Basic education in Finland | 3 |
| Vocational education | 1 |
| No education | 1 |
| Immigrant's status | |
| Finnish citizen | 6 |
| Residence permit | 1 |
| Residence | |
| With spouse only | 1 |
| With spouse and children | 4 |
| Divorced and had children | 2 |
| Living alone | - |

8.1 Physical activity

This study found out that the participants enjoyed different kinds of sports and leisure activities namely; gym workouts, swimming, stretching, walking for leisure and as a means of transportation from point one to the other and were involved in various house chores.

Reasons for participating in this sport program were weight control, child and family support, stress relief, social inclusion through friendships and overall wellbeing. For some, they participated in the sport program because of many reasons that happened at the same time:

'I was a housewife when I heard about this program and at that time, I had a young child. I was able to attend the workout sessions, catch up with other mums and at the same time

have my child taken care off. It was a good thing these sessions were organized daytime so that mums with young children can also take part.'

Family support as a reason for participating had many participants describe how invested their children and partners were with them taking part in the sport program. The following report was made to support how the children were so happy that their mother was trying to live a healthier life:

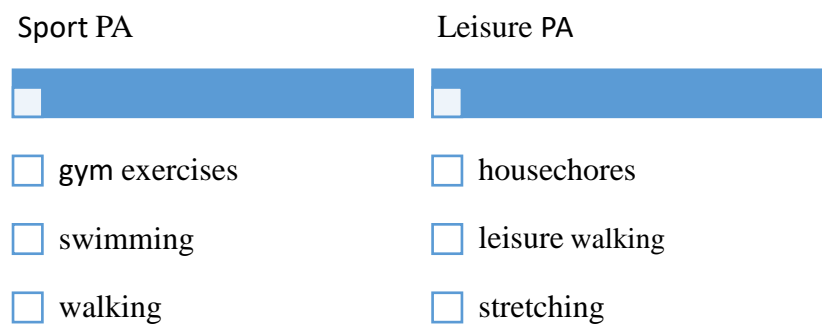
'Mum, it is time for you to go and work out.'

This sport program also offers workout and language support to participants. Everyone needs to know how to use the gym equipment and so, this is provided to them. Some participants offer their language translation skills to others. In a case whereby a participant is new in the country and has just joined the sports program, there are highly motivated participants who volunteer in language translations. For example, when they are new in the country, they cannot speak Finnish therefore someone who speaks the same language will volunteer to do the translations. This is what one of the participants said about helping her peers:

'I am an immigrant and so I know what the other immigrant women will need in these kind of situations.'

From these findings, this sport program would help participants to join other groups by giving them adequate information about other sport programs beforehand, recommending them only about women-only and free groups. The following figure (FIGURE 1) shows sport activities undertaken by the participants either at the Fit4Life sport program, in other workout places and when at home or outdoors.

FIGURE 1. Participants' sport activities and leisure PA



8.2 Healthy nutrition

All participants had mentioned healthy foods in their daily intake to meet their dietary recommendations. Learning about healthy nutrition through this sports program has enabled them to realize their personal dietary daily goals. Some of the discussions concerning what they ate are as follows:

'I like eating salads, fruits, vegetables, fish and other kinds of meat.'

'I never used to eat vegetables before and now I like eating them. I also like eating whole wheat breads. I do not eat sweet stuff and I do not drink juices. I used to drink so much unhealthy juices before.'

There were discussions about how the food preparation process has changed from the moment they joined this sports program. Participants shared their experiences about consuming unhealthy foods back in their home countries and also before joining this sports program. This is one of the responses:

'I think healthy food to me means eating more vegetables, no salt, no sugar...before I used to prepare foods with too much salt and sugar but now I use less of these ingredients. My children ask me why I used to prepare foods with too much salt and sugar, and now it is like there is nothing.'

African and Middle East Foods have differences as compared to Finnish foods according to the findings of this study. The unhealthy African and Middle East foods comprised of too much meat, white rice, and less vegetables. Moreover, people not willing to learn how to consume vegetables in their home countries was a topic that came up a few times. A healthy nutrition can be affected by cultural beliefs as described by one of the findings:

'If you eat vegetables in my country, people will think you have no money.'

After the integration process into the Finnish society, participants get to experience the food culture here and have opinions concerning this matter. As much as many participants were delighted to mention how healthy the Finnish foods are, there was a different opinion about the Finnish foods generally:

'We eat a lot of vegetables and less meat in my home country. Finnish foods have a lot of creams, oils and feel very heavy. I think the food from my country is healthier than the Finnish food.'

Fit4Life program provides participants with theme days that talk about ways of living a healthy life. Some of these days include food preparation days and they highlight how to cook foods in a healthier way. One positive fact that the participants' brought up was that they can still enjoy foods from their own countries but cook them in a healthier way e.g. use less of some ingredients like salt, choose whole grains over the processed ones and avoid methods of cooking that will contribute to using more oil e.g. frying food in a lot of oil. During sport days at the Fit4Life program, the participants are offered healthy snacks the whole time and most of them try to keep up with having the same food rhythm when exercising and when not. Some responses about the participants' health nutrition satisfaction were:

'I have learnt how to prepare foods in a healthier way. I now understand how much I need to eat per day.'

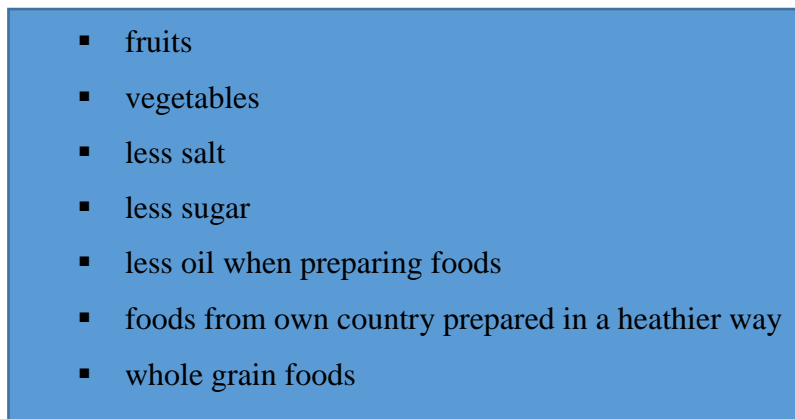
'I used to eat more sugar at home, but I have learnt to eat healthier food choices during sport days.'

'The food from my country is still part of my diet, but I do prepare a healthier version of it twice a week and the rest of the days I prepare Finnish foods.'

'Nowadays I eat healthier food options and eat latest by seven in the evening.'

The following figure shows the kind of foods consumed by the participants of this study.

FIGURE 2. Foods consumed by the participants of this study



8.3 Self and future motivation

Sport motivation is when an individual participates in a certain sport activity when perceiving the value of that activity thus enhancing living benefits of stress relief and physical health and well-being. Moreover, autonomous motivation or intrinsic regulation happens when a person engages in an activity because it interests them. Friends who had taken part in this sport program had recommended these participants to join this group. Their recommendations were based on their own positive views about the services offered to them in this sport program.

Therefore, participants in this study perceived benefits of involving themselves in PA both at home and with the other participants at the Fit4Life program. They found out that PA was a stress reliever and enabled them to live an active healthy life with all the benefits that come with it e.g. weight loss. Maintaining a healthy weight was highly associated with body image mostly how one will be seen by the others in the same sport group.

Social inclusion has helped the participants to motivate each other to stay healthy and each one of them felt like they had to keep attending the sport program so as not to be left behind. An example from the social inclusion category was:

'I do not want to be told I have extra weight, so I have to keep on working out.'

Work and school are some of the reasons as to why attending the sport program was challenging to some of the participants. Around half of the participants felt like the sport program is enough as it is and some were reluctant to join other sport groups. One of the participants was uncertain about what the future brings and said:

'Life changes so I do not know anything about the future.'

The need for better experiences in the future was heard from some of the participants. They wished to have different kinds of equipment to exercise with because same equipment could create less motivation. As these participants are used to working out together, they also wished that the sport program would attract as many women in the future. Sport participation satisfaction was seen from the participants and their experiences hence, the same way someone recommended them is the same way they would recommend other women to join this sport program.

8.4 Participation hindrance

Most participants had no health problems that prevented them from participating in the sport program. Knee pains were some of the challenges experienced by some participants during workout sessions. Participants with weight issues were motivated in maintaining a healthy weight.

Other challenges that hindered some participants from attending the sport program were personal and child health situation. If a participant was sick or having a doctor's appointment or had a child who was sick, they preferred not to attend. Weather was also another reason mentioned for not participating in the sport program. Some example of these findings is as follows:

'If I have a flu or not feeling well generally, I will just stay at home. Sometimes if the weather is horrible or if my child has an appointment at the clinic, I will not participate in the sport program.'

9 DISCUSSION

It is clear from the results above that the participants understood what PA is all about and why they participate in it. Exercises done in the gym, walking and doing house chores all involve physical exercises as explained by Chang et al. (2018). PA in a team as opposed to PA alone is most likely to involve participants fully hence the social inclusion feeling. Some studies show that, socially included adults in PA activities have less depression, better cognitive and physical status, higher levels of satisfaction in their lives and most likely to be involved in healthy lifestyles. (Almeida et al. 2019 & Baker et al. 2010). And so, as people age, the body undergoes biopsychosocial changes which decline cognitive and functional processes in the body thus PA is a vital non-pharmacological preventive approach. Almeida et al. 2019 & Baker et al. 2010).

Most of the participants had a familiar person introduce them into the program. And so, having a role model who can recommend and show them what they do was a huge decision for them to get on board. (Wieland et al. 2015). All participants were recommended by a friend to join this sport program. One positive surprising result was the fact that, all of the participants had so much social support system and that the children and spouses were invested in their mothers' health and wellbeing. From the women's discussions, their motivation to attend the sport activities encouraged their children and spouses to go and work out. The process of acculturation can cause stress and disrupt the functioning of a family hence affecting one's physical and mental health negatively. When the children and the spouses offer support, they not only ensure her physical and mental health is improved but also theirs as well. (Bekteshi et al. 2017). Most participants believed in this sports program since it has had numerous positive changes in their lives. Having familiar surroundings, free workout sessions and women-only sport program were mostly seen as the reasons as to why some of them wished to not explore other programs.

There were many reasons as to why the participants were motivated in doing sports and engage themselves in living a healthy lifestyle. Some of the most talked reasons were theme days, child-care support and social inclusion. Almost all participants looked forward to theme days simply because they were taught more about healthy food choices. The topics included what foods to eat, how much, when and how to prepare them. It was

empowering to listen to some of the ladies explain how they still enjoy foods from their home countries which have been prepared in a healthier way. A healthier diet should comprise of daily intake of whole cereal products, vegetables, fruits, berries and fish intake for 2-3 days times a week as discussed by Adebayo et al. 2017. None of the participants mentioned berries as part of their diet and so, it is not known if they consume them. Moreover, nutrition should be emphasized in the future. Most of the participants felt that the Finnish foods were healthier than foods from their home countries.

Most participants had no health problems that prevented them from participating in the sport program. A few participants had some physical hindrances which prevented them from working out as they would have wished. Overweight is a risk factor to some illnesses e.g. diabetes, cancer and cardiovascular diseases. (Cheng et al. 2013). An issue that came up from one of the project coordinators was that, the participants have two health check-ups twice a year and none of the participants mentioned this. Blood pressure (BP) values from each participant are measured and if they are not ideal, they are advised on how they can change their diets i.e. less salt and be involved in sports more often during the week. According to Anold & Mcnaughton (2018), blood pressure measurements reflect a person's health and wellbeing. The BP's accuracy depends on various factors including the location of BP measurements and the correct cuff size. In case of an obesity patient, the upper arm circumference fittings often exceed the cuff fittings and in such a situation, the forearm BP measurements are used. (Leblanc et al. 2013). It is very vital to obtain the correct BP values as incorrect readings might result in hypertension misdiagnosis as explained by Overstreet (2015).

Another test done to the participants is the balance test which is helpful to them in avoiding falls especially during winter. Strong muscles and flexible joints play a huge role in our balance. Our ankles make some small adjustments therefore keeping our body weight over our feet. If a person's ankles are weak, sore or stiff, they will definitely not be able to make strong, swift adjustments that aid us maintain our balance. Frequent balance exercises are needed to keep the ankles strong and flexible which reduces a person's chances of falling. (National Osteoporosis Foundation, 2019).

The third and final test done as a routine check-up is the body composition analysis. All participants go through this process using a body composition analyzer and the interpretation of the results is explained by the project coordinators. The human body is comprised of four molecular-level components namely: water, fat, proteins and minerals in that order of decreasing levels. Excessive amount of body fat is related to an increase in morbidity and mortality. Most body fat is stored in the adipose tissue and some body fat is present in the liver and in skeletal muscle. High amount of visceral adipose tissue are related to an increase in cardiac risk, type 2 diabetes, liver disease and cancer. Also, high amounts of liver fat increase the risk of liver disease and type 2 diabetes and increased muscle fat is associated with an increased risk for insulin resistance and type 2 diabetes and reduced mobility. (Borga et al. 2018).

Most of the participants had explained happily that they have lost some weight during the course of their time in this program. The community sport centres are all located in Helsinki and all the participants live in Helsinki and so, this is one of the motivating factors as to why they would feel the need to work out. So, it was not surprising that distance or bus ticket challenges were not mentioned by any participant. Moreover, one of the participants talked about weather being a huge determinant on whether she would attend or not. Weather can be among the environmental factors that would prevent someone to move from one point to another. (Wieland et al. 2015). Additionally, child's health and personal health had an impact on sport participation.

10 CONCLUSION

Physical inactivity and unhealthy eating is not only a public health concern but also a global health issue. All the participants attend fit4Life program with the aim of promoting their health. The goal is to feel empowered through health promotion practices. This study found out that primary and secondary health prevention strategies are needed to create awareness to the participants. For example, primary prevention strategies needed would be to educate the participants more about healthy eating habits because berry consumption was not mentioned in the discussions. Also, secondary prevention strategies such as blood pressure testing, body composition analysis and balance tests are offered to all the participants. This topic came from one of the project coordinators and so, more awareness about these prevention strategies could be done.

Previous researches have stressed the need to find out more about healthy eating habits and physical activity involvement in immigrants living in Finland. This research found out that, the women ate adequate vegetables, fruits, fish and whole cereal products enough times a week. Since none of the participants mentioned berries as part of their diet, it is hard to speculate why berries were not part of the healthy nutrition discussion. (Adebayo et al. 2017). Furthermore, emphasis on healthy nutrition is needed during the health education days.

All participants were highly motivated and involved in the physical activities. They participated in gym workouts, stretching, walking and some took swimming classes in different locations in order to have adequate workouts a week. There is a need to have different kinds of equipment in the gym as mentioned during the discussions with the participants. WHO recommends 150 to 200 minutes a week of moderate level physical activity if one wishes to maintain an ideal body weight. To achieve weight loss, WHO recommends more than 250 minutes of moderate level physical activity a week. (WHO, 2019).

The aim of this research was to describe immigrant women's motivation in physical activity participation in Finland. Fit4Life sport program is free of charge, offers various ways to participate in sport activities and live a healthier lifestyle. However, for these

participants to be enrolled in other sport programs, those other programs need to be free of charge, have a women-only policy, adequate knowledge given beforehand and offer different kinds of equipment. Fit4Life sport program is free of charge so participants do not need to sign up in other sport activities which have a fee. All participants are very used to having women around and so, they would not wish to compromise that. Getting all the required information about a new or another sport program was a crucial reason for them to join. Different kinds of exercise equipment can increase motivation and hence participation levels among these immigrant women. This can also motivate them to join other programs with ease.

Health education plays a crucial part in living a healthy lifestyle. This sample group did not mention the health days that are conducted twice a year through their organization. Knowing the relevant information about their health and for what reason they do it could raise the participants' motivation. Some dietary recommendations were lacking from the group and so, more studies are needed to establish healthy nutrition lifestyle in immigrant women. This research had a small sample therefore, more research about this topic is needed.

11 LIMITATIONS AND RECOMMENDATIONS

This research had a small sample from immigrant women living Helsinki, Finland. Since the establishment of Fit4Life program four years ago, most participants have been from the beginning of this program and so, their thoughts may be same. This small sample does not depict the experiences of other immigrant women living in Finland. The other limitation is that, a translator was used during the first three interviews and another translator was present during the fourth interview. This could have resulted to the participants speaking freely about their experiences of the program hence creation of a bias situation during these first four interviews. One project coordinator said that they usually have feedback times and participants have same thoughts when asked about how to better their future experiences in this sport program.

The participants' discussions showed that exercising in a group makes them feel like family and this was also a determinant in being motivated to continue with the sport program or join other groups. And so, having better advertising strategies to attract as many women participants is needed. Additionally, advertising other sport groups to the participants by giving them all the information they need is crucial too. The other recommendation is health education emphasis. From the findings, berries as part of dietary recommendations were not mentioned by the participants. Health check-up days were mentioned by the education coordinators. Health education is crucial in understanding what needs to be done and the reasons behind it. It has been proven that when one participates in an activity knowing the advantages of it, it not only increases the motivation levels but also enables a healthier and fulfilling life.

12 ETHICAL CONSIDERATIONS

It is crucial for all researchers to understand and stick to research ethics in order to produce ethical, reliable and valid outcomes. (Stephens & Brighton, 2015). Ethics are moral principles that help guide decision-making and behaviour or how to live a life based on moral principles. Moreover, ethics are rules and standards by which a community regulates the behaviour of its members. (Harris et al. 2014). Researchers are urged to live, work and conduct research in an ethical manner so that people can thrive physically, psychologically, emotionally, socially, morally and interpersonally. (Atkins et al. 2014).

The data will be presented in such a way that; participants' anonymity will be observed. Also, the interview contents are confidential and only the researcher has the right to analyse them. After the research is done completely, all papers used in the interview to write participants' thoughts will be safely destroyed and iPad audios deleted. All seven participants agreed to sign the forms giving their full cooperation in this research.

13 VALIDITY AND RELIABILITY

The term validity in qualitative research studies means that, the research question is valid for the desired outcome, the choice of methodology answers to the research question, the design is appropriate for the methodology, sampling and data analysis. It is also expected that the results and conclusions of the study are valid for the sample and context. (Leung, 2015). The methodology of the research answers to the research question/s and is also reflected in the results, discussion and conclusion of this study.

Another vital way to increase the validity of a qualitative research is to have correct and enduring contacts with key informants who can extend the researcher's contact time and the phenomenon to be studied. (Dikko, 2016 & Faris, 2017). This is because the key informants know the key operations of the organizations and may bring extra details to be used in the studies. (Mckinnon, 1988). In this research study, the researcher was able to be in contact with the key co-ordinators of Monaliiku organization from the beginning to the end.

Reliability is achieved when it consistently measures the concepts it is supposed to measure without any bias. There are two ways of establishing reliability: test-re-test and parallel form. Test-re-test reliability is achieved when the same test is given to the same respondents at different times and obtaining the same results. If the same test with different wordings or sequence of questions result to same results brings about parallel form reliability. (Dikko, 2016). All the research questions were the same to all participants and were asked in the same order as they appear.

This research uses a methodology that answers to the two research questions. The validity is also described in the results, discussion and conclusion chapters. As there were seven participants, all the data collected was fully utilized to bring out the results and this further helped with the discussion and conclusion chapter which included relevant literature.

One project coordinator was a translator during the first three interviews while the researcher took notes. Another interpreter who is also a project coordinator was present at the fourth interview however, the researcher did the whole interview. As the coordinator had explained, they normally have feedback times and the participants do tell the same

thoughts and perceptions. Also, the project coordinators are known to all participants and so, when they were discussing their experiences, it could have been possible they gave out the same thoughts in some questions as usual during the first four interviews.

Use of the two project coordinators during the four interviews might have caused some bias situation. This is because the translators were already known to the participants and were not trained interpreters.

14 ACKNOWLEDGEMENTS

The author of this research would wish to thank the managing director of Monaliiku organization for making it possible to conduct this research. The author would also wish to recognize the effortless work the two project coordinators did to manage their hectic schedules and be there to arrange and help with the interviews.

The research would not have been fully complete were it not for the willingness of the participants to share their thoughts and perceptions. The participants of this research study were very cooperative during the data collection time and for that, the researcher is truly grateful.

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APPENDIX 1. Participants background information and interview questions

Participant's background

Participant's number

Age

Country of origin

Residence (living alone, with a spouse, shared apartment or in a dormitory)

Years lived in Finland

Municipality of residence

Education level

Immigrant's status (documented, undocumented or refugee)

Interview questions from the literature review themes

1. Physical activity

- Why do you feel the need to participate in the sport program?
- What kind of sport activities do you participate in?
- How has your lifestyle changed since you joined the sports program?
- What kind of support does your loved ones give in relation with your sport participation?
- In what ways can the program do to help you join other sport groups?

2. Healthy nutrition

- What does your healthy nutrition comprise of?

- What kind of nutrition differences are there between your home country and Finland?
- How does this program motivate you to stay healthy?
- How do your food choices differ or compare during sport times and other times?

3. Self and future motivation

- What motivates you to work out?
- How did you get to know about this program?
- What can the program do to better your future sport participation experiences?
- How does this program motivate you to still be part of it in the near future?
- What kind of recommendations do you have for someone who wishes to join this sport program?

4. Participation hindrance

- Do you have any health issues that prevent you from participating in the sport program? If yes, please name them
- What other challenges do you encounter during sport activities?

APPENDIX 2. Title of appendix 2. Research questions, raw data, summary of the raw data, sub-categories and main categories

| Research question | Raw data | Summary of the raw data | Sub-categories | Main categories |
|--|---|---|--------------------------|-------------------------|
| What motivates multicultural women to participate in Fit4Life sport program? | My body feels great when I work out | This participant said her body feels great after participating in the sport program | Well-being | Healthy life |
| | I walk and use the gym more nowadays | She has more interest in working out in the gym and walking | Personal goals | Motivation |
| | My family is very supportive when I work out | Both the children and the husband are very supportive of her workout schedules | Interest from the family | Family support |
| | It is very boring to be in the house alone. | Feels lonely in the house and is glad to exercise with other women | A sense of belonging | Social inclusion |
| | The best working out place | Thinks that there is no other better place to work out than this | Tips offered | Workout support |
| | I translate Arabian language to Finnish language | The participant is happy to help with language translations | Peer support | Language support |
| | I can work out and have someone babysit my child | Having my workout sessions and my baby being cared for at the same time is rewarding | Child care | Child support |
| | I feel good because my weight has decreased | Consistent exercises have ensured my weight loss | Weight loss | Weight control |
| | I learn how to prepare healthy food | The sport program has food preparation days in which the participants are taught how to prepare healthy foods | Food preparation days | Theme days |
| | I now understand how much I can eat and drink per day | Through this program, the participant is able to know how much they eat and drink for a healthier lifestyle | Personal dietary goals | Dietary recommendations |
| | I fear being told I have extra weight by | The participant does not wish to have extra weight so as to feel accepted by the other participants | Body image | Social inclusion |

| | | | | |
|---|--|--|-------------------------|--------------------|
| | other participants | | | |
| | A friend invited me to this sport program | The participant used to know a friend who participated in this program. The friend invited her to join | Friend support | recommendations |
| | All the women here are like family to me | Being part of this program has made the participants to feel like they are one family | Peer support | Social inclusion |
| What kind of challenges do multicultural women experience when participating in this sport program? | I wish there was a variety of working out equipment in the gym | The participant expresses her disappointment in using the same equipment all the time | Future thoughts | Future feedback |
| | Knee pains prevented me from doing exercises | The participant has had challenges participating due to knee pains | Extra weight challenges | Weight issues |
| | I cannot participate if my child has a doctor's appointment | The participant is not able to attend the workout sessions in the child has a doctor's appointment | Child's sickness | Child's health |
| | Sometimes the weather can be a challenge | If the weather is too extreme, it can determine if the participant will attend the workout sessions | Bad weather | Weather Challenges |
| | If I am not feeling well, I cannot participate | When the participant is unwell, they are not able to participate in the sport program | Self-care | Personal health |

APPENDIX 3. Informed consent form to Rhoda Korpijärvi's research

Hallo,

I would wish to welcome you to take part in the interview process of my research study. The aim of my research is to describe multicultural women's motivation in sports involvement in Finland. I feel like your experience as a multicultural woman living in Finland will contribute in helping better the services you get from Monaliiku Organization.

This research will involve a one-on-one interview session that will take approximately 45 minutes. The questions provided will be open-ended questions. An iPad audio application will be used to record the interviews. We will use Finnish language during the interview sessions. A translator will be present if needed.

Participation is voluntary; you can choose not to answer some questions or leave during the interview. The interview data will be saved so that nobody else can see it. The results of the interviews are reported so that the readers cannot identify the answers. Your answers will be used only in my Master Thesis study.

There is no direct benefit to you but your participation is likely to help find a way to better the services you get in the future. The information that I collect from you will be private. I will have a numbering system that will identify the participant rather than names for anonymity purposes. The data collected will be kept safe till the research is completely done. After the research is done, all data will be disposed.

This interview is part of my Master Thesis study, Diaconia University of Applied Sciences. If you have questions, do not hesitate to ask. My email address is Rhoda.Korpijarvi@student.diak.fi.

Rhoda Korpijärvi has given enough information about her research process and I will take part in the study and give my consent to interview recordings.

Participant's signature

Researcher's signature

Date and place