# Patterns of Physical Activity in Arabic males: Barriers and Motivations to Adopting Healthy Lifestyles

By

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## **Dedication**

To my father, to my mother, to my wife Nouria, to all my brothers and sisters.

To all my children Barah, Mohamed and Joud.

To all my Friends.

To all my colleagues in the Faculty of Physical Education and Sports Science in Libya.

### بسم الله الرحمن الرحيم

{رَبِّ أَوْزِعْنِي أَنْ أَشْكُرَ نِعْمَتَكَ الَّتِي أَنْعَمْتَ عَلَيَّ وَعَلَى وَالِدَيَّ وَأَنْ أَعْمَلَ صَالِحًا تَرْضَاهُ وَأَدْخِلْنِي بِرَحْمَتِكَ الْتَعَمْتُ عَلَيَّ وَعَلَى وَالِدَيِّ وَأَنْ أَعْمَلَ صَالِحًا تَرْضَاهُ وَأَدْخِلْنِي بِرَحْمَتِكَ فِي عِبَادِكَ الصَّالِحِينَ} [النمل: 19].

#### **Abstract**

The worldwide prevalence of obesity is reaching epidemic proportions in both adults and children and leading to increased risk of non-communicable diseases (WHO, 2004), including coronary heart disease, circulatory disease, cancer and type 2 diabetes. In the UK, increasing levels of obesity may relate to a decrease in sport and physical activity participation as only 39% of males and 32% of females are sufficiently active to meet stated targets for physical activity (Townsend et al., 2012). In Britain, approximately 8% of the population originate from ethnic minorities that includes a high proportion of individuals from Arabic countries, with a significantly greater odds ratio for a sedentary leisure-time physical activity pattern than people from other countries. The thesis contains three studies which identify the patterns of physical activity in Arabic males (men and boys) in Liverpool, and explores the barriers and motivations to adopting physically active lifestyles, before addressing the feasibility of an intervention to enhance levels of physical activity.

Study 1 examined the patterns of physical activity in 62 Arabic men and 65 boys during 7 consecutive days of continuous accelerometry recording. Men and boys were more active during weekdays than weekend days. Although boys were more active than men, they did not perform sufficient minutes of moderate to vigorous activity (60 min per day) to reach recommendations of MVPA. The men, however completed 190 mins per week of activity in the moderate intensity category and therefore satisfied Government guidelines. Study 2 investigated the barriers and motivators in becoming physically active by using focus group semi-structured interview techniques, followed by transcription and content analysis. The findings of the study indicated that physical activity plays a significant role in the individual's health and that Arabic males perceive several benefits of physical activity for the individual, such as self-confidence, mental health and improved physical condition. There was a mixed interpretation and understanding of physical activity in these groups, with barriers to becoming more active cited as lack of time and sociocultural barriers of not being accustomed to being physically activity. Facilitators, that encouraged participants to become physically active, included religion and enjoyment. Study 3 used a mixed methods approach to investigate the feasibility of an awareness raising intervention to increasing the levels of physical activity in Arabic males who owned exergames at home. An intervention group of men and boys were provided with physical activity guidelines. Changes in their physical

activity levels were measured (using accelerometry) 4 weeks after receiving the guidelines and compared with a control group. The intervention provoked more light activity, moderate and MVPA activity in the men but no reduction in their sedentary behaviour. In boys, light and moderate activity increased, sedentary behavior decreased, but there was no significant difference in MVPA levels. Semi-structured interviews showed that the men found physical activity guidelines alone were not sufficient to motivate them to change their physical activity levels, but the boys found the provision of these useful. **Conclusion.** This study demonstrated that Arabic men met recommendations for physical activity, whereas boys did not. Barriers to the adoption of physical activity revolved mainly around a lack of understanding of physical activity and guidelines. The intervention strategy was regarded as family-focused and entertaining but not useful in promoting sustainable change in physical activity levels.

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## Chapter 1

Introduction

The WHO states that the worldwide prevalence of obesity is reaching epidemic proportions in both adults and children (Fogelholm *et al.*, 1999) and leading to increased risk of non-communicable diseases (WHO, 2004), including coronary heart disease, circulatory disease, cancer and type 2 diabetes. For example in England, the proportion of the population that are overweight (including the obese) has increased from 58% to 65% in men and from 49% to 58% in women between 1993 and 2011. In terms of clinical obesity, there was a marked increase in the proportion of adults that were obese from 13% in 1993 to 24% in 2011 for men and from 16% to 26% for women (The Information Centre for Health and Social Care, 2013).

In parallel with these changes in the western world, the levels of obesity have increased by three fold during last 20 years in developing countries including a number of Arabic countries that have adopted a Western lifestyle based on decreased levels of physical activity and increased consumption of convenience foods (Musaiger *et al.*, 2011b). Obesity is also a serious concern in children and young people, and there is a pressing need to reduce and treat obesity levels in this vulnerable population, since obesity in young people is predicted to increase the risk of obesity in later life and possibly increase the risk of obesity-related disease (Dugdill *et al.*, 2007).

These trends emerge at the same time as a decrease in sport and physical activity participation in the UK, suggesting a need to increase physical activity with a view to improve health and reduce the incidence of chronic diseases (Dugdill *et al.*, 2007), with similar patterns of change of physical activity in Arabic countries (Musaiger 2007; Zaghlool *et al.*, 2011). In England only 39% of males and 32% of females are sufficiently active to meet stated recommendation targets for physical activity (Townsend *et al.*, 2012a).

In Britain, 92% of the population are white British and approximately 8% originate from ethnic minority groups that are principally divided into two main groups, Black (Black Africans and Black Asians) and South Asian (Szczepura *et al.*, 2004). Obesity prevalence is highest among Black African (38%), Pakistani (28%) and Black Caribbean (32%) groups, and it is also known that men born in Arabic-speaking countries have a significantly greater odds ratio for a sedentary leisure-time physical activity pattern than in all other countries. Moreover the odds ratio of completely sedentary leisure—time physical activity status in men born in Arabic-speaking countries is significantly higher compared to men born in Northern Europe (Lindstro *et al.*, 2001).

Szczepura (2004) suggests that these differences in activity levels relate to a greater number of cultural and social barriers that impede minority groups to access public health and activity services. The higher prevalence of physical activity in some segments of ethnic minority groups may relate to lower-income households low levels of education (Hillsdon *et al.*, 2005), and coupled with gender, ethnicity, religious and social factors (Allender *et al.*, 2006), these issues present a complex problem for health policy and decision makers in promoting active lifestyles to these sections of society.

Therefore the work contained in this thesis is an attempt to investigate physical activity patterns of Arabic men and their sons siblings living in the UK, as well as their views, beliefs and understanding of the concepts relating to physical activity. This body of work focused on small sections of the Arabic community living in Liverpool that had previously originated from North Africa and Western Asia. Liverpool is considered the home to Britain's oldest Black community and oldest Chinese community in Europe, (Ray, 2001). Although 90% of the citizens in Liverpool are white, the city is one of the most important multicultural cities in the history of the UK.

The thesis contains three studies which identify the patterns of physical activity in Arabic males in Liverpool and explores the barriers and motivations to adopting physically active lifestyles, before addressing the feasibility of an intervention to enhance levels of physical activity. The thesis progresses through three consecutive phases in order to collect quantitative and qualitative data deductively and inductively in the first and second phase and utilises a mixed-methodology in the third and final phase.

This thesis aimed to explore the physical activity behavior in three generations of Arabic males with a view to developing a feasible physical activity intervention for this population, and sought to achieve this goal through the completion of three main studies:-

- **Study 1:** quantitative study this study examined the patterns of physical activity in Arabic men and boys during 7 consecutive days and also examined individuals' physical self-perception profile.
- **Study 2:-** qualitative study based on the findings of study 1, this phase investigated the barriers and motivators in becoming physically active by using focus group interview techniques.
- **Study 3:-** intervention study, mixed methodology based on the findings of study 2, this phase investigated the feasibility of an exergaming and awareness raising intervention in increasing the levels of physical activity in this sample.

## Chapter 2 Literature Review

#### 2.1 Health Benefits of Physical Activity

Physical activity is defined as any bodily movement produced by skeletal muscle that results in energy expenditure above basal levels. This definition was established by \*Caspersen *et al.* (1985), and then considered as a standard definition that was broadly accepted by researchers internationally (Caspersen *et al.*, 1985; WHO, 2002a; Moy., 2005; WHO, 2011a). Physical activity is associated with many physical and psychological health benefits, both in the prevention of ill health and the management of existing health conditions (Johnson *et al.*, 2009) and a strong relationship between being physically active and good health (Haskell *et al.*, 2007) now exists, with physical activity considered as an essential and important component of lifestyle for individuals within the age groups of 18 to 65 years (Haskell *et al.*, 2007). It also appears that this relationship is somewhat dose-dependent, since high intensity physical activity is more important for lowering the risk of cardiovascular disease (Geffken *et al.*, 2001) and for the treatment of various other diseases, such as osteoporosis (Warburton *et al.*, 2006).

A direct correlation has been proven between the volume of physical activity and health wherein the greater the fitness gain the more improvement in indices of health (Warburton *et al.*, 2006). The opposite is that a lack of physical activity is also thought to be a contributor to increasing obesity levels in the UK (The Information Centre For Health and Social Care, 2008). Hence, it is important for the UK government to take more dynamic action to minimize the rate of development of overweight and obesity in the population and the subsequent impact on health (WHO, 2000b; Macdonald *et al.*, 2003; Wenche *et al.*, 2004; Swinburn *et al.*, 2004; Henry F.J., 2004; Wareham *et al.*, 2005; Jones *et al.*, 2007; The Information Centre For Health and Social Care, 2008, 2010).

As a result of physical inactivity it is estimated globally that there are in the region of 3.2 million people that will die each year from lifestyle related diseases. In addition to this, the health burden of inactivity will increase the risk of all-cause mortality by approximately 20% to 30% in those people that fail to meet published requirements for physical activity The WHO considered physical inactivity as the fourth most levels (WHO, 2011b). important cause of global mortality (WHO, 2010a) and there is a worldwide consensus that physical inactivity leads to ill health and the prevalence of many diseases such coronary heart disease (6%), colon cancer (10%), breast cancer (10%), and type 2 diabetes (7%). In addition, it has been calculated that 5.3 million of the 57 million deaths that occurred worldwide in 2008, had a direct association with levels of (in)activity (Lee et al., 2012). Furthermore, it is evident that the rates of certain non-communicable diseases are increasing in the UK, with currently coronary heart disease (11%), colon cancer (18%), breast cancer (17%), and type 2 diabetes (13%) contributing to of premature all-cause mortality (Lee et al., 2012). In Eastern Arabic countries (Iraq, Kuwait, Lebanon, Libya, Saudi Arabia, Tunisia and United Arab Emirates) these diseases present a similar pattern of effect [coronary heart disease (8%), type 2 diabetes (9%), breast cancer (13%) and colon cancer (14%)] for all-cause mortality (WHO, 2013).

Despite advances in treatment and health care globally, it is known that there are high death rates in children from non-communicable diseases such as rheumatic heart disease, type 1 diabetes, asthma, and leukemia, if comprehensive health care is not provided (WHO, 2013).

However, it is increasingly clear that physical inactivity is now being classified as one of the leading causes of non-communicable diseases among children (Lee *et al.*, 2012; WHO, 2010b), and therefore it is very important that childhood physical activity whether for prevention or for treatment of these diseases is promoted (Swaminathan & Vaz, 2013).

Consequently, policy and decision makers must urgently develop comprehensive strategies to encourage the culture of performing physical activity in order to contribute to the prevention of the non-communicable diseases (Global Advocacy for Physical Activity (GAPA), 2011).

The cost of physical inactivity in England is estimated by The Chief Medical Officer as £8.2 billion per year including direct costs of treatment, and indirect costs caused through sickness absence (Scarborough *et al.*, 2011). This has lead to financial initiatives by governments and economists to impose fat taxes to prevent people eating calorie-laden foods and to promote healthy manufacturing processes from food companies in order to generate a better health climate (Chouinard *et al.*, 2006; Leicester & Windmeijer., 2004). Concurrently there are now many physical activity related initiates to attack the obesity crisis and increase physical activity through walking schemes etc, in an attempt to promote better health.

Physical activity has a positive effect for improving mental health and enhancing quality of life (Whitelaw *et al.*, 2008). Physical activity also plays an important role in reducing psychological problems for individuals suffering from depression or mental stress as it can help reduce anxiety and promote self-esteem and concept of self (Calfas and Taylor., 2010).

#### 2.2 Health Consequences of Sedentary Behaviour

Research has shown that increased sedentary behavior, rather than reduced physical activity is associated with a variety of health risks, and as such there has recently been an increased focus on research on sedentary behaviour as an independent construct (Tremblay *et al.* 2010).

To study the health consequences of sedentary behaviour there needs to be clarification of the terminology and associated concepts (Owen et al., 2010). Some debate surrounds the concept of sedentary behaviour and whether it is simply a lack of physical activity or whether it is a set of behaviours that are independent of physical activity (Tremblay, 2012). From the first viewpoint, researchers have defined sedentary behaviour as low energy expenditure (Pate et al., 2008; Owen et al., 2010; Tremblay et al., 2010) or as physical activities that do not reach moderate to vigorous physical activity (MVPA), and defined as between 3-6 METs or greater than 6 METs respectively (Mullen et al., 2011; Sims et al., 2012; Biddle., et al., 2012). From the second viewpoint, however, sedentary behaviour has been defined as individual behaviours where sitting or lying is the dominant mode of posture and energy expenditure is very low (Biddle., et al., 2012) such as sitting to read, screen-time (computer use, TV viewing, video game playing, mobile phone) or driving. One reason for the confusion surrounding the term may be that some people are sitting for long periods and classified as sedentary, yet they also meet recommended physical activity guidelines in other parts of their lifestyle (Owen et al., 2010). As such, researchers have become interested in the independent role that sedentary behaviour plays in health and wellness (Owen et al., 2010; Department of Health, 2011b). Evidence shows sedentary behaviour is inversely associated not only with all-cause mortality (Chau et al., 2013) but also psychological wellbeing and mental health (Hamer et al., 2010; Tremblay et al., 2010; Chinapaw *et al.*, 2011).

#### 2.3 Health Inequalities

Health inequalities were defended by the Royal College of Nursing (2012) that the "differences in health status or in the distribution of health determinants between different population groups", while Peter et al (2007) were more specific in their definition by

including differences in socioeconomic, demographic and geographic factors that lead to inequalities. A further definition is provided by Šućur & Zrinščak (2007) as "differences in health and health care among different social groups as a result of their different social positions" (p.654). Factors leading to health inequality includes employment, education and housing, access to healthcare, individuals' circumstances and behaviours, such as their diet and how much they drink, smoke or exercise and the income levels. (Wilkinson & Pickett., 2009).

Health inequalities exist within countries and between countries and across a ring of health problems (Marmot., 2007). Several studies carried out during the past decade demonstrated that disparities in premature mortality exist netween a number of countries such as a number of European nations (Shaw et al., 2000), New Zealand and Australia (Hayeset al., 2002; Pearce and Dorling., 2006), the US (CDC., 2011) and the UK (Shaw et al., 2000; Shaw et al., 2004). To this end the world health Assembly issued resolution 65.8, (WHO., 2012) endorsing the Rio Political Declaration on Social Determinants of Health (WHO., 2011) put emphasis on the need for "delivering equitable economic growth through resolute action on social determinants of health across all sectors and at all levels" (p.2).

A survey conducted in 2003 covering 28 EU countries to investigate the differences health status and access to health care according to income groups found significant differences between EU country groups in all indicators: having long-standing illness or disability, self-perceived health status, satisfaction with health, access to health care according to four indicators (delay in getting an appointment, waiting time to see the doctor on the day of the appointment, distance to the nearest medical facility and the cost of seeing the doctor). In many ways the health of population in industrialised countries has never been better (World Health Organization., 2008). However, health advantages are not shared equally

by all members of society. Higher income people are likely to live longer and lead healthier lives than those whom were in lower social classes with low-income the gap in life expectancy between low and high income reported as six years (Marmot., 2010). Increasing health equality is not a responsibility of the department of Health only; it is a multifaceted issue that requires coordination and action between all the governments departments to take actions toward it (Department of Health., 2010).

#### 2.4 Recommended Levels of Physical Activity

There is a pattern of increased rates of physical inactivity in many countries along with the attendant risk of increasing the prevalence of non-communicable diseases (WHO, 2010b) Consequently, Governments in various countries have taken the initiative to establish public health guidelines among the population in order to promote the importance of physical activity for health (Marcus *et al.*, 2006) and limit the time spent by the individual in sedentary behaviours (Biddle., *et al.*, 2012).

In 2008 the European Union Physical Activity Guidelines were published which suggested a wide variety of actions for Member States to follow with the purpose of promoting higher rates of physical activity. These guidelines recommended the European Union and its Member States to promote a minimum of 60 minutes of daily moderate-intensity physical activity for children and young people and a minimum of 30 minutes of daily moderate-intensity physical activity for adults including seniors (The EU Working Group "Sport & Health", 2008).

Previously, there were physical activity guidelines for each member country of the UK (Department of Health, 2011b). However, during the last decade the British Government has set a variety actions and procedures for raising the levels of physical activity among

the population by creating new guidelines (Higgins & Dale., 2009) that have been comprehensive designed by considering the previous guidelines of each country with further additions (Department of Health, 2011b). These efforts have resulted in the latest issue of physical activity recommendations (Department of Health, 2011a). The previous UK recommendation encouraged people to perform a type of physical activity for two times per week to improve health (Department of Health, 2004). However, in recent years, this package has been extended to advise greater doses of physical activity than earlier recommendations (Department of Health and Human Services, 2008; Kesaniemi et al., 2010; Department of Health, 2011b). The UK government has now issued a sophisticated guideline for physical activity that stipulates that adults should involve themselves in at least 150 minutes ( $2\frac{1}{2}$  hours) of moderate intensity activity in cumulative bouts of 10 minutes or more on at least 5 days a week or 75 minutes of vigorous intensity activity spread across the week (Department of Health, 2011a). Furthermore, the guidelines were revised for children aged between (5-18 years), with recommendation to perform moderate to vigorous intensity physical activity for at least 60 minutes per day, every day of the week, with the direction that this should include vigorous intensity activities, including those that strengthen muscle and bone, at least three days a week (Department of Health, 2011a). These physical activity guidelines are recommended in order to minimise the amount of time spent being sedentary (sitting) for extended periods whether for adults or children (Department of Health, 2011a).

#### 2.5 How Active is the Population Currently

There is an increase in physical inactivity levels among the population of many countries around the world (WHO, 2010a) combined with prevalence of non-communicable diseases (NCDs) and a decline in the general health of the global population (Lee *et al.*, 2012). Furthermore, the WHO reports that physical inactivity is the fourth leading risk factor in

global mortality (WHO, 2010a). In the European Union the majority of the population perform informal physical activity rather than participate in organised sport. Data suggests that 27% of Europeans were engage in physical activity regularly for about 5 times a week while the great majority of the population (65%) are undertaking some type of physical activity once a week. However, the most worrying statistic is that 14% of European citizens are completely physically inactive and they never do any type of physical activity (TNS Opinion & Social., 2010).

In the United Kingdom the picture is slightly better with 37% of adults engaging in physical activity regularly, but this is still lower than Latvia which has the highest prevalence of adults engaging in physical activity with 44% (Townsend *et al.*, 2012a). In Scotland, 45% of men managed to reach the recommended levels of physical activity (Bromley *et al.*, 2011), compared with 39% of men in England (The Information Centre for Health and Social Care, 2011), and 37% in Wales (Welsh Assembly Government., 2011), while just 33% of men in Northern Ireland reported meeting the threshold (Townsend *et al.*, 2012a). These reductions in physical activity are exemplified by the observation that there was a decrease in the average of distance travelled on foot or by bike from 306 miles in 1975/1976 to just 221 miles in 2010 (Department for Transport, 2001, 2011). Adults and children in England are predominantly more active during weekdays than weekend days at the level of moderate to vigorous intensity required (Townsend *et al.*, 2012a) with walking being the most popular type of physical activity in England in 2008 (Communities and Local Government, 2009).

#### 2.6 Physical activity and obesity patterns in the Arabic world

Obesity is increasing at an alarming rate in the Eastern Mediterranean region including the Arabic countries, as is the incidence of related diseases. The degree of overweight and

obesity ranges from 25% to 82% in the Eastern Mediterranean region. Eating behaviour plus physical inactivity were mostly responsible for such high rates of obesity (Musaiger., 2004), and there is an urgent need to review the cultural, social, environmental and educational issues relating to this (Mokhtar *et al.*, 2001).

There is a paucity of research on the levels of physical activity among the Arabs (Al-Hazzaa *et al.*, 2011a) with the large majority of research conducted in females of this population (Musaiger *et al.*, 2011b). During the last two decades, the level of obesity has increased threefold in those developing Arabic countries that have adopted a western lifestyle that has seen decreased levels of physical activity and eating patterns change (Musaiger *et al.*, 2011a). Additionally, the lack of physical activity in Arabic countries led to an increase in the prevalence of overweight and obesity (Musaiger, 2007; Ng *et al.*, 2011). Al-Hazzaa *et al.* (2011b) found that the rates of sedentary behaviour is high, and that this is associated with low physical activity levels among adolescents aged 14-19 years in Saudi Arabia. It is also worth mentioning that physical activity levels among females are very low regardless of the country of the Arabic world under consideration (Henry *et al.*, 2004; Al-Sabbah *et al.*, 2007; Collison *et al.*, 2010; Al-Hazzaa *et al.*, 2011b). According to the STEPwise survey performed by WHO 2003–2007, daily physical activity in different Arabic countries amounted to just 10 minutes or less of meaningful exercise (STEPwise, 2007).

The pattern of lifestyle has changed in Arabic countries as a result of alterations in socioeconomic status, availability of electric home appliances, cars and also the technical sophistication which has meant that levels of physical activity have diminished sharply (Musaiger, 2007; Youssef *et al.*, 2010; Musaiger *et al.*, 2011a; Di-Capua *et al.*, 2005; Al-Sabbah *et al.*, 2007; Shuval *et al.*, 2008). In addition, it has been reported that the level of maternal education and monthly income of the house impacts the degree of physical activity (Centers for Disease Control and Prevention., 2006; Obeisat 2012). WHO statistics (Regional Office in Cairo) indicated that there is a deficiency of physical activity amongst the adults in 7 Arabic countries (Egypt, Iraq, Jordan, Kuwait, Saudi Arabia, Sudan and Syria).

These changing levels of physical activity among Arabic populations (Musaiger, 2004; Badran & Laher, 2011) are having very important consequences for increasing the prevalence of non-communicable diseases such as cardiovascular disease, type 2 diabetes and certain types of cancers (Khatib, 2004; Al-Nuaim *et al.*, 2012), as well as being associated with an increase in obesity levels of these populations. A high priority for Arabic nations has become the implementation of policies and national programs for promotion of physical activity in an attempt to reduce the levels of obesity (Musaiger, 2004). A study carried out to examine the reasons behind such obesity indicated that the pattern of lifestyle among the Arabic gives the opportunity to be more physically **in**active and also suggests greater access to a westernized diet. Moreover these populations have easy access to transport which results in less or no physical activity and there has been a shift in the workplace, where the majority of manual work is performed with the help and of availability of cheap labor which reduces the quantity of workplace physical activity performed (Badran & Laher, 2011). The table below shows a comparison of overweight in males between several Arabic and non-Arabic countries:

#### Table 2.1. The prevalence of obesity in Arabic and non-Arabic countries

The data are separated for males aged between 15 and 100 years, using WHO estimates for 2010 (Badran & Laher, 2011)

Country	Male %
USA	44%
Greece	30%
Mexico	30%
Kuwait	30%
UK	24%
Saudi	23%
Egypt	22%
Bahrain	21%
Spain	17%
Lebanon	15%
Belgium	15%
Italy	14%
Libya	12%
Syria	12%
Iraq	8%
Tunisia	8%
Oman	8%
Algeria	6%
Mauritania	5%
Morocco	4%
Yemen	2%
Sudan	2%
Somalia	1%

#### 2.7 Physical Activity and Ethnic Minority in UK

There is an increase in the number of the resident population of England and Wales of 7% which is equivalent to an increase of 3.7 million from 2001 to 2011 with 55 per cent (2.1 million) of this increase due to immigration. Most of the residents of England and Wales belong to the White ethnic group, however there were 5 % decrease in the number of this category since 2001 which it was represented 91% and became 86% in 2011.

Table 2.2. Distribution of ethnic groups in England and Wales, 2011

Ethnic group			Per cent
Other ethnic group	Arab	231	0.4
	Any other ethnic group	333	0.6
Mixed/ multiple ethnic groups	White and Black African	166	0.3
	Other Mixed	290	0.5
	White and Asian	342	0.6
	White and Black Caribbean	427	0.8
Black/ African/ Caribbean/ Black British	Other Black	280	0.5
	Caribbean	595	1.1
	African	990	1.8
Asian/ Asian British	Chinese	393	0.7
	Bangladeshi	447	0.8
	Other Asian	836	1.5
	Pakistani	1,125	2.0
	Indian	1,413	2.5
White	All white ethnic groups	48,209	86.0
White	Gypsy or Irish Traveller	58	0.1
	Irish	531	0.9
	Other White	2,486	4.4
	English/Welsh/Scottish/Northern Irish/British	45,135	80.5

Source: Office for National Statistics 2011.

South Asians, African Caribbean and Chinese comprise the major part of ethnic minority groups in the UK, and they account for 7.9 % of the UK population. The dietary habits of the ethnic minority result in high incidence rates of cardiovascular diseases and this could

be the reason behind the ethnic groups experiencing worse health conditions than the UK whites (Stanner, 2011).

Between 2001 and 2011 there were increases in the majority of the religion groups in England and Wales except the Christian based on the data demonstrated in the table below.

Table 2.3. Distribution of religious groups in England and Wales

Religion	20	001	2011		Change	
	Number	Per cent	Number	Per cent	Number	Per cent
Christian	37,338	71.7	33,243	59.3	-4,095	-12.4
No religion	7,709	14.8	14,097	25.1	6,388	10.3
Muslim	1,547	3.0	2,706	4.8	1,159	1.8
Hindu	552	1.1	817	1.5	264	0.4
Sikh	329	0.6	423	0.8	94	0.2
Jewish	260	0.5	263	0.5	3	0.0
Buddhist	144	0.3	248	0.4	103	0.1
Other religion	151	0.3	241	0.4	90	0.1
Religion not stated	4,011	7.7	4,038	7.2	27	-0.5

Source: Office for National Statistics 2011.

Several studies have demonstrated that ethnic minority groups have low physical activity levels compared with white British population. For example, Pomerleau *et al.* (1999) examined physical activity levels and obesity in 291 South Asian, 303 Afro-Caribbean, and 559 European women in West London. Results indicated that South Asian women exhibited the lowest leisure-time physical activity, with the highest prevalence rate of obesity being among the Afro-Caribbean women. Other research conducted to investigate the relationships between physical activity types and level and cardiovascular disease and diabetes risk factors among several ethnic minority groups (men and women, aged 25-75) reported that Europeans were more physically active than Indian, Pakistani and

Bangladeshi (Hayes *et al.*, 2002). Physical activity levels were also reported to be lower for Indian Asians than Northern Europeans (Chambers *et al.*, 2006). A review of existing behaviours and ethnic differences in diet, physical activity and obesity in adults based on data in Health Survey for England (HSE) reported that all minority groups are less likely to meet the physical activity guidelines than the white in men (Higgins & Dale, 2009). In addition, in England many ethnic groups were unable to meet physical activity recommendations whether among men or women (Saxena *et al.*, 2004). However, certain ethnic groups, for example the Irish and Black Caribbean men were closer to reaching the recommended levels of physical activity (Department of Health, 2004).

An overview of the current evidence on the relationships between obesity and ethnicity for adults and children in the UK demonstrated that physical activities differ among the population with respect to ethnicity and socioeconomic status differences. Systematic literature reviews have been conducted to assess the impact of ethnicity on physical activities in various minority groups in the UK (Hayes *et al.*, 2002). It reported that south Asian groups were performing 45% less physical activity than the UK whites and therefore had lower probability of reaching the Government recommended physical activity levels (Fischbacher *et al.*, 2004). The data revealed that ethnic groups' exposure to risk of diabetes and cardiovascular diseases is greater, since up to 88% of the South Asian population did not meet physical activity recommendations, compared with 52% of Europeans (Hayes *et al.*, 2002).

Another systematic review of 18 papers that examined low rates of physical activities in minority populations and the existing barriers to physical activity demonstrated that socioeconomic and cultural barriers exist for performing physical activity in UK among this population. However, to overcome these barriers to physical activity the UK government has to implement for intervening in their cultures (Teijlingen et al., 2009).

This corresponds to findings of a systematic review carried out by Babakus and Thompson (2012) who in examining physical activity and sedentary time in South Asian women found that physical activity levels among South Asian women were low compared with South Asian men. In comparison with white Europeans, south Asian women were found not to reach physical activity thresholds. This compares with data for American, Canadian and Australian women 33% of whom were reported as active (McLeod & Ruseski., 2013; Australian Bureau of Statistics., 2012).

#### 2.8 Barriers to Physical Activity

Regardless of the benefits of being physically active, there are still a large proportion of adults living a sedentary lifestyle (Chen, 2010). Regrettably, published studies on the barriers associated with the adoption of a more physically active life among Arabic people are limited and therefore work addressing this area is urgently needed. This is particularly important as a good level of understanding of such barriers will help drive the design of appropriate interventions to improve participation in physical activity in such populations (Chen, 2010). This work could also inform best practice amongst health professionals who need to have a good understanding of principal barriers in order to be able to promote physical activity levels and thereby improve public health (Chinn *et al.*, 1999). Thomas *et al.* (2005) suggested that qualitative methodologies are appropriate in giving in depth information about the real barriers to the engagement in physical activity, since these approaches can delve deeper into individuals' experiences and the obstacles that present to participation in physical activity (Thomas *et al.*, 2005).

Diverse research has focused attention on barriers to physical activity amongst members of the general population, especially individuals those are physically inactive (Brawley *et al.*,

2003; Grossman & Stewart, 2003). There are a range of factors identified as barriers to physical activity such as socio-economic status, sex, age and variety of other components (Robbins *et al.*, 2003). Tandon *et al.* (2012) reported that socioeconomic status plays a major role in the adoption of a physically active life, as existing on the lower scales of socioeconomic status leads to increase sedentary behavior and a consequent decrease in physical activity.

Chen (2010) divides the barriers to physical activity into two types; personal and environmental factors, and these barriers includes several factors; physical health problems, past sedentary lifestyle, fear of resultant injury or falling and insufficient understanding about physical activity. The environmental factors reported as barriers centered around a lack of resources including the lack of accessible and convenient space as well as equipment for physical activity in institutions that were accessible. Furthermore, Allender et al. (2006) summarized the barriers to participation in physical activity as poor access to facilities, unsafe environments and high costs, and another qualitative study about participation in physical activity found the same barriers coupled with time constraints and negative pressure from peers, for instance harassment of some children during physical education class (O'Dea, 2003). Content analysis of tape recordings of a study carried out by Rimmer et al. (2004) reported barriers to physical activity such as; 1) barriers and facilitators related to the built and natural environment, 2) economic issues, 3) emotional and psychological barriers, 4) equipment barriers, 5) barriers related to the use and interpretation of guidelines, codes, regulations, and laws; 6) information-related barriers; 7) professional knowledge, education, and training issues; 8) perceptions and attitudes of persons who are not disabled, (when being with non-able individuals) including professionals; 9) policies and procedures both at the facility and community level; and 10) availability of resources.

National Institute for Health and Clinical Excellence (NICE) produced public health guidance on physical activity for The Department of Health (DH) and reviewed a set of studies to identify the barriers to physical activity wherein it was concluded that a combination of factors prevent participation in various types of physical activity. NICE found evidence from 3 qualitative studies carried out in the UK that indicated that the main barriers to participation in physical activity among children were; parental fear relating to danger of traffic, limited places to play locally, and parents' disapproval of children playing outside from a security perspective. There was also a reported lack of places to store bikes in schools (National Institute for Health and Clinical Excellence (NICE), 2009). Trost et al., (2002) reported a range of barriers to physical activity such as marital status, level of obesity, smoking habit, lack of time, and past exercise behavior. Other researchers mentioned similar factors such as lack of time and marital status (Sherwood & Jeffery, 2000; Speck & Harrell., 2003) fear of falling particularly in elderly populations, the preference to exercise with a partner, lack of energy, self consciousness, injury risk, lack of knowledge and information about how to exercise, weather conditions, lack of facilities and fear of joint pain (White et al., 2005; Trost et al., 2002; Bauman & Bull, 2007).

Cultural values and beliefs play an important role for encouraging adults to engage in a type of physical activity with young children (Lindsay *et al.*, 2009; Emma, & Jarrett, 2010). There are a large number of cultural and social barriers that prevent ethnic minority groups accessing public health and activity services (Szczepura., 2004). Emma, & *Jarrett*, 2010 also indicated that socio-cultural factors during both home and school time could influence the physical activity behaviours among young children. For example, Arabic parents focus more on academic study than giving their children the opportunities to be physically active with the burden of homework additional classes further limiting the availability of the time to engage in a type of physical activity (Garrett, 2006).

Although, there are many health benefits of being physically active (Perspectives in Public Health, 2013) and also Shuval *et al.* (2008) noted that culture can play an important positive role for promoting physical activity, the perception of not being able to fit physical activity into their lives suggests Arabic males do not put physical activity among the priorities of their life (Perspectives in Public Health, 2013). Furthermore, Caperchione *et al.* (2011) suggested that unadapting physical activity as a part of the lifestyle could be due to the factors associated with the Arabic culture.

Several parental factors contribute to childhood overweight, such as parental BMI, parental education and income level (Reilly *et al.*, 2005). Parenting style is also considered an important factor over time and leads to an increase in the level of childhood overweight. This factor particularly constitutes the environmental and emotional variables for the socialization and the upbringing of children (Rhee *et al.*, 2006). Parenting style is considered as a complicated and multifaceted activty including various behaviors that impact individually and together to influence child outcomes (Darling., 1999). The most commonly used definition of parenting style is "a constellation of attitudes toward the child that are communicated to the child and create an emotional climate in which parent's behaviours are expressed" (Darling & Steinberg., 1993).

A study conducted by Rhee *et al* (2006) aimed to determine the relationship between the 4 parenting styles (authoritative, authoritarian, permissive, and neglectful) and overweight status in first grade. The study found that children who have authoritarian mothers had an increased risk of being overweight, compared with children of authoritative mothers. Children of permissive and neglectful mothers were twofold as likely to be overweight, compared with children of authoritative mothers.

It is commonly reported that active parents will have active children and also a number of studies support this trend (Biddle *et al.*, 2011). However several studies highlighted some contrast and a negative correlation between parental PA levels and their children's PA levels (Biddle *et al.*, 2011) such as, Gustafson and Rhodes who reviewed 24 studies and found that there is 'much uncertainty' (p. 88) about the relationship between parental physical activity and child activity levels.

### 2.9 Interventions to promote Physical activity

Governments around the world face a huge problem in attempting to combat high rates of sedentary lifestyle and consequences of the lifestyle diseases associated with physical inactivity (Edwards et al., 2006). These rates of physical activity (two thirds of population in European Union at ages of 15 years and older are physically inactive (Cavill et al., 2006); only 37% of UK adults engage in physical activity regularly), lead to an important question; who should take action to implement strategies to improve PA? NICE Public Health Guidance (2009) referred to various organizations and groups responsible for ensuring that recommendations are placed into practice, and these agencies include Government Departments, Local Authorities, local strategic partnerships, parents, families and carers, private sector providers, schools and colleges (NICE, 2009). All organizations, whether small or large should take action to promote physical activity among their employees and manage a strategy that empowers the workplace as a vehicle to promote activity even without a gym (Public Health Agency, 2010). Furthermore, increases in physical activity levels among children and adolescents were identified as a very important factor to promote health (Lobstein et al., 2004; Van Sluijs et al., 2007) particularly during the school day, as schools played a very important role to contribute in physical activity promotion (Pate et al., 2006). However, a number of researchers adopt the view that family- and community-based interventions provide a better opportunity to improve physical activity levels than relying solely on school-based promotion (Biddle *et al.*, 2004; Marcus *et al.*, 2006). It is also important that a package of components such as family-based interventions, organization-based policy interventions (such as school-based skills-oriented interventions, classroom curricula, physical education curricula), community-wide policy interventions for example policies or legislation establishing financial incentives for organizations and communities to provide access to physical activity opportunities, Health education classes to change knowledge and attitudes about benefits of exercise, are provided as ways to increase access to exercise and physical activity. Such initiatives should be aligned with special support mechanisms such as telephone support, counselling, physical activity and exercise clubs, family-based programs and school-based social support (Kahn *et al.*, 2002).

Although the family-based approaches to promote physical activity are underutilized at present, they are considered a good opportunity for helping to counteract barriers to promote physical activity (Brustad *et al.*, 2010). The family unit is considered one of the most important source to understand the individual's physical activity behaviours (Centers for Disease Control and Prevention., 2011) and it is plays a considerable role in promoting physical activity among its members (Brustad *et al.*, 2010). This is particularly important in the context of childhood obesity (Perryman, 2011), as several studies have pointed out that individuals tend to be extremely similar to the other family members in their regular physical activity levels (Davison & Birch, 2001; Salmon *et al.*, 2005; Brustad *et al.*, 2010), and that family members like parents, brothers and sisters provide a model that children follow and copy their behavior from (Salmon *et al.*, 2005; Marcus *et al.*, 2006). This further enhances the findings of Sears *et al.*, (2006) who found that the child has a 40% chance of becoming overweight if there is one member of his/her family is overweight and this chance will increase to 80% if there are two members of his/her family were overweight (Sears *et al.*, 2006).

The family-based intervention provides an opportunity to understand children physical activity patterns based on habits, beliefs and values expressed in the family environment (O'Connor *et al.*, 2009). There is strong evidence that interventions involving family members are more likely to lead to positive changes in physical activity levels in both boys and girls (Van Sluijs *et al.*, 2007; NICE, 2008). However, there is still a challenge to embed all family members including fathers to engage in a regular physical activity (Marcus *et al.*, 2006).

### 2.10 Physical Activity measurement

Although physical activity is a very important factor for maintaining public health among whole world's population, there is no consistent standard for monitoring and determining its rates (Bauman *et al.*, 2009). Warren *et al.* (2010) divided physical activity assessment into two types of methodologies; the first category of instruments are usually named self-reports and consist of questionnaires, diaries, logs and recalls, with the second category consisting of more objective measures e.g., heart rate monitors, accelerometers, pedometers, motion sensors, direct observation and doubly labelled water. Using all these different methods it is important to note that there can be a large variation between data of prevalence of individuals reaching recommended levels of physical activity when it is measured by accelerometry compared with self-report in England (Townsend *et al.*, 2012b).

The key variables monitored in assessing physical activity are volume, intensity and type of activity being measured; monitoring is also complicated or contaminated by functional activities of day to day lifestyle, such as stair climbing, use of escalators or lifts. In relation to physical activity measurement in children, the appropriate physical activity

measurement needs to identify the type and intensity of physical activity, in order to accurately quantify against published recommendation thresholds (Timmons *et al.*, 2007). Researchers have shown that although questionnaires are a valid measure for measuring habits of physical activity among individuals, the current measurements for physical activity also need to include the ongoing changes in the activities of the population.

The measurements also need to highlight the biological implication and meaning of the intensity of exercise such light, heavy and moderate (Shepherd, 2003). Objective methods are more in use for measuring sedentary behavior and physical activity intensity compared to self-reports, and provide a more accurate and reliable assessment than subjective methods (Reilly *et al.*, 2008).

Self-report measures are commonly used to assess physical activity (Warren., et al 2010) as they allow a large amount of data to be collected at low cost (British Heart Foundation Report., 2012), the information they provided is limited however and there are difficulties in assessing the frequency, duration and intensity of physical activity (Warren., et al 2010). Furthermore, participants may have a different understanding of what 'moderate intensity' or 'exercise' actually means (British Heart Foundation Report., 2012). Moreover, the data obtained by self-report has been shown to be over-reported compared to objective data such as assessment of physical activity by accelerometry (Kowalski et al., 2012).

#### 2.11 Accelerometer

Electronic devices such as accelerometers have become the most commonly used tool to monitor health-related physical activity and the body movement. Several surveys and research studies have conducted for testing its validity and report that these new technologies invented have been accepted as a reliable measure (Kuffel *et al.*, 2011).

Accelerometers calculate the increase of rate of movement and also can calculate movement intensity, duration and frequency (Esliger & Tremblay, 2006; Hale *et al.*, 2008). The validity of accelerometry for measuring moderate physical activity during the performance of several activities such as playing golf, over ground walk at specified speeds and household tasks have been compared with the telemetry assessment of energy expenditure. Walking activities provide good correlations between metabolic costs and accelerometry outcomes rather than golf game and household chores (Hendelman *et al.*, 2000). Robertson *et al.*, (2010) conducted a study to measure effectiveness of accelerometry in monitoring physical activity changes, and included 28 children who wore the accelerometer for a week. Accelerometry was accepted as a suitable tool to measure the intensity of different physical activities, but, the study also indicated that wearing it at schools was difficult.

### 2.12 PSPP questionnaire

There has been an increasing interest in psychology of physical activity research during the past two decades and a focus on individual differences (Fox, 1990; Harter, 1989; Marsh., 1993). The physical self-perception profile (PSPP) questionnaire can be used to measure the physical self-concept of individuals. It helps in providing more clarity in understanding the dynamics of the physical self-concept and the impact of individuals' physical activity on this construct. It helps in the study of the multi-dimensional model of physical self-concept. The model has self-esteem at the top, physical self-worth in the middle and several other dimensions in the bottom level (Fox, 1990; Fox & Corbin, 1989; Fox, 1997; Sonstroem *et al.*, 1992; Lindwall, 2004; Ninot *et al.*, 2006). The PSPP questionnaire was designed for use with the physical self-perception profile to identify cognitive aspect of the proficiency perceived by an individual in various physical subdomains.

The general form of the questionnaire deals with four subscales (sport competence, physical condition, attractive body, and physical strength) and one general scale (physical self-worth PSW) which is one domain that affects the Global Self-esteem GSE of an individual and each subscale composed 6 items (equivalent to 30 items) presented in a four-point structured-alternative format (Figure 2.2) (Tenenbaum *et al.*, 2011). based on two contrasting descriptions for example (*those with unattractive bodies and those with attractive bodies*) and the participants asked which description is most like themselves and whether the description they select is "sort of true" or "really true" for them. (Fox, 1990; Fox & Corbin, 1989).

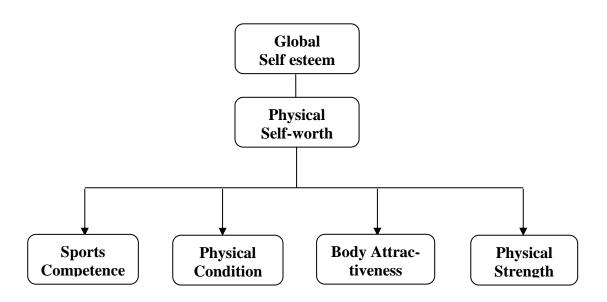


Figure 2.1. Hierarchical model of physical self-perceptions

The results are calculated by scores which ranged from 1 to 4 for each item; in view of the fact that each scale is composed of 6 items, subscale scores could range from 6 to 24 (Fox, 1990). The internal consistency reliability coefficients of the five subscales ranged from .81 to .92 and the test-retest reliability coefficients ranged from .74 to .92 for a 16-day-period of time and from .81 to .88 over a 23-day period of time (Karteroliotis, 2008). The

validity of the PSPP questionnaire has been demonstrated with a range of populations including athletes or non-athletes (Asçi, 2003), males and females (Hayes *et al.*, 1999), adolescent girls (Kowalski *et al.*, 2003) and different cultures (Malete *et al.*, 2008; Moreno *et al.*, 2007). However, no known research has explored the physical self-perceptions or the physical activity levels of Arabic males living in the UK.

## 2.13 CY-PSPP questionnaire

CY-PSPP is a modified version of PSPP questionnaire that gives better results with respect to competence in sports and self-perceptions with children. This scale was validated by a research study on children by Welk and Eklund (2005). The study included 570 boys and revealed that those who practice sports even outside of the school hours had higher self perceptions and competence in sports (Murcia *et al.*, 2007). A further research study included 48 children in measuring the validity and ability of CY-PSPP questionnaire to discover the relationships between self perception and BMI within school children and pointed out that the CY-PSPP questionnaire was able to differentiate children with regard to high and low amounts of physical activity. It was also able to provide the necessary information for implementing physical activity programs (Raustorp *et al.*, 2004).

## 2.14 Mixed-Method Approach

This thesis employs a mixed methods approach (as advocated for research with families (Andrew & Halcomb, 2006)) to evaluate the perceptions, beliefs and values relating to the adoption and promotion of physical activity within the family. In addition a mixed methodological approach of quantitative and qualitative investigation was used to explore the psychosocial factors relating to adoption of more active lifestyle. A range of quantitative and qualitative methods are used both *concurrently* and *sequentially*, allowing

the research questions, design and methods of study 3 to be informed by the findings from studies 1 and 2.

There are many reasons for combining quantitative and qualitative data in health research (O'Cathain *et al.*, 2007) which in the context of this thesis include:

- using quantitative methods to investigate outcomes and qualitative methods to explore processes contributing to outcomes (e.g. how the intervention works, who it works for etc.);
- using quantitative methods to investigate relationships between variables, and qualitative methods to explore the mechanisms underlying these relationships; and
- triangulating objective outcomes with participant perspectives to inform the development of interventions to promote physical activity to Arabic males.

## **2.15 Summary**

From the discussion in the preceding pages it is apparent that the incidence of obesity is increasing around the world at an alarming rate. This worrying trend appears independent of geography and culture. There is now compelling evidence that such a change in prevalence of obesity relates to altered activity and nutritional patterns and that these changes are also increasing the incidence of lifestyle-related illness and increasing the risk of all-cause mortality. In the UK, the large majority of individuals (adults and children) do not perform enough meaningful physical activity to reach the thresholds outlined in Government recommendations. The UK population is comprised of 8% ethnic minorities that reside in the country (short and long-term). Whilst data is available to suggest that the health status of these populations differs from the indigenous White population, relatively little is known about physical activity levels and barriers or facilitators to activity in these

groups. In addition, little is known about the adoption of an active lifestyle of such groups in regional areas of the UK.

# Chapter 3

## Study 1

**Estimates of Physical Activity and Physical Self- Perception Amongst Arabic Men and Boys** 

#### 3.1 Introduction

Over the last few decades there has been an increasing prevalence of obesity in most Western countries in both children and adolescents (Fogelholm *et al.*, 1999). The National study of Health and Growth (NSHG) reported that the rate of obesity has increased from 1.2% in boys in 1984 to 3.4% in 1996-97 and then reached 6.0% in 2002-03, and 1.8% in girls in 1984 and then increased to 4.5% in 1996-97 to reached 6.6% in 2002-03 (Stamatakis *et al.*, 2005), with men less likely than women to have a raised waist circumference (32% and 41% respectively) (The Information Centre, England Statistics, 2008). Obesity is therefore a serious concern in children and young people, and there is a pressing need to reduce and treat obesity levels in this vulnerable population, since obesity in young people is predicted to increase the risk of obesity in later life and possibly increase the risk of obesity-related disease (Dugdill *et al.*, 2007).

This trend emerges at the same time as a decrease in sport and physical activity participation in the UK, suggesting a need to increase physical activity with a view to improve health and reduce the incidence of chronic diseases (Dugdill *et al.*, 2007). However, there is controversy about whether there is any relationship between physical activity levels and body weight and body fat. While some studies indicate that normal weight adolescents are more active than those who are overweight, other studies have indicated that no relationship between physical activity and body composition exists (e.g. Jakicic, 2005; Peterson and Tucker, 2008). However it is possible the degree of association is diminished by a lack of accurate measurement of PA and body composition (Peterson and Tucker, 2008).

The risk of major non-communicable diseases such as, stroke, coronary heart disease and type 2 diabetes, will reduce by up to 70% to 80 in people who have physically active

lifestyles the WHO (2011). The definition of physical activity is any bodily movement produced by skeletal muscles producing an increase in energy expenditure above resting metabolic rate (Koosam, 2013).

The active people survey was conducted by Sport England and provided the largest sample size ever established for a sport and recreation survey in the UK. It was first carried out between October 2005 and October 2006, and data was obtained through telephone surveys with 363,724 adults in England (aged 16 plus). The survey reported that 21% of the adult population aged 16 include sport as a part of their lifestyle, and that 11.5 million people (28.4% of the population) perform some exercise in their lifestyle. However, 51% of adults (20.6 million people) reported not being meaningfully active (30 mins moderate intensity) more than 3 times per week, which falls someway sort of current recommendations. These data suggest that only 27% of women and 38% of men in England, Wales, Northern Ireland and Scotland adhere to the physical activity guidelines as suggested by the Government. There is therefore a need to enhance physical activity levels and promote healthier lifestyles in the UK (British Heart Foundation, 2009). To achieve health benefits, the amount of physical activity need not be strenuous since moderate intensities of physical activity translate to health benefit for men and women of all ages (U.S. Department of Health and Human Services, 2008). In addition, physical activity is a modifiable risk factor for lifestyle - related diseases in children with the optimum recommended amount of moderate to vigorous physical activity being 60 min a day, with physical education lessons and playtime during the school day representing an excellent opportunity to engage in this type of activity (Stratton, 2000). Increasing rates of physical inactivity have become one of the most important health problems in many countries (Blair, 2009) along with increasing prevalence of non-communicable diseases risk factors (WHO., 2010). This led the UK governments to update guidelines to promote physical activity and reduce sedentary time (Biddle., et al., 2012) according to the Global

Recommendations on Physical Activity for Health of the World Health Organization (WHO, 2010a). The UK government developed guidelines for physical activity including an advanced recommendation for adults to perform at least 150 minutes (2½ hours) of moderate intensity activity in bouts of 10 minutes or more – one way to approach this is to do 30 minutes on at least 5 days a week. Alternatively, the same benefits could be achieved through 75 minutes of vigorous intensity activity spread across the week (Department of Health., 2011b). Additionally, the guidelines for children aged between 5 and 18 years recommended to perform moderate to vigorous intensity physical activity for at least 60 minutes and up to several hours every day and to incorporate vigorous intensity activities, including those that strengthen muscle and bone, on at least three days a week (Department of Health., 2011a).

A major priority in public health is increasing physical activity levels in children and adolescents (Trost *et al.*, 2003), since physical activity is considered as very important for keeping children in good health, as well as reducing children's levels of adiposity and future disease (Dugdill *et al.*, 2007). It is also evident that the role of parents is an important factor in improving physical activity and reducing obesity in their children (Lindsay *et al.*, 2006), since parents playing with their children encourages them to become more physically active (Strauss *et al.*, 2001). In addition, most of the studies pertaining to physical activity in children found a positive correlation between the levels of physical activity in children and in their parents (Trost *et al.*, 2003). Moreover, research has reported that children whose parents have high physical activity levels are more active than children whose parents are less active (Xu, *et al.*, 2010).

British society is 92% white British (English 83.6% Scottish 8.6% Welsh 4.9% Northern Irish 2.9%). Therefore, approximately 8% of the UK population are from ethnic minority groups and these groups are principally divided into two main groups, Black (Black

Africans and Black Asians) and South Asian (Szczepura *et al.*, 2004). These populations can be further categorised as 2% Black, 1.8% Indian, 1.3% Pakistani, 1.2% mixed race and 1.6% other (The Information Centre, England Statistics, 2008).

Obesity prevalence is highest among women in Black African (38%), Pakistani (28%) and Black Caribbean (32%) groups, with the lowest prevalence of obesity found in Chinese women (8%) (The Information Centre, England Statistics, 2008). Weight management problems may be caused by certain lifestyle factors; for example it is known that during adolescence there is a decline in physical activity levels in black girls, where the proportion of physical inactivity in leisure time reached 56% versus 31% in white girls (Kimm *et al.*, 2002). Furthermore in Arabic communities there is a high prevalence of physical inactivity among Saudi males, with 81% of adult males not engaging in any type of physical activity (Al-Refaee *et al.*, 2001), and 20% of males walking for less than 10 minutes a day (Al-Hazzaa., 2006). In addition, men born in Arabic-speaking countries have a significantly greater odds ratio for a sedentary leisure-time physical activity pattern than in all other countries. Moreover the odds ratio of completely sedentary leisure—time physical activity status in men born in Arabic-speaking countries is significantly higher compared to men born in Northern Europe (Lindstro *et al.*, 2001).

Szczepura (2004) suggests that these differences in activity levels relate to a greater number of barriers that impede minority groups to access public health services. These may include cultural and social differences and consequently these factors provide complex problems for policy decision makers. Several population surveys indicate that there are some factors which play an important role in influencing physical activity behaviours such as socioeconomic status, gender, and ethnicity as well as, personality and social factors (Allender *et al.*, 2006). Furthermore, studies indicated that there is higher prevalence of physical activity in some segments of ethnic minority groups such as in

people from low-income households and in people with low levels of education (Hillsdon *et al.*, 2005).

Rai *et al.* (1997) reported that there are two kinds of barriers to becoming more physically active; firstly practical barriers which involved lack of time, work-related issues, socioeconomic factors and barriers related to access to facilities. Other barriers to the adoption of a more physically active lifestyle relate to attitudes and beliefs surrounding the perceived importance (or lack) of physical activity, particularly in older individuals.

During the past two decades there has been an interest in psychological research, particularly in self-perceptions (Eklund et al. 2013). The relationship between physical self-perceptions and physical activity is well established, with several studies showing those who have the most positive physical self-perceptions are the most physically active (e.g. Fox, 1990; Fox and Corbin, 1989; Fox, 1997; Eklund, 2013; Fairclough, and Ridgers, 2010). Crocker et al. (2003) and Evdoxia et al. (2013) demonstrated that there is a relationship between physical activity and physical self-worth, and Findlay and Bowker (2009) showed the levels of sport participation among adolescents is positively linked with physical self-esteem. Similarly, it has been shown that adolescent students with high skills and motivation levels have higher self-esteem and engaged in more physical activity than students with low skills and motivation levels (Kalaja et al., 2010), and athletic girls have more positive self-esteem development than other girls (Richman and Shaffer, 2000). Moreno and Cervelló (2005) found individuals who participate in physical activity less than once a week had lower scores in Sport Competence, Physical Condition and Physical Strength than those individuals who participate in physical activity three or more times a week.

The Physical Self-Perception Profile (PSPP) questionnaire was designed by Fox and Corbin (1989) to identify cognitive aspects of the proficiency perceived by an individual in various physical sub-domains. The validity of the PSPP questionnaire has been demonstrated with a range of populations including athletes or non-athletes (Asçi, 2003), males and females (Hayes *et al.*, 1999), adolescent girls (Kowalski *et al.*, 2003) and different cultures (Malete *et al.*, 2008; Moreno *et al.*, 2007). However, no known research has explored the physical self-perceptions or the physical activity levels of Arabic males living in the UK.

## 3.2 Aim of Study

The aim of this study was to examine the patterns of physical activity and physical selfperceptions among males of Arabic origin that now live in Liverpool. A secondary aim was to investigate any differences in Arabic males from different generations of the same family (sons, fathers).

#### 3.3 Methods and Procedures

#### 3.3.1 Participants

The participants in the study were from an Arabic community in Liverpool. One hundred and twenty-seven community-dwelling people, including sixty two men and sixty five boys (see Table 3.1) volunteered to participate in this study. The procedures undertaken in the study were approved by the local institution Ethics committee and informed consent was obtained from each participant or their guardian.

Participants in the study originated from several Arab countries as follows: - 17 Libyan men and 15 Libyan boys, 12 Yemeni men and 17 Yemeni boys, 11 Saudi men and 7 Saudi

boys, 10 Iraqi men and 13 Iraqi boys, 7 Egyptian men and 10 Egyptian boys, 2 Algerian men 2 Syrian men 2 Syrian boy 1 Sudanese man and 1 Sudanese boys.

**Table 3.1. Senior family member characteristics** 

The	S	Sample	Full	Employ	Unempl	Less than	Less than 10	More than 10	Born in
country of origin	n	%	time student	ees	oyed	5 years in the UK	years in the UK	years in the UK	the UK
Libyan	17	27.4%	58.8%	29.4%	11.7%	17.6%	64.7%	17.6%	-
Yemeni	12	19.4%	16.6%	66.6%	16.6%	8.3%	25%	25%	41.6%
Saudi	11	17.7%	72.72%	-	27.27%	18.18%	81.81%	-	-
Iraqi	10	16.1%	20%	60%	20%	-	30%	70%	-
Egyptian	7	11.3%	-	71.4%	28.5%	1	71.4%	28.5%	-
Algerian	2	3.2%%	-	100%	-	ı	-	100%	-
Syrian	2	3.2%	50%	50%	-		100%	-	-
Sudanese	1	1.6%	-	100%	-	-	100%	-	-

**Table 3.2. Baseline characteristics** 

	Men (n = 62)	Boys (n = 65)
Age (years)	33.4 ± 9.6	12.4 ± 1.9
Height (M)	$175.7 \pm 6.5$	$138.3 \pm 6.1$
Body Mass (Kg)	$79.8 \pm 12.1$	$40.4 \pm 4.9$
<b>Body mass index</b>	$25.8 \pm 3.4$	$20.8 \pm 1.3$

## 3.3.2 Experimental design

The present study was designed to provide an estimate of the patterns of physical activity of Arabic males using accelerometry data that was collected between November 2009 to January 2010, and required participants to wear an ActiGraph accelerometer on the right hip during waking hours for a period of seven consecutive days. This included five

weekdays and two weekend days. In addition, men completed the Physical Self-Perception Profile questionnaire (PSPP) (Fox and Corbin, 1989) and boys completed the Children and Youth Physical Self-Perception Profile (CY-PSPP) (Eklund *et al.*, 1997).

#### 3.3.3 Measurement

#### Physical activity levels

This measurement method provides information on the frequency, amount, and duration of activities performed. Accelerometery used widely to assess physical activity in adults and children for males and females and also it considered an objective measure to assess physical activity (Robertson *et al.*, 2010). Physical activity levels were measured using accelerometry. Accelerometer data were obtained and downloaded using the Actigraph Monitoring System (Model GT1M), a widely used objective measure of physical activity in adults and children. Participants wore an ActiGraph Accelerometer for seven consecutive days which included five weekdays and two weekend days (Barwais et al., 2013).

The device was programmed to record data with an epoch of 60 seconds. Data was also categorised for daytime and night-time activity patterns as well as activity intensity.

Accelerometers were programmed before placement on a standard belt worn around each participant's hip. All participants were familiarised with the use of the monitors and instructed how to proceed around bathing or shower times.

Data files were converted into Excel by (MAHUffe) software (<u>www.mrc-epid.cam</u>. ac.uk).

Full data were obtained for one hundred and twenty-seven participants including sixty two men and sixty five boys. A minimum of 8 hours per day (i.e. 24 hours over the 7 days) of activity monitoring between the hours of 8:00 am and 10:00 pm was the prerequisite for

inclusion in the analysis as a valid measurement day. A mean duration of monitoring >9 hours per day was achieved.

The time spent being sedentary or performing physical activity was determined based on Freedson *et al.* (1989) cut points for men and the Ekelund *et al.* (2004) cut points for children and the performing physical activity was categorised into light, moderate and moderate-to-vigorous physical activity (MVPA).

#### **Physical self-perceptions**

Before commencing the accelerometer measurement, physical self-perceptions were measured using the PSPP for adults, and the CY-PSPP for children. The PSPP (Fox and Corbin, 1989) is a self-report questionnaire measuring how individuals evaluate themselves physically. The content and factor structure and internal reliability of the PSPP were originally validated and are well supported in the literature (Fox, 1990; Fox & Corbin, 1989; Sonstroem, Speliotis, & Fava, 1992). Cross-cultural validity has also been supported among a wide range of samples in other countries such as in Turkey (Zorba *et al.*, 1999), Sweden (Hagger and Lindwall, 2004), Portugal and Spain (Hagger *et al.*, 2009), Estonia (Hagger *et al.*, 2011), Canada (Crocker, *et al.*, 2000) and in the UK (Hagger *et al.*, 2005; Page *et al.*, 1993).

The PSPP includes 30 forced-choice items in which participants are asked which of two agreements they agree with most. The PSPP contains five subscales, evaluating sports competence (SC), physical condition (PC), body attractiveness (BA), physical strength (PS) and physical self-worth (PSW).

The CY-PSPP is a modified version of the PSPP for children and youths (CY-PSPP), measuring the same five subscales. The CY-PSPP has been validated with children at age

of 9 years or younger (Welk *et al.*, 1997), and also Welk and Eklund (2005) and Whitehead (1995) found it an appropriate tool for the adolescent population aged 12 and above, and the factorial validity and internal reliability of the CY-PSPP scales were well supported with the original version of the PSPP (Gregory *et al.*, 1997).

Both the PSPP and the CY-PSPP questionnaires were translated into Arabic by the researcher and then the Arabic version was checked by a legal translator in Libya. A back translation was undertaken by a Libyan Doctor living in the UK who speaks English natively.

#### 3.3.4 Data Analysis

Accelerometry data were converted into categories of physical activity for both week and weekend days. The categories reported were time spent performing sedentary, light, and moderate to vigorous physical activity (MVPA), and these were determined using Freedson *et al.* (1989) cut points for men and Ekelund *et al.* (2004) cut points for children. The total number of steps taken each day were also recorded and averaged for week vs. weekend days.

#### 3.3.5 Statistical analysis

Accelerometry data were downloaded and subsequently analysed using the statistical package for the social sciences (SPSS) version 17. Differences in physical activity categories between week vs weekend and between men vs. boys were compared using independent *t* tests. Descriptive statistics (mean and standard deviation) were calculated for each scale of the PSPP and CY-PSPP questionnaires.

#### 3.4 Results

#### 3.4.1 Accelerometry Data

Figure 3.1 presents the time spent by men in performing the three intensities of physical activity (light, moderate and MVPA). The number of minutes spent for light physical activity during the week days (37.92 $\pm$ 21.43 mins) was significantly higher than the time spent during the weekend days (25.75 $\pm$ 19.69 mins) (P<0.001).

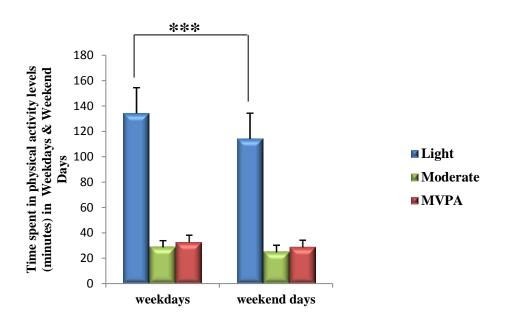


Figure 3.1. Time spent in different physical activity intensities on week and weekend days by adult men

\*\*\*P <0.001; significant difference between categories

There was no significant difference between week and weekend days for time spent in moderate physical activity  $(28.83\pm10.74 \text{ for week days vs. } 25.04\pm8.35 \text{ for weekend days,}$  P=0.27) or for time spent in MVPA physical activity  $(32.83\pm12.64 \text{ for week days vs.} 29.05\pm9.95 \text{ for weekend days,}$  P=0.24).

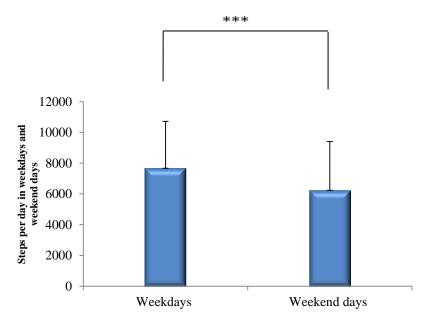


Figure 3.2. Steps per day for week and weekend days by adult men

\*\*\*P<0.001; significant difference between levels

Figure 3.2 presents the number of steps taken by men during the week and weekend days. It is evident that the steps per day during the week  $(7673\pm3045)$  was significantly greater than the steps per day during the weekend  $(6233\pm3174)$  (P=0.001).

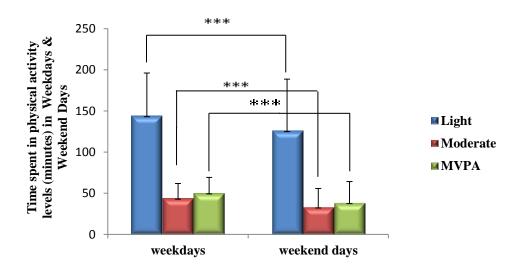


Figure 3.3. The time spent in different physical activity intensities on week and weekend days by boys

\*\*\*P<0.001; significant difference between categories

Figure 3.3 shows that boys spent significantly more time performing light physical activity during week days (144.06 $\pm$ 51.75) than during weekend days (125.90 $\pm$ 62.51) (P=0.002). Similarly, boys performed significantly higher levels of moderate activity on week days than weekend days (43.87 $\pm$ 18.05 vs. 33.08 $\pm$ 22.79, p<0.001), and again, more time in MVPA on week days than on week end days (50.27 $\pm$ 19.07 vs. 38.38 $\pm$ 25.77, p<0.001).

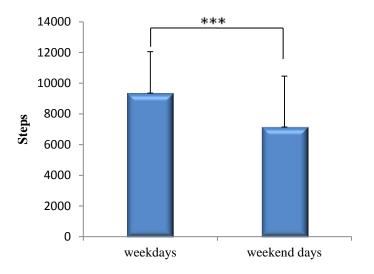


Figure 3.4. Steps per day on weekdays and weekend days by boys \*\*\*P<0.001; significant difference between levels

From figure 3.4 it is also evident that when physical activity is quantified as step count, the boys recorded 24% less steps on the weekend than in the week (7151±3362 vs 9360±2743 steps per day, p<0.001).

#### **3.4.2 PSPP data**

Table 3.3. Men PSPP scores

PSPP Subscales	Sports Competence	Physical Condition	Body Attrac- tiveness	Physical Strength	Physical Self-worth
<u>Men</u>	SC	PC	BA	PS	PSW
Mean.SD	16.17±2.98	15.23±3.47	17.65±2.84	16.14±3.38	17.66±2.99

Table 3.2 shows the mean scores on each of the five PSPP subscales for the men. Whilst all scores were higher than the median of possible scores (median=15) the highest scores were in body attractiveness  $(17.65\pm2.84)$  and physical self-worth  $(17.66\pm2.99)$ . Lowest scores were recorded for perception of individuals' physical condition  $(15.23\pm3.47)$ .

**Table 3.4. Boys PSPP scores** 

CY-PSPP Subscales Boys	Sports Competence SC	Physical Condition PC	Body Attractiveness BA	Physical Strength PS	Physical Self-worth PSW
Mean.SD	16.34±3.16	14.92±3.63	17.71±2.93	16.00±3.37	17.81±2.94

Table 3.3 presents the mean scores on each of the five PSPP subscales for the boys. All scores were higher than the median of possible scores (median = 15) except the physical condition subscale (14.92+3.63). As with the men, the highest scores were in body attractiveness (17.71 $\pm$ 2.93) and physical self-worth (17.81 $\pm$ 2.94).

#### 3.5 Discussion

The aim of this study was to examine patterns of physical activity and physical selfperceptions among Arabic males (fathers, sons and grandfathers) living in Liverpool. The
findings indicated that both men and boys were more active during weekdays than
weekend days, and that boys were more active than men when performing light, moderate
and MVPA intensity patterns of activity. This finding is similar to that of other studies
(Bundred et a., 2001; Reilly *et al.*, 1999; Dorosty *et al.*, 1999; Young et.al 2009) that are
reflective of the more sedentary lifestyle that is attained after adolescence. Overall,
activity performed in the light intensity category was the most prevalent compared with
moderate and MVPA intensity. In association with this data, participants also completed
the greatest number of steps on days during the week.

The major new finding of this study was that Arabic males were performing a cumulative total of approximately 190 (29 min x 5 + 25 min x 2) minutes per week in moderately intense physical activity, which is in excess of the recommended weekly guideline of 150 min per week. By comparison, their sons were performing, on average 47 (50 min x 5 + 38 x 2) minutes of MVPA on a daily basis. Taken together these data indicate that Arabic men in this sample exceeded the current UK guidelines for recommended physical activity, whereas the boys did not reach the levels of MVPA required, despite being more active than their fathers overall. These data were averaged from the total sample of 62 men and 65 boys and indicate that, at least for the Arabic men, a high proportion of this population meet UK physical activity guidelines. This compares with the recent physical activity assessment of total UK population by Townsend et al., (2012a) which reported that in 2008 only 39% of males in England met current guidelines, with these percentages being 45% in Scotland, 37% in Wales and 33% in Northern Ireland. In the context of physical activity levels in the population under investigation here, this is encouraging, particularly since the data of Townsend was collected by self-report, which has historically been shown to overestimate activity levels. Furthermore, although the boys failed to meet recommendations for MVPA, the data presented is an average of 65 individuals and therefore compares favourably with the 32% of UK male children that meet current recommendations (Townsend et al., 2012a), albeit perhaps somewhat behind that report for Scottish Boys at 75%.

From a psychological perspective, the results indicate that the level of body attractiveness and physical self-worth as assessed by the PSPP questionnaire were higher than the other subscales in both men and boys, and that values generated across all subscales were similar between the age-groups. This is the first known study to use the PSPP with an Arabic male population. The fact that the PSPP and CY-PSPP scores were higher than the median of

possible scores (except the physical condition in the boys) indicated Arabic males have a generally positive physical self worth. The same pattern of results was observed for men and boys, with the most positive scores on the body attractiveness and physical self-worth scales, and the lowest scores on the physical condition scale.

#### 3.5.1 Accelerometry

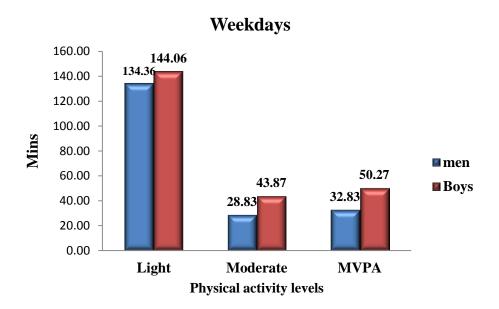


Figure 3.5 Number of Minutes Spent per Day in each activity category during Weekdays

Figure 3.5 highlights the observation that the most prevalent activity pattern for boys was light activity which presented as 144.06 minutes per day. Time spent in moderate and MVPA was 43.87 minutes and 50.27 respectively. The pattern of physical activity for men was similar to that of boys with the greatest number of minutes spent in light (134.36 min) compared with moderate (28.83min) and MPVA (32.83min) but values were lower when comparing these divergent patterns, These differences between men and boys likely reflect the sedentary nature of adult males occupations as compared with the more active lifestyle that attendance at school determines for children. For example, school life is

punctuated with periods of intense activity at playtimes and when playing games etc. Although it is evident that children are more active than their fathers, these data indicate that these numbers of minutes do not meet the minimum required minutes for the MVPA level daily of 60 minutes (Department of Health, 2011a; Riddoch *et al.*, 2009; Strong *et al.*, 2005; Jago *et al.*, 2005; Department of Health., 2004; Jago *et al.*, 2004; Biddle *et al.*, 1998), and somewhat less than the average amount of moderate to vigorous physical activity (MVPA) of 85 minutes per day for white British boys reported in the Joint Health Surveys Unit (2010).

The differences in men vs boy activity levels in this study suggests that age determines the degree of variance in the different categories of activities (Bundred et a., 2001; Reilly *et al.*, 1999; Dorosty *et al.*, 1999; Young et.al., 2009). Perhaps this is due to the cycle of weekly commitments and obligations of parents versus children. The children spend the most of their time at school which includes an hour during the recess doing different types of physical activities. In addition, boys attend physical education classes as part of the curriculum which leads to do a promotion of physical activities. This is the opposite of parents, who are engaged in sedentary occupations or full time students at university. From these activity profiles it is evident that adults spent much time in the sitting position, particularly given that they recorded less than 8000 steps per day on average.

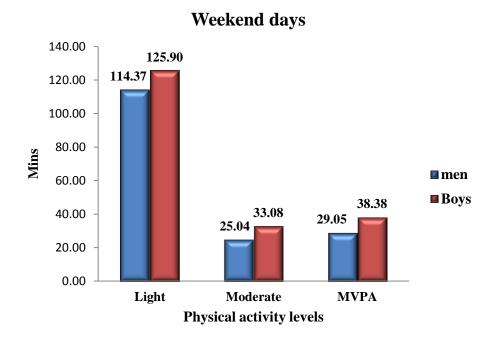


Figure 3.6 Number of Minutes Spent per Day in each physical activity category during Weekend days for adult men and boys

The pattern of activity found during the week and the differences presented between men and boys are replicated at the weekend, with the exception that values in all categories and for both groups are lower, These findings are in agreement with those of Riddoch *et al.* (2009) who found that younger people are more active than those older ones, especially males (Bundred et a., 2001; Reilly *et al.*, 1999; Dorosty *et al.*, 1999 Bagos, 2005). Again, it is important to mention that the required/recommended number of minutes of 60 minutes for the MVPA level was not reached on weekend days for boys. Although the Arabic men in this study failed to reach 30 minutes of moderate activity every day of the week, the cumulative total (accelerometry was collected every day for 7 consecutive days) of 190 minutes was in excess of current guidelines for moderate activity.

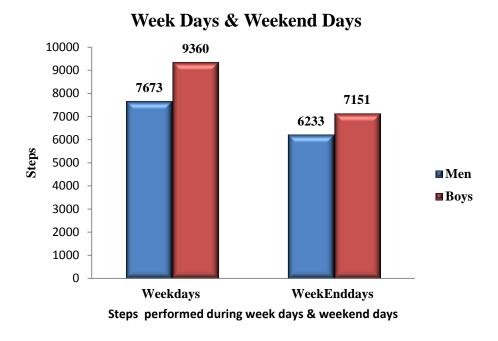


Figure 3.7 Number of Steps

It is evident for Figure 3.7 that boys take significantly (P<0.05) more steps per day during the weekdays than in the weekend days. Similarly, men tend to have the same pattern where they make more steps in the weekdays. In comparison as indicated by steps per day, boys are much more active on a daily basis than men, independent of day of the week. These findings are consistent with previous study of Young *et al.* (2009) which reported that participants were more active during the weekdays than on weekends. These differences obviously relate to activity focused around occupation or school-based activity (Bagos, 2005; Bundred et a., 2001; Reilly *et al.*, 1999).

#### 3.5.2 PSPP data

Table 3.5. Mean PSPP score

PSPP Subscale <u>Men</u>	Sports Competence SC	Physical Condition PC	Body Attrac- tiveness BA	Physical Strength PS	Physical Self-worth PSW
Mean.SD	16.17±2.98	15.23±3.47	17.65±2.84	16.14±3.38	17.66±2.99
Fox (1990)  Mean.SD	17.06±3.93	16.63±3.93	15.23±3.56	15.66±3.50	17.05±3.55
Robert et al. (2005) Mean.SD	15.60±4.28	16.36±4.06	15.86±3.86	16.15±3.77	16.89±3.66

Whilst the PSPP scores give us some indication of the areas Arabic males feel most positive about themselves, the lack of a control group does not allow us to compare the scores with other ethnic groups. We can however gain some indication by comparing our results with other published studies. Table 3.5 shows the men's PSPP scores from our sample compared to two studies from Fox (1990) and Robert *et al.* (2005). It can be seen that the body attractiveness and physical self-worth scores for the Arabic males are higher than Fox and Robert's samples, and the physical condition score is lower. The reason for this difference is not clear, but it is possibly related to cultural differences. In this context, Heine *et al.*, (2002) emphasised that people from different cultures use different standards when evaluating themselves. Research has also indicated that body image in PSPP have been associated with different cultural expectations of males and with respect to body ideals (Schwalbe & Staples, 1991; Lindwall, 2004).

Table 3.6. Boys PSPP score

CY-PSPP	Sports	Physical	<b>Body Attrac-</b>	Physical	Physical Self-
Subscale	Competence	Condition	tiveness	Strength	worth
<u>Boys</u>	SC	PC	BA	PS	PSW
Mean.SD	16.34±3.16	14.92±3.63	17.71±2.93	16.00±3.37	17.81±2.94
White-British sample Foweather (2010) Mean.SD	18.7±4.1	18.7±3.7	17.4±4.5	17.4±4.2	18.3±3.9

The same pattern of scores was observed for the boys, with the most positive scores on the body attractiveness and physical self-worth subscales. When compared with a sample of White-British (Foweather, 2010) boys, the differences in body attractiveness and physical self-worth were not as pronounced as for the men, but the physical condition and sports competence scores were considerably lower than those of the White-British boys (Foweather, 2010).

Although the study examined the patterns of physical activity among Arabic males, the study is limited, since it did not make a comparison between this sample and other White-British sample and other ethnic minority groups in physical activity levels. In addition, the study was completed during the school term only and also during the winter months which may have caused a lower pattern of activity to be reported compared with the summer. Moreover, this study used the Freedson (1989) cut points that were formulated on a different population sample from the Arabic culture. In the future, it would be interesting to understand the reasons why people have low physical activity levels and therefore it is suggested that such a group be interviewed regarding their issues which impeded adopting healthy lifestyles.

#### 3.6 Conclusion

The present study contributed to the dearth of physical activity studies for Arabic people whether residing in the UK or even in the Arabic world. Results indicated that Arabic men resident in the UK met the physical activity guidelines whereas their offspring did not. Results also highlighted that both men and boys were more active during weekdays than at the weekend, and moreover boys have higher physical activity levels than men. In addition time spent performing light level of physical activity was greater than the Moderate and MVPA intensities in men and in boys. Furthermore, the results revealed that the level of

Body attractiveness and physical self-worth in PSPP questionnaire were higher than the other subscales in men and similarly in YC-PSPP questionnaire which showed greater level of body attractiveness and physical self-worth in the boys in this sample compared with previous studies. The low levels of physical activity of Arabic male boys suggest that strategic interventions are needed with a view to provide opportunities to become more physically active in their daily routines and lifestyles.

## **Chapter 4**

## Study 2

Barriers and motivations to adoption of physical activity in Arabic males

#### 4.1 Introduction

The level of physical activity of UK citizens is considered to be very low. In Scotland government statistics indicate that around 68% of females and 57% of males are considered inactive in terms of meeting the national physical activity recommendations (NHS, 2011). By comparison, in Wales 36% of males and about 23% of females are physically active (NHS, 2011). In the UK the most active population are those people living in England, where approximately 39% of males and 29% of females are regularly active enough to meet government recommendations of 150 minutesof moderate physical activityper week (Department of Health, 2011b). This compares to 32% of men and 21% of women in 1997. When these figures are translated into younger populations (NHS, 2008) only 32% of boys and 24% of girls (aged from 2 to 15 years) in England meet the guidelines of 60 minutes or more of physical activity on each day of the week (Department of Health, 2011b).

According to the Health Survey for England (Health Survey for England, 2012) levels of physical activity differ between different ethnic groups:

- With the exception of Irish and Caribbean populations, physical activity levels of ethnic minority groups are lower than white British UK residents.
- There was an increase in physical activity from 1999 to 2004 in Bangladeshi and Chinese populations but a reduction in Pakistani males' physical activity levels.
- Apart from the Irish population, ethnic minority groups show less interest in walking 30 minutes every day than the UK white British population.
- Asian populations were observed not to be following the daily physical activity recommendations (NHS, 2004).

Furthermore, from a population perspective, the levels of physical activity in the Arabic countries are considered very low. In Eastern Mediterranean regions and the Arabic world more than half of adults aged 40-69 are overweight or obese (WHO, 2003; Maddah *et al.*, 2009; Sadeghipour *et al.*, 2010; Maddah *et al.*, 2010; Esteghamati *et al.*, 2010; Naghmeh-Zahra *et al.*, 2011). While obesity is more prevalent among women, overweight is more common among men (Department of Health, 2011b). According to the available data in the Arab world, the prevalence of obesity in Arabic countries is about 50-70% in women and 40-60% in men (Musaiger *et al.*, 2011). For the years 2003-2007, The WHO reported a particularly high prevalence of both obesity and inactivity in gulf state nations. Table 4.1 presents this data as a percentage of the population, with these examples being particularly high.

Table 4.1. Percentage of Overweight/Obesity and Physical inactivity in several Arab countries.

Country	Overweight/Obesity (%)	Physical inactivity (%)
Egypt	66.0	70.4
Iraq	66.9	56.7
Jordan	57.0	51.0
Kuwait	75.4	64.7
Lebanon	60.5	68.7
Oman	62.6	69.9
Saudi Arabia	68.8	67.7
Sudan	53.9	86.8
Syria	56.3	31.2
		(WHO EMRO, 2007).

Childhood obesity in the Arabian Gulf States is an increasing health problem and it is related positively to adult obesity (Mouss, 1994). For example, around 21% of young people in Egypt are at risk of becoming overweight, and about 42% of school students in the United Arab Emirates spend more than 3 hours playing video games and watching television every day (WHO, 2010b).

There are a number of social and cultural barriers to adopting and maintaining a physically active lifestyle in the UK (Department of Health, 2005). The most commonly cited barriers are a lack of time (Brophy *et al.*, 2011), not having the necessary equipment and facilities, not having the requisite skills, and a lack of interest and motivation for physical activity (National Obesity Forum, 2006). In ethnic minorities in the UK these barriers are compounded by a lack of awareness of physical activity programs. There are also feelings of being overly exposed in the environment which may lead people from ethnic minorities to feel as if they do not fit in and therefore worry about their security. Furthermore there are cultural issues relating to dress codes in females and privacy issues for both males and females (Balarajan and Soni, 1995; Sharif., 2011). Brophy *et al.* (2011) indicated that boys also experienced barriers to physical activity such as limited opportunities to participate in physical activity as a result of the requirement of supervision by their parents and teachers and also poorness of access to facilities. To date no known studies have investigated the barriers to physical activity experienced specifically by Arabic males.

This study builds on the results of study one that highlighted that Arabic men are sufficiently active whereas their sons' do not meet the recommendations for MVPA. Here focus group interviews are used to explore both the barriers and facilitators to physical activity among Arabic males living in the UK. The findings from study one pointed out that both men and boys were more active during weekdays than weekend days, and boys

took part in more light, moderate and moderate-to-vigorous physical activity than men. This reflects the more sedentary lifestyle that is attained after adolescence. Generally, activity performed in the light intensity category was the most prevalent compared with moderate and MVPA intensity. From a psychological perspective, the results indicated that perceived Body Attractiveness and Physical Self-worth were higher than perceived Sports Competence, Physical Condition and Physical Strength in both men and boys. Whilst these results provide information about physical activity levels and physical selfperceptions of Arabic males, quantitative methodology provides no insight into the mechanisms underpinning these observations. For example, what factors facilitate physical activity participation, what barriers to participation exist, and what role physical factors play in the self-perceptions of Arabic males. Therefore, this second study uses qualitative methodology to obtain in-depth information about the physical activity experiences of Arabic males, and to provide context to the study one results (Bernard et al., 2010). Focus groups are used as they allow data to be collected from a large number of participants in a short space of time, and allow for debate between individuals to promote the introduction of new ideas and create relationships between the information provided by each participant (Liamputtong, 2011).

# 4.2 Aim of study

The aim of this study was therefore to examine barriers and motivations to physical activity in Arabic males (fathers, sons) living in a large metropolitan, multicultural city in the North West of England.

# 4.3 Method

# 4.3.1 Participants

As is common in qualitative studies contributors were selected purposively instead of at random (Miles and Huberman, 1994; Patton, 2002). Purposive sampling was used to recruit men and boys of Arabic origin living in Liverpool. All study one participants were contacted via phone or face to face to invite them to take part in the focus groups. Prior to participation, written consent and assent was obtained from both men and boys. The study was approved by Liverpool John Moores University Research Ethics Committee. 16 Arabic men (aged 27 to 52 years, BIM 28.4) and 12 Arabic boys (aged 7-16 years, BMI 18.4) agreed to take part (see Tables 4.2 and 4.3).

**Table 4.2. Participants' characteristics (Men)** 

	The country of origin	BMI	Postcode	Employment Status	
1	Libyan	29.7	L7	Full time student	
2	Yamani	24.7	L7	Full time employee	
3	Yamani	30	L7	Full time employee	
4	Iraqi	26.6	L6	Full time student	
5	Libyan	24.1	L7	Full time student	
6	Saudi	38.2	L7	Full time student	
7	Libyan	26.2	L6	Unemployed	
8	Yamani	22.8	L8	Full time employee	
9	Egyptian	31.1	L8	Full time employee	
10	Saudi	27	L6	Unemployed	
11	Iraqi	27.7	L7	Full time employee	
12	Yamani	31.9	L7	Full time employee	
13	Libyan	29.3	L8	Unemployed	
14	Saudi	28	L8	Full time student	
15	Yamani	26.7	L7	Full time student	
16	Yamani	29.7	L7	Full time employee	

**Table 4.3. Participants' characteristics (Boys)** 

	The country of origin	BMI	Postcode
1	Libyan	21.8	L7
2	Libyan	15.3	L7
3	Yamani	16.9	L7
4	Saudi	17.3	L8
5	Libyan	18.1	L6
6	Yamani	18.8	L7
7	Libyan	17.3	L8
8	Saudi	13.6	L6
9	Iraqi	16.9	L6
10	Yamani	21.4	L7
11	Saudi	21.8	L7
12	Yamani	21.2	L7

#### **4.3.2 Procedures**

The study followed an interpretative approach whereby the aim was to elicit and represent the realities of the participant experience of physical activity. This approach acknowledges the existence and importance of multiple realities and also allows for an understanding of the role of the researcher in the research process. The study findings and their interpretation are reflected through the life experience of the researcher who is an Arabic male (Libyan) of age 40 years, married with 2 young children, studying in full-time tertiary education and having lived in the North West of England for 3 years. The researcher lived and socialised in the same community from which the sample was recruited. Such immersion in the culture of interest enhances the trustworthiness of the findings (Miles & Huberman, 1994).

Seven focus groups were conducted (4 men's groups, 3 boys' groups). Focus groups took place either in the Tom Reilly Building or the Aldham Robarts Library at Liverpool John Moores University, or at the Libyan School, Liverpool. Men's focus groups lasted between 75 and 90 minutes and boy's focus groups lasted between 40 and 60 minutes.

The focus groups followed a semi-structured format, using open-ended questions. Questions covered seven main topics: Terminology & Knowledge of Physical activity (TKPA), Physical Activity and Sedentary Behaviour (PASB), Positives of Physical Activity (PPA), Barriers to Physical Activity (BPA), Motivations for Sedentary Behaviour (MSB), Importance of PSPP Components (IPSPPC) and Family Factors (FF) for both men and boys. A series of questions were prepared in advance to cover these topics. Example questions included: "What do you understand by the terms physical activity, exercise and sport?" (TKPA theme); "What types of physical activity do you engage in?" (PASB theme); "What benefits of physical activity are you aware of?" (PPA); "What prevents you from being physically active?" (BPA theme) "What sedentary pastimes do you engage in?" (MPI) "How important are the dimensions of physical conditioning, sports competence, body attractiveness and strength to you?" (IPSPPC); "Do you engage in physical activity as a family?" (FF). A full interview schedule is provided in appendix 1.

All focus group sessions were conducted in Arabic and recorded using a digital recorder. The interviews were then transcribed verbatim, and subsequently translated into English. At the end of each conversation participants were asked whether there were any other issues they would like to add.

#### 4.3.3 Data analysis and presentation

Qualitative research methods were used in order to interrogate participants' personal experiences (Kesby, 2007; Twum-Danso, 2009). This approach allows for an

understanding of participants' views relating to the reality of their lifestyle (Twum-Danso, 2009). A content analysis approach was used to analyse the data. Content analysis has been defined as a systematic, replicable technique that can compress many words of text into a small amount of content categories based on explicit rules of coding (Weber, 1990). The analysis contained deductive and inductive components to identify the barriers and motivations of physical activity. Transcriptions of the interviews were reviewed several times and line by line in an effort to identify the themes that unfolded from the data. In the initial deductive analysis, words or sentences that related to each focus group topic were coded into themes, then subthemes created based on the emerging data. Coding decisions were informed by the frequency of responses and relevance to the aim of the study. Themes were then transferred to a visual representation using a pen profile technique (Knowles *et al.*, 2009; Ridgers *et al.*, 2012).

The pen profile is a way of providing a composite of main themes of the interviews and displays the data using verbatim quotes and frequency counts (Ridgers *et al.*, 2012). Pen profiles are considered a suitable method for representing findings from large qualitative datasets through a visual representation of composite themes (Mackintosh *et al.*, 2011).

## 4.3.4 Establishing Trustworthiness

This study used a framework proposed and developed by Lincoln and Guba (1985) as well as cited in Parahoo (2006) which seeks to evaluate the trustworthiness of research work conducted within an interpretive paradigm in qualitative research. This includes credibility, transferability, dependability, conformability.

In order to assist trustworthiness of the findings several precautions were taken:

a) Participants were given full information about the study and the aim of the interview in order to help them focus on the themes of interest;

- b) All participants were guaranteed full anonymity and informed that all information obtained through the interview would be treated with confidentiality with the purpose of encouraging them to provide related information comfortably and confidently;
- c) The interview schedule was designed as far as possible to ensure questions were clear to participants. Where participants did not understand a question they were encouraged to ask for clarification. It was made clear that if participants did not wish to answer a question they were not required to do so.

To improve the credibility of the research results triangulation was employed for the content analysis, which involved discussion of the results with an expert in pen profiles and with the second supervisor to reach agreement on theme categorisation. Rich description of the data and clear reporting of the research procedures has been employed to enhance the transferability of the study.

### 4.4 Results and Discussion

The aim of this study was to examine barriers and motivations to physical activity in Arabic males (fathers and sons) living in Liverpool. Data from the mens' and boys' focus groups will be presented for each of the seven general dimension themes and discussed in the context of previous literature. The seven general dimension themes are Terminology and Knowledge of Physical activity (TKPA), Physical Activity and Sedentary Behaviour (PASB), Positives of Physical Activity (PPA), Barriers to Physical Activity (BPA), Motivations for Physical Inactivity (MPI), Importance of PSPP Components (IPSPPC) and Family Factors (FF). All themes are presented for both men and boys, with the exception of the PPA theme which is presented for men only. This is due to the fact boys' responses to the PPA questions overlapped considerably with other general or sub dimension themes

and there was insufficient data to constitute a unique PPA theme for the boys. Boys' responses were therefore distributed amongst other relevant themes.

The pen profile technique is used to present the data from the focus groups. Each diagram shows a hierarchical thematic structure. The **general dimension theme** is coloured in blue and refers to the main interview topic under investigation. Branched off this theme are the **higher order themes**. The higher order themes are in green and illustrate the main ideas that emerged for each of the general dimension themes. Branched off the higher order themes are the **raw data themes**, and branched off these are the **sub-raw data themes**. Each pen profile provides verbatim quotes as examples of participant responses (shown in brackets) and a frequency count that refers to the number of participants who commented on each theme (shown as "n=").

## Pen profile (men, boys).

## 4.4.1 Terminology and Knowledge of Physical activity (TKPA)

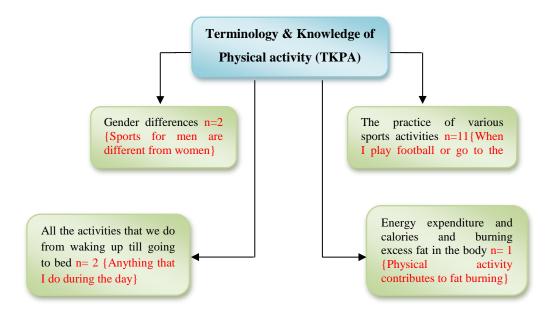
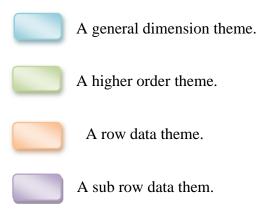


Figure 4.1 The general dimension theme of Terminology and Knowledge (TK) for men.



n= digit number of participants agree with this idea.

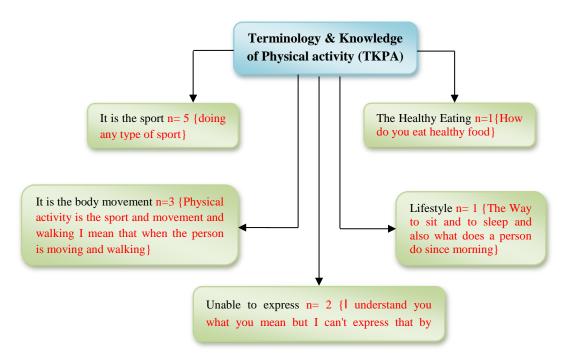


Figure 4.2 The general dimension theme of Terminology and Knowledge (TK) for boys.

Figure 4.1 (men) and Figure 4.2 (boys) show the themes that emerged relating to knowledge and terminology of physical activity. It was apparent that the concept of physical activity is interpreted in many different ways. Both men and boys were most likely to view physical activity as a type of sport, although others gave a broader interpretation focussed on lifestyle activities. The differences in the participants' responses can be explained by Rimmer (2006) who indicated that physical activity is something that is unique to each individual, and which is influenced by several environmental factors. Therefore suggesting individual responses varied according to personal interests and capabilities.

The fact that most respondents believed physical activity involves various sports is in agreement with Eiosdottir *et al.* (2008) who found in their study that trends in physical activity have been constantly moving towards a greater emphasis on sports. However, a

broader definition of physical activity is used in the Department of Health (2011a) guidelines, which state that physical activity is "any bodily movement produced by skeletal muscles that requires energy expenditure" (p.54). Some of the men and boys demonstrated an understanding in line with this broader view. For example, by suggesting physical activity is "Anything that I do during the day" (2 men) and "the sport and movement and walking I mean that when the person is moving and walking" (3 boys). This description of physical activity is supported by that of Reilly et al. (1997), who mentioned that physical activities include those actions and movements a person performs in between the intervals of rest and/or sleep.

A couple of participants focussed on the functionality of physical activity. For example, one man commented "physical activity contributes to fat burning" and one boy related physical activity to its role as part of a general healthy lifestyle ("how do you eat healthy food"). Physical activity and healthy eating have a combined role to play in balancing energy expenditure with energy intake (Hardman & Stensel, 2009), and failure to perform enough physical activity could lead to diseases such as obesity, cancer and cardiovascular disease. Consequently, being active is very important (Hardman & Stensel, 2009).

Some of the men felt physical activity is something that differs between men and women e.g. "Sports for men are different from women". Despite gender differences being mentioned by only two participants, this is not a new viewpoint. Research suggests there are major differences between men and women in terms of physical activity (Chipperfield et al., 2008). For instance, Azevedo et al. (2007) found that men and women have different levels of physical activity, wherein males were more physically active than females. Physiological differences that affect physical activity have also been observed, where it has been found that women have a higher degree of fat in their body, but studies

suggest that metabolism of fat may be faster among males (Blaak, 2001). Boys made no comments about gender differences in physical activity.

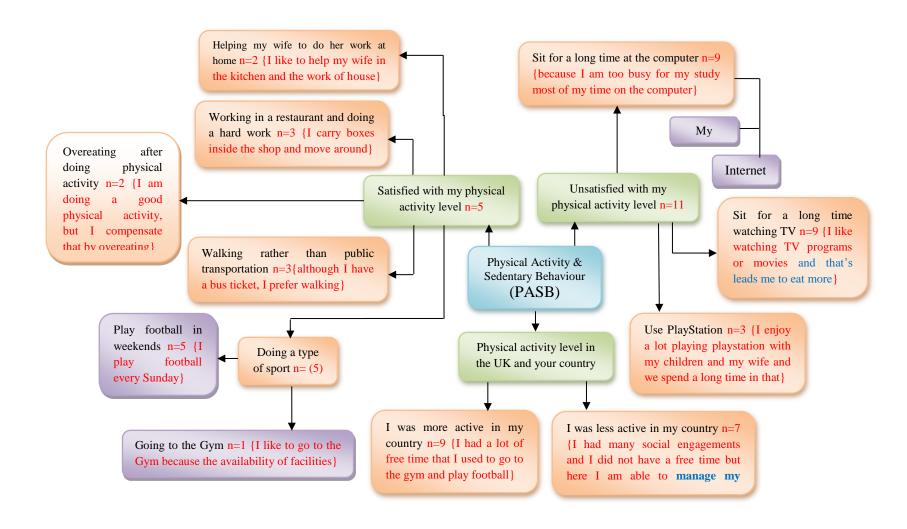


Figure 4.3 The general dimension theme of Physical Activity and Sedentary Behaviour (PASB) for men.

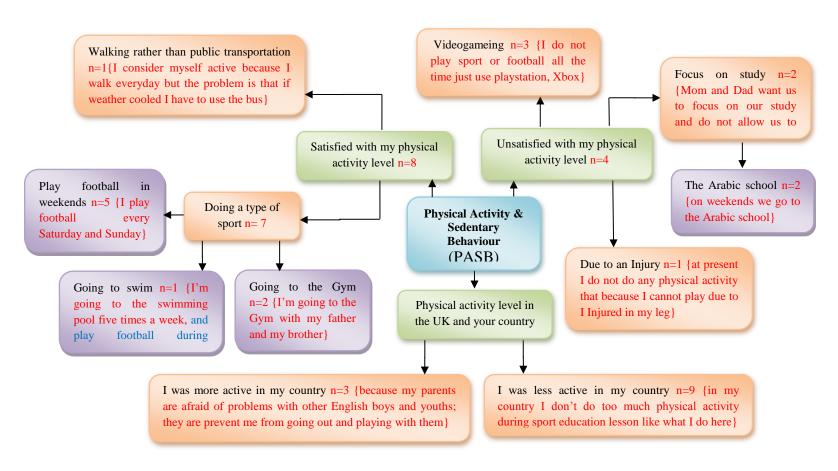


Figure 4.4 The general dimension theme of Physical Activity and Sedentary Behaviour

#### 4.4.2 Physical Activity and Sedentary Behaviour (PASB)

In addition to the general dimension of terminology and knowledge of physical activity, another significant general dimension shown was the relationship between physical activity and sedentary behaviour. Under this general dimension theme, three higher order themes were figured out from the responses of the participants (three for men and three for boys). These higher order themes in men and boys were *satisfied with physical activity*, *unsatisfied with activity level* and *physical activity level in the UK and country of origin*.

The majority of men expressed that they found their physical activity levels insufficient. This was seen as a result of the fact they were sitting for long periods of time watching TV (n=9), using computers (n=9) and using the PlayStation (n=3). Manson et al. (2004) also found the most common reasons why men tend to be physically inactive are the over-use of computers and television. Furthermore, Hu et al. (2001) found that television viewing, as a sedentary behaviour, is among the greatest risk factors for the development of obesity and cardiovascular diseases. In this context there is an overlap between sedentary behaviour and physical inactivity. Although "sedentary behaviour" and "physical inactivity" are often used interchangeably in the literature, it is important to note the difference between these two concepts (DOH, 2010). Physical inactivity indicates an insufficient level of physical activity (which might, for example, be defined as not meeting recommended guidelines). Sedentary behaviour on the other hand "is not simply a lack of physical activity but is a cluster of individual behaviours where sitting or lying is the dominant mode of posture and energy expenditure is very low." (DOH, 2011, p.10). Therefore, it is possible for people to engage in excessive sedentary behaviour but also be physically active (e.g. the office worker who sits at their desk all day then goes to the gym every evening). In the current study however, participants who were dissatisfied with their physical activity levels related this to the fact they engaged in many sedentary behaviours.

This could be explained by the fact television viewing promotes and actually encourages inactivity and sitting for long periods of time, reducing the person's physical activity, and thus depriving the person of a good opportunity to engage with physical activities that will be beneficial for their health.

While most boys were satisfied with their physical activity levels, some reported doing less than they would like due to spending a lot of time playing video games (n=3) focusing on study (n=2) or being injured (n=1). Video games are attractive to children, who have been found to concentrate on these games to the extent that they forget to perform physical activity (Smith & Biddle, 2008).

In the Arabic culture there is a large focus on academic study, with parents putting pressures on their children to complete homework and attend additional classes (Garrett, 2006). For some children this includes going to the Arabic school over the weekends; thus again limiting the available time for physical activity.

There was some consensus in views between parents and their sons who were not satisfied with their physical activity levels and the reasons behind it, for example, sitting for long periods in front of the TV, and this may be caused by the reflection of the fathers' behaviour on their sons. The participants who were satisfied with their physical activity levels took part in a variety of activities. For the men these included active transport (n=3), active jobs (n=3), housework (n=2) and going to the gym (n=1). These responses coincided with the findings of Lakka *et al.* (1992) as the activities that people most often perform to keep themselves physically active.

However, although five respondents expressed that they had enough physical activity, two of them felt the positive effects of physical activity may be negated by an increase in

energy consumption after doing physical activity "I am doing a good physical activity, but I compensate that by over-eating". Consequently, this brings to light the fact that physical activity in itself could not guarantee that health and lifestyle-related disease prevention. Care and attention must also be given to the person's diet and habits. Nevertheless, physical activity does have numerous benefits, especially in maintaining health (Peterson et al. 2006). Most of the boys in the study were satisfied with their levels of physical activity, citing active transport (n=1) and sport (n=7) as their main means of being active.

Another theme that arose during the focus groups concerned how participants perceived their physical activity levels when in the UK compared with their physical activity levels when in their country of origin. While the majority of boys reported being more physically active in the UK, men's responses were mixed. A slightly greater number of men articulated that they were more physically active in their countries (n=9), as compared to those who said that they were less active in their countries (n=7). It is possible this reflects a difference in the way Arabic males living in the UK deal with the British lifestyle. For example, some participants were able to take advantage of the facilities available in the UK to be more physically active such as going to the gyms available in many areas of Liverpool. Additionally the green areas such as public parks provide a good opportunity to walk around or engage in physical activity, as well as large shopping centres that promote walking. Some participants described being unable to manage their time when they were in their Arabic countries due to social commitments (which would be less while living in the UK). Furthermore, the cost of owning a car in the UK and the difficulty of getting a full UK driving license led most Arabic males to use public transport, which in turn encouraged them to walk to bus stops and to reach their destinations. Even those who had a car preferring to walk to the city centre rather than drive, due to the lack of free car parks.

Many participants who were more physically active in their countries put this down to lack of time during their life in the UK (particularly for the full time students) while several participants expressed their resentment with the weather, which they saw as a barrier to physical activity.

Although the difference between the participants whom were more physically active in their countries and the other participants was not considerable numerically, it reflects a difference in the way Arabic males living in the UK deal with the British lifestyle. This could be due to the diversity of Arabic countries from which the participants had moved, where cultural, environmental and other factors might affect the way men adapt to the British culture.

Most of the boys in the study expressed that the environment in the UK enabled them to be more physically active compared to living in their countries of origin. For example, they reported having a good opportunity to perform diverse types of physical activity during sport education lessons (*In my country I don't do too much physical activity during sport education lesson like what I do here*) (n=9). Conversely, the boys who said that they were more active in their countries gave reasons that they could not go out to play with the English boys because their parents were afraid problems might occur with them (e.g. "Because my parents are afraid of problems with other English boys and youths; they are prevent me from going out and playing with them"). These types of parental perceptions can prevent children from taking part in physical activity (Carver et al. 2010).

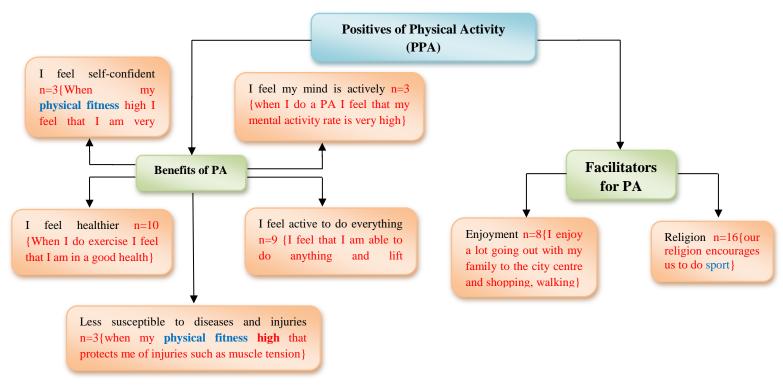


Figure 4.5 The general dimension theme of Positives of Physical Activity (PPA) for men.

#### 4.4.3 Positives of Physical Activity (PPA, men only)

The positives of physical activity theme revealed two higher order themes: benefits of participating in physical activity, and facilitators for participating in physical activity. These two main positives of physical activity were discussed by Van *et al.* (2005) as significant aspects of physical activity, who mentioned that when used properly physical activity brings with it a lot of benefits and is facilitated by numerous purposes and values.

Participants described five benefits of physical activity, the most common of which was a feeling of greater health (n=10). One participant said that when he performs a physical activity, he "felt that he was in a good health". This feeling of health and wellness is indeed one of the benefits most associated with physical activity. Numerous studies, including those of Warburton et al. (2006) and Yang et al. (2010) have found that physical activity significantly benefits health, particularly in terms of musculoskeletal strengthening and prevention of illnesses.

In addition to physical health, the respondents reported a greater sense of energy or vitality, as reflected by the response that "they felt that they were more active and able to do anything". This greater sense of vitality was also observed by Myers et al. (1999) when they examined individuals engaging in physical activity.

A few participants linked their physical activity to mental health (n=3). Studies have shown that physical activity can be beneficial for mental health through several proposed mechanisms, such as the release of hormones and other chemicals in the brain (Hamer et al., 2009).

When asked their reasons for participating in physical activity, participants described religion and enjoyment to be important factors and of these two, the respondents most commonly cited religion as their main facilitator for physical activity (n=16). This finding is comparable to that of Shuval *et al.* (2008), who found that religion was one of the greatest facilitators for physical activity among Arabic populations, for the reason that the scriptures and teachings of Islam encourage physical activity as part of the Muslim male lifestyle. Moreover, eight of the participants articulated that they were enjoying walking and going out with their families. This enjoyment aspect of physical activity was explored by Trost *et al.* (2011) wherein they found that the physical activity of adults greatly influences the activity of their children, and exercises can provide a way for social interaction.

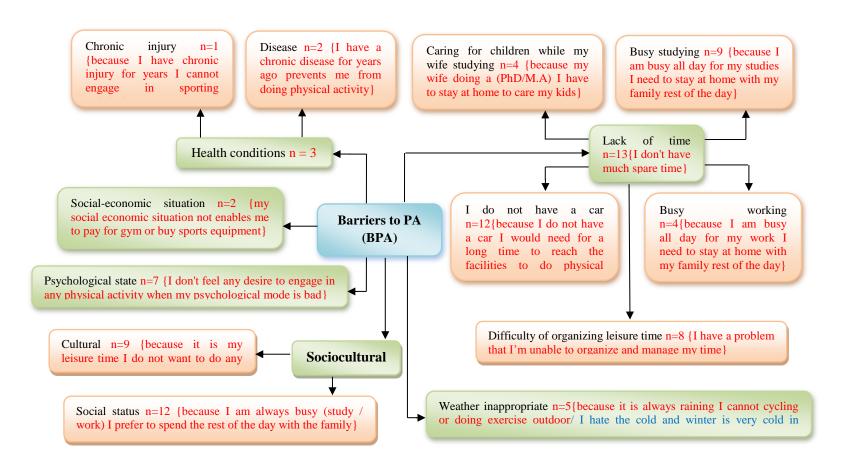


Figure 4.6 The general dimension theme of the Barriers to PA (BPA) for men.

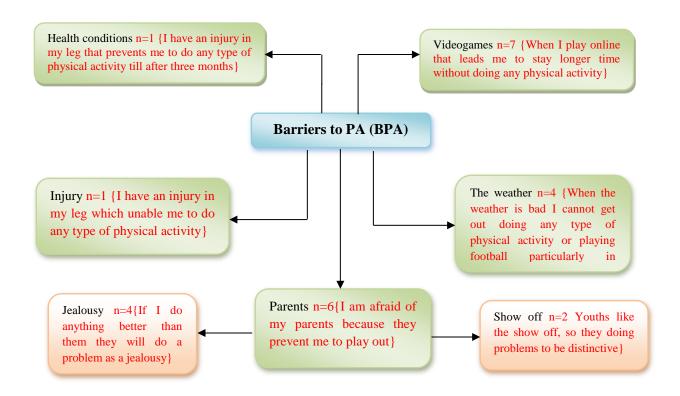


Figure 4.7 The general dimension theme of the Barriers to PA (BPA) for boys.

#### 4.4.4 Barriers to Physical Activity (BPA)

The respondents revealed that there were several barriers to physical activity. For the men these included lack of time, health condition, psychological state, socio-economic situation, and inappropriate weather conditions. From the responses, it was seen that the most common barrier for physical activity was the respondents' lack of time (n=13). Perceived reasons for lacking time included caring for children or family (n=4), studying (n=9), working (n=4) and lack of transport meaning it took too much time to reach gym facilities (n=12).

Lack of time is the most common reported barrier to physical activity (Ayotte *et al.*, 2010; Moore *et al.*, 2010). According to Moore *et al.* (2010), lack of time is the most common factor among students (due to studying pressures) and married individuals (due to caring for their family). This is because studying may need much of the student's time, and caring for a family could also be demanding, especially when study or work is coupled with the need to care for a family. This is consistent with Ayotte *et al.* (2010) who explored the different barriers to physical activity among adults and found that adults' busy lifestyle is one of the major causes for decreased physical activities, wherein some adults perceive that they do not have enough time to exercise or to perform a type of physical activity.

The weather was considered a key barrier to physical activity for both men (n=5) and boys(n=4) "When the weather is bad I cannot get out doing any type of physical activity or playing football particularly in weekends" This is probably caused by the heavy rainfall in most days of the year in addition to low temperatures in winter. The shortness of the daytime over the period of the year also minimises the amount of available time to play

outside the home. Therefore this combination of environmental factors constitutes a strong barrier to physical activity outside the home. This notion is supported by Chan and Ryan (2009) who found that rain, wind, low temperature and snow could affect individuals and decrease their opportunity to perform outdoor activities.

Participants also articulated that health conditions or injury prevented them from being physically active. For example, one man said that his health prevents him doing physical activity, while another participant said "because I have chronic injury for years I cannot engage in sporting activity". One of the boys described how having an injury in his leg was preventing him from doing any type of physical activity. These problems in health conditions, especially injuries, were among the findings of the study conducted by Reichert et al. (2007) which highlighted health as a common barrier to physical activity.

Another barrier to physical activity reported by men was socio-cultural factors. Twelve respondents expressed that their social status among their families motivates them to be physically inactive: "because I am always busy (study / work) I prefer to spend the rest of the day with the family". Additionally, data from the men's focus groups suggested cultural perceptions of what constitutes relaxation may act as a barrier to physical activity. Nine respondents noted how their free time is for relaxing rather than undertaking physical activity: "because it is my leisure time I do not want to do any type of work". Where individuals of British origin might view physical activities as a means of relaxing (Gies, 2006), the Arabic male participants in this study perceived activities requiring physical exertion as "work". It was clear that most respondents chose to be inactive during their leisure time because of the idea that leisure time should be used for leisure not for doing any physical activity, Cho (2004) noted similar themes in a study on the relationship between motivation and physical inactivity level conducted in South Korea.

A couple of men commented how their socio-economic status affects their physical activity wherein it limits their resources for paying for a membership in a gym, or for buying sport equipment. Lack of money was also observed as a barrier to physical activity in Reichert *et al.*'s (2007) study.

Several men described how their psychological state affects their physical activity. For example, one participant stated "I do not feel any desire to engage in any physical activity when my mood is bad". Psychological state usually involves the individual's mood and thinking, and such a negative style of thinking may be one of the most influential factors that could prevent him to carry out a physical activity consequently, low mood might prevent people from being physically active, but if they are physically active this can improve their mood. Reichert et al. (2007) also observed that "dislike of exercising" could serve as a barrier to physical activity.

Further barriers reported by the boys related to competitiveness e.g. "jealousy" and "showing off". Boys expressed that when playing out with white British boys they felt jealous of the white boys' sports performance and described how white British boys liked showing off. Due to the chaos that resulted, the boys felt their parents were reluctant to let them play outside and participate in physical activities shared with white British boys.

These "showing off" behaviours may be linked to the nature of this age particularly in boys, where they were on the threshold of adolescence. This is consistent with the findings of Christopher *et al.* (2003) who pointed out that children like to show off the things that they are able to do well. Other studies have also reported parents as a barrier to children's physical activity (e.g. Cincinnati Children's Hospital Medical Centre., 2012).

Boys also felt the amount of time they spent in sedentary pastimes (e.g. video games) prevented them from being physically active, wherein the respondents mostly just watched TV, or played videogames or any other sedentary behaviour. This finding that engagement in sedentary behaviours prevents children from being physically active has been noted in several other studies (Robinson and Kestnbaum, 1999; Rae, 2007). Research by the Centres for Disease Control CDC (2005) discovered several factors such as weather, injury, video games, peer influence acted as motivators for physical inactivity and suggested some recommendations; for example, during bad weather, the children can engage in going upstairs, including indoor activities such as fixed cycling among others (Rae, 2007).

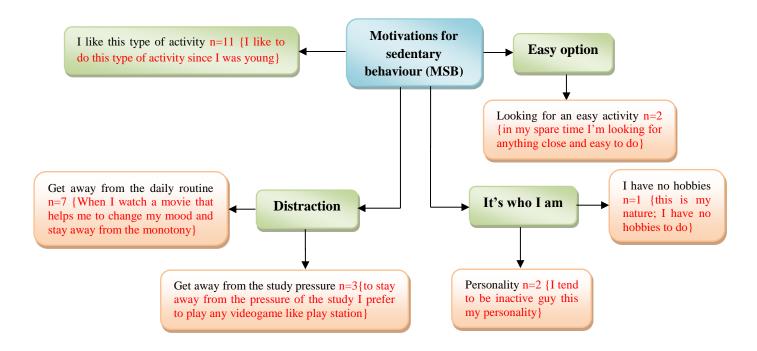


Figure 4.8 The General dimension theme of the Motivations for Sedentary Behaviour (MSB) for men.

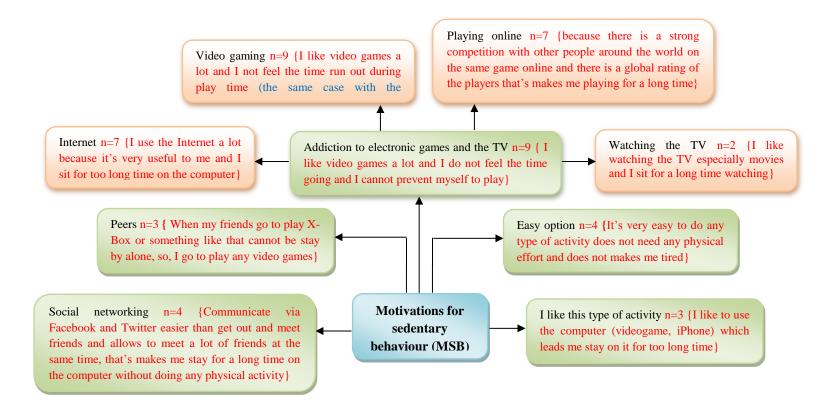


Figure 4.9 The General dimension theme of the Motivations for Sedentary Behaviour (MSB) for boys.

## 4.4.5 Motivations for Sedentary Behaviour (MSB)

As well as barriers to physical activity, participants in this study reported many factors that motivate them to engage in sedentary behaviours, in turn taking time away from being physically active. Under this general dimension theme, four higher order themes were found in men (*I like this type of activity, distraction, easy option* and *It's who I am*) and five higher order themes in boys (*Peers, easy option, I like this type of activity, The weather*, and (*Social networking*).

There was a link between culture and technology reflected in the boys' theme of social networking (n=4), in that their culture motivates them to create a strong social relationships and social networking provides them an opportunity through which to do this, leading to boys spending excessive hours sitting at the computer. "Communicate via Facebook and Twitter easier than get out and meet friends and allows to meet a lot of friends at the same time, that's makes me stay for a long time on the computer without doing any physical activity" This is supported by data from the Media and Communication in Australian Families Series (2008) which pointed out that 64% of young people's total internet use was in social networking and other related online communication.

Both men and boys reported engaging in sedentary behaviours because they were viewed as the easy option (*It's very easy to do any type of activity does not need any physical effort and does not makes me tired*"), perhaps reflecting the men's cultural perceptions that physical exertion equates to "work" (see BPA theme, section 4.4.4). Boys noted how this impacted on their physical activity levels "*I like to use the computer (videogame, iPhone)* which leads me stay on it for too long time". Similarly, men reported enjoyment of sedentary behaviours leading them to choose these over physical activities (n=11) "*I like to do this type of activity since I was young*".

Additionally, several men preferred engaging in sedentary behaviours such as watching the TV or sitting in front of the computer or use playstation and they viewed that physical inactivity serves as a distraction for them, such as when they want to get away from their daily routine (n=7) "When I watch a movie that helps me to change my mood and stay away from the monotony" or when they want to get away from the pressure of studying (n=3) "to stay away from the pressure of the study I prefer to play any videogame like play station".

For the boys, their peers acted as motivators to sedentary behaviour as they wanted to take part in whatever their friends were doing: (*n*=3) "When my friends go to play X-Box or something like that cannot be stay by alone, so, I go to play any video games". Boys also described being addicted to electronic games and/or TV (n=9), and enjoying spending time on the internet as they found it useful (n=7). As noted in the previous section, boys felt spending too long in these sedentary behaviours also prevented them engaging in physical activity, as generally time will be spent on video games or watching TV at the expense of physical activity (as observed elsewhere by Yeora Kim (2003)). Boys who spent more time on the Internet al.so spent more time with other existing media, which included television and video games. However, although Yeora Kim (2003) emphasized that boys spent a significant time in front of the computer's screen using the internet, the findings also indicated that the amount of internet use was not related to the time spent with organised physical activities that involving competitiveness like physical education classes or belonging to sports clubs, whilst it was positively associated with performing their own free physical activity.

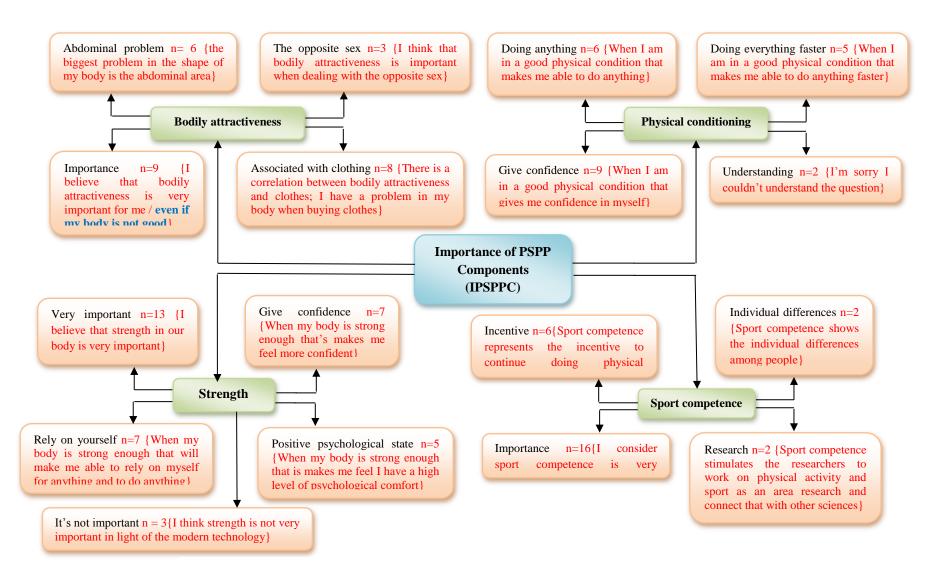


Figure 4.10 The general dimension theme of Importance of PSPP Components (IPSPPC) for men.

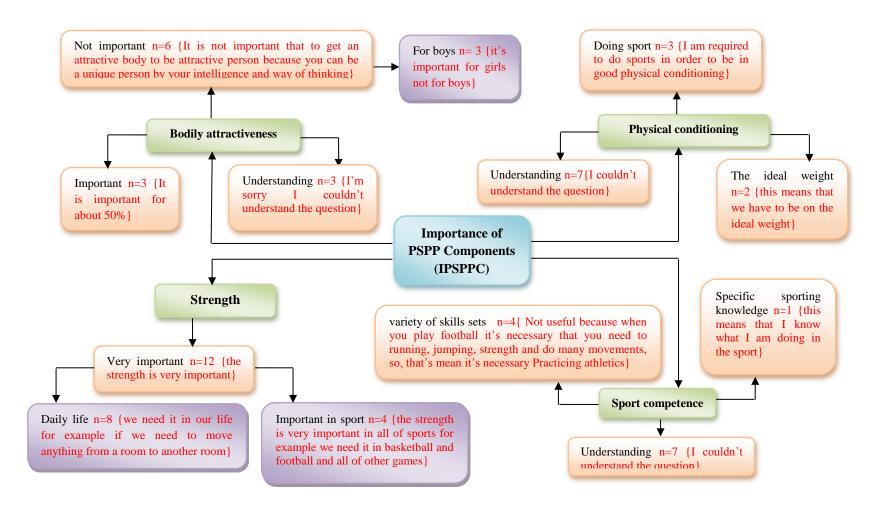


Figure 4.11 The general dimension theme of Importance of PSPP Components (IPSPPC) for boys.

### **4.4.6 Importance of PSPP Components (IPSPPC)**

Another aspect investigated in this study was the importance of the components of the Physical Self-Perception Profile or PSPP in men and boys. Under this general dimension theme, four higher order themes were shown (*physical conditioning, sport competence*, *bodily attractiveness* and *strength*). Of the PSPP components, the men were most likely to perceive **sport competence** to be important (n = 16) whilst the boys were most likely to report **strength** as an important factor (n = 12). **Strength** was the second most common factor reported as important in men (n = 13), followed by **bodily attractiveness** (n = 9). Interestingly, however, bodily attractiveness was not perceived to be important by boys.

### Sport Competence

According to the men respondents, sport competence involved the person's incentive to continue doing physical activity, and they also agreed that physical activity shows individual differences among people in terms of sports or athletic competence. This response is one that coincides with the findings of Hagger *et al.* (2005) that physical activity is important in maintaining individual skills and competence especially in sports. Some boys believed that sport competence was not useful, as they preferred to engage in a variety of activities to gain a variety of skills. Beaulieu (2008) however noted that physical activity enhances sport competence among children.

#### Strength

It is not surprising that participants described strength as an important factor, since one of the main reasons that the participants pursued physical activity is its health benefit, wherein in the earlier responses in the PPA general dimension theme (section 4.4.3) the participants said that one of the benefits they get from physical activity is that they feel healthier. Boys considered strength a very important issue (n=12) and they attributed that

to the needs during their daily life (n=8) "we need it in our life for example if we need to move anything from a room to another room", and to its importance in sport where they believed that the strength is very important in ball games and other sports (n=4) "the strength is very important in all of sports for example we need it in basketball and football and all of other games". Perhaps boys of this age have the impulse to use strength in all spheres of their life, and also this was reflected directly in their point of view about the practice of sport, where the use of strength is more visible as strength increases more dramatically in boys than girls (Purcell, 2005).

#### **Bodily Attractiveness**

In terms of bodily attractiveness, it has been noted that most individuals perform physical activity for bodily attractiveness reasons, along with physical health reasons (Wyse *et al.* 1995). Whilst bodily attractiveness was important to the men in this study, a number of participants also expressed a level of body dissatisfaction, with comments such as "the biggest problem in the shape of my body is the abdominal area" or "there is a correlation between bodily attractiveness and clothes; I have a problem in my body when buying clothes". Such negative physical self-perceptions for something that is deemed important could have a knock-on effect for self-esteem and confidence (Thøgersen *et al.*, 2007).

Half of boys however (n=6) perceived bodily attractiveness as not important: "It is not important that to get an attractive body to be attractive person because you can be a unique person by your intelligence and way of thinking". Other boys believed this component related to girls not to boys "It is important for girls not for boy". This could be a reflection of the boys' age in wishing to distinguish themselves from the female sex as they begin growing into men (Blakemore and Choudhury, 2006).

#### Physical conditioning

With regard to the physical conditioning aspect of the PSPP, the men revealed that physical activity helps them to be in good physical condition. Whereas this conditioning then allows them to perform needed responsibilities of life (n=6), as well as to do things at a faster rate (n=5). In addition, the participants also revealed that being in high level physical condition helps them to be more confident in themselves (Thøgersen *et al.* 2007). A number of boys linked the physical conditioning with doing sports, while just two participants associated that with the ideal weight.

Some of the boys struggled to understand the questions related to the PSPP components, possibly because of the young age of some participants. It has been noted elsewhere that further research is needed on the lack of understanding of physical activity among young ages (Genevieve *et al.*, 2008; *Emma et al.*, 2010).

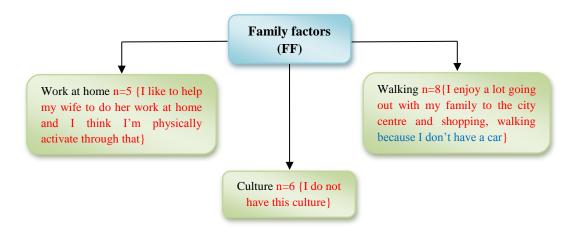


Figure 4.12 The general dimension theme of the Family Factors (FF) for men.

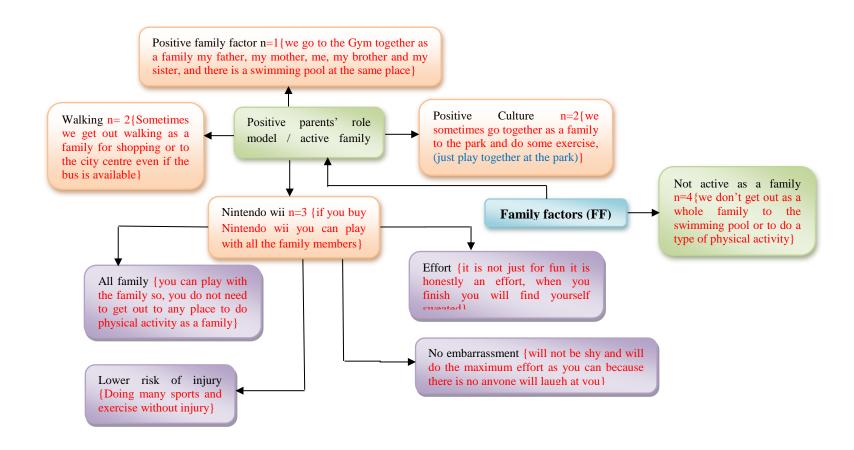


Figure 4.13 The general dimension theme of the Family Factors (FF) for boys.

#### **4.4.7 Family Factors (FF)**

The final general dimension theme explored in this study involved the family factors that affected the individual's physical activity level. Under this theme, three higher order themes emerged for the men (working at home, walking, culture) and two for the boys (not active as a family, positive parents' role model/active family).

The men revealed that the most important family factor that affects physical activity was walking. Under this higher order theme, there were eight participants expressed that they enjoyed walking and going out with their family, especially in going to shopping centres and parks "I enjoy a lot going out with my family to the city centre and shopping, walking because I don't have a car". These findings were consistent with the previous study of Xu et al. (2010) which found that social activities help individuals to remain physically active.

Trainers and nutritionists recommend that social support from partners or family members can help individuals lead an active lifestyle (Jackson, 2004). Similarly, the examples set by parents in their physical activity behaviour could influence children in their later years in life (Dagkas *et al.*, 2007). Boys also presented the same idea as a positive side of the family factor when they expressed that "Sometimes we get out walking as a family for shopping or to the city centre even if the bus is available".

Another family component raised by the men surrounded cultural issues, whereby six participants responded that they do not have a culture of doing physical activities with their family as a social activity "I do not have this culture". Yet at the same time, participants provided examples of how culture can positively influence physical activity levels. For example, participants expressed that the family promotes physical activity especially when the males work at home to help their wives in their house chores "I like to help my wife to

do her work at home and I think I'm physically activate through that". This observation is supported by Shuval et al. (2008), who noted culture can play an important positive role for promoting physical activity.

Although in some respects boys considered their parents as a barrier to physical activity (see section 4.4.4), boys also felt their parents played a positive role in encouraging them to be more physically active. The most frequently reported example of this positive influence was through the Nintendo Wii, whereby 3 boys expressed that the Nintendo Wii allows family members to be physically active together "if you buy Nintendo wii you can play with all the family members". Boys perceived many benefits of this activity, including the opportunity to exert physical effort, a lower risk of injury and less likelihood of leading to embarrassment.

Boys considered the Nintendo Wii as an opportunity to perform physical activity as a family at home for those unable to get outdoors for any reason (Hansen and Sanders 2010). Furthermore, boys felt the Nintendo Wii encouraged players to be physically active and they emphasised that it is not just a regular computer game. However, even though the participants had a positive view of the Nintendo Wii as an active video game, they did not consider it required the same physical effort as real physical activity or sport, as has been noted elsewhere (Milenkovic and Timmons, 2013). Importantly, as long as the participant was able to do some physical activity at his house with his family at least he would reduce his sedentary behaviour even if he did not increase his physical activity. Therefore, these types of exergaming consoles can be considered an active game and an opportunity for families to have fun and be physically active together. Furthermore, this family atmosphere of playing together may encourage the family members to play a long time without feeling bored or tired. When using the Nintendo Wii at home with the family,

boys indicated that they did not feel shy. There was no embarrassment by playing with their family members even if they did not win the game or made a mistake, as family members did not mock them. These findings highlight the family contribution to children's physical activity and reinforce the responsibility of parents to create an enabling environment to allow children to be physically active (Beaulieu, 2008).

#### 4.5 Limitations

The current study has a number of limitations. Firstly, some men feel embarrassed when they speak with other people about some sensitive issues related to their family. Some participants had moved to the UK as students and others had moved with their wives who came to study, therefore the participants views may have been influenced by their different levels of education, social situations, duty and responsibilities.

Similarly, this study included some participants who came to the UK for a few years to get a scientific degree, and other participants who were already residents and were accustomed to the British way of life. Thirdly, the young age of some of the boys made it difficult for them to understand some questions and some boys were shy to express their ideas in the presence other boys.

# 4.6 Conclusion

This research aimed to examine barriers and motivations to adoption of physical activity in Arabic males (fathers, sons) living in the Liverpool. While the study's sample was not large enough to represent all of the Arabic communities in the UK, it did reflect the cultural and social factors behind the low levels of physical activity that were found in study one. The findings of the study indicated that physical activity plays a significant role

in the individual's health and that Arabic males perceive several benefits of physical activity for the individual, such as self-confidence, mental health and improved physical condition. However, the responses given by participants showed that the understanding of physical activity varied from one individual to another. For example, some respondents viewed physical activity as a type of sport, while others believed it is a factor that leads to energy expenditure and burning of fats or calories. Additionally, the results revealed that respondents also differed in their satisfaction with their physical activity levels, wherein some were satisfied, while others were unsatisfied.

Participants cited several barriers to physical activity. The first resulted from the diversity of understanding of the physical activity concept, which demonstrated the lack of knowledge of physical activity guidelines. Although participants had highlighted some information related to physical activity, most of this information represented their perceptions and bore little resemblance to the information in the current UK physical activity guidelines (Department of Health, 2011a). Lack of time was an important factor that prevented participants engaging in physical activity as a result of their academic or occupational or family commitments. Furthermore, socio-cultural barriers were evident, such as a lack of culture for being physically activity as a family (males and females), particularly in public places. There were also factors that motivated Arabic males to engage in sedentary behaviours, such as opting for activities perceived to be easy, seeking distraction by watching a movie or by using the playstation.

In contrast, this study noted several facilitators that encouraged participants to be physically active. These included religion and enjoyment. Boys expressed that Nintendo Wii allows the family members to be physically active together, particularly for those unable to get outdoors or at times when the weather is bad or there are a lack of opportunities for outdoor physical activity. Boys perceived family participation to be a key

factor, highlighting the role the family can play in promoting child physical activity. This is achievable by creating a suitable surrounding for the child to take part in physical activity that is decidedly crucial to the health of the child (Rae, 2007). To improve children's understanding of physical activity as a lifestyle concept, it is recommended physical activity is incorporated into the school curriculum. This way, children's knowledge of physical activity will grow as they develop (Claude and Peter, 2007).

The study explains the relationship between physical activity and sedentary behaviours. The research noted that modern lifestyles have made life easier, but have made it more challenging to be physically active. The inventions and innovations have produced items in the world market that makes life more comfortable by presenting the tools that save energy. Such gadgets (such as remote controls even) allow children to watch TV without moving. Sedentary lifestyles coupled with a lack of physical activity is a common cause of preventable deaths resulting from diseases such as diabetes (Beaglehole *et al.* 2011).

In summary, Arabic males' low physical activity levels need strategic interventions in an effort to provide opportunities to be physically active during their lifestyle through taking into account the barriers and facilitators for being physically active.

# Chapter 5

Study 3

**Intervention study** 

# 5.1 Introduction

In the present age, sedentary behaviour is increasing among people of all ages and genders in the UK and in the ethnic minorities in the UK in particular (Gorely *et al.*, 2009). In study 1 of this thesis, time spent in sedentary activities were high in Arabic males, but overall they amassed enough time in moderate intensity physical activity to reach the threshold of current recommendations (i.e. greater than 150 minutes moderate physical activity per week). In contrast, the child participants engaged in MVPA on average for only 50 minutes per weekday and 38 minutes per weekend day, thus not meeting the recommended 60 minutes of MVPA per day (Department of Health, 2011b).

other family members in their free time. The UK weather and the amount of time spent in sedentary behaviours were further perceived barriers to physical activity.

The Chief Medical Officers in the UK released a set of new physical activity guidelines in July 2011 (Department of Health, 2011b). For children aged 5-18 years, the guidelines recommended involvement in physical activity with moderate to vigorous intensity for at least an hour a day, involvement in activities of vigorous intensity for at least three days a week, and minimization of sedentary time in general (Griffiths *et al.*, 2012). Nevertheless, "there are no guidelines as to what might be considered 'acceptable' or 'excessive' sedentary behaviour when assessed by accelerometers across the day" (Biddle *et al.*, 2010, p. 22).

Through the family, children receive a good opportunity to perform several different types of physical activity (Brustad, 2010). Parents play an important role for establishing a family climate to allow the children to do a type/level of physical activity (Welk *et al.*, 2004). More recently, in a review of the correlates of physical activity in youth, Biddle *et al.* (2011) concluded that parents impact significantly on physical activity levels in children however, it is not necessarily that active parents have active children. Seabra *et al.* (2008) also found the family to be a strong influential factor in determining physical activity levels i.e.individuals tend to be affected by the other family members in terms of physical activity levels and lifestyle.

A number of research papers have suggested family-based interventions are successful for changing health behaviour (Kahn *et al.*, 2002). For example, O'Dwyer *et al.* (2012) found a family-focused intervention was effective in increasing physical activity and reducing sedentary time in pre-school children. Similarly Todd *et al.* (2008) found family-based

intervention successfully contributed to reducing electronic media use among boys aged 8–11 and decreasing body fat gain.

Despite increasing evidence that physical activity levels are low among Arabic males, there are no reported intervention studies targeting this population specifically. Therefore this study will draw on the reported barriers and motivators from study 2 to design and pilot a physical activity intervention for the Arabic male population. One potential mechanism of interest is exer-gaming technology (e.g. Nintendo Wii / X-box connect) which many of the participants reported to have in their homes. There has been increasing interest in using exer-gaming technology (e.g. Nintendo Wii / X-box connect) to improve physical activity. "The Wii remote uses a three-axis accelerometer to translate body movement into onscreen movement" (Matthew et al., 2011). These systems provide the users with entertaining and distracting games that make them focus on playing the game rather than focusing on any other effects, thus making the exercises more enjoyable and effective (Lange et al., 2009). Furthermore, exer-games are capable of providing light-tomoderate physical activity (Peng et al., 2012) and have potential to overcome the obstacles that prevent individuals to be physically active (Graf, 2009; Kirkwood, 2011) such as lack of time, bad weather and unsafe neighbourhood surroundings. However, simply acquiring or owning an exer-game does not automatically lead to an increase in physical activity (Baranowski et al., 2012). Therefore whilst exer-games have potential to overcome many of the barriers identified in study 2, additional intervention strategies may be required to promote an accompanying increase in physical activity behaviour.

Based on the results of studies one and two Arabic men living in the UK have physical activity levels that are acceptable, but their children do not reach recommended levels of physical activity, and experience many barriers to being active. The main factor was the lack of time because both men and boys wanted to stay home with their family members

after a busy day. Additionally, cultural factors encouraged them to stay home and be physically inactive. For example, Arabic males considered activities requiring any physical effort (e.g. gardening, walking) as "work" and therefore something that should not be done during leisure hours. Furthermore, study two demonstrated that Arabic males have a poor understanding of physical activity and how much they should do. It is important that any intervention for the Arabic male population takes into account their barriers and focusses on feasible physical activities that can be done at home with their families, such as exergaming.

This study will therefore pilot a brief intervention aimed at educating Arabic fathers and sons about PA, to investigate whether an increased understanding of PA motivates them to be more physically active, potentially through increasing use of their exer-gaming console at home.

# **5.2** Aim of Study

This study will investigate whether a brief intervention designed to increase knowledge of physical activity guidelines impacts on the physical activity levels of Arabic males who have exer-gaming consoles available at home. A secondary aim was to explore positives and negatives of exer-game usage. It was hypothesized that educating participants about physical activity guidelines would encourage them to improve their physical activity levels.

# **5.3 Methods and Procedures**

#### **5.3.1 Participants**

The participants were 20 father and son dyads (20 men and 20 boys) from Arabic families who owned an exer-gaming console (Nintendo Wii or Xbox) in their home. Boys were aged between 8 years and 18 years. All participants lived in Liverpool and provided signed written consent prior to participation (consent for children under 16 was provided by their parents).

Families who had participated in studies one or two were asked if they owned an exergaming console and – if so – were invited to take part. Those who did not own an exergaming console were asked to recommend other Arabic families, who were subsequently invited to take part. If families were interested the researcher organised a meeting with each participant individually to describe the research and to explain the study requirements. The meetings were conducted either at Liverpool John Moores University or at the Al-Rahma Mosque, whichever was most convenient for the participant. Participants received a written information sheet outlining the aims of the study and were asked to sign written consent (adults) and assent (children) for their participation.

Of the dyads who took part, four had already participated in studies 1 and 2, and three had participated in study 2 only. The remaining 13 dyads had participated in neither study 1 nor 2, but were families known to the researcher and who owned an exer-gaming console at home.

All participants were asked to complete a screening questionnaire to collect demographic information, current exer-game usage and knowledge of physical activity guidelines.

# 5.3.2 Study design

Each father and son dyad was assigned into one of two groups a) Control group (n=10 father-son dyads (10 men, 10 boys) or b) intervention group (n=10 father-son dyads (10 men, 10 boys)).

Figure 5.1 gives a conceptual representation of the data collection process. The intervention group received a brief intervention designed to increase their knowledge of the physical activity guidelines, the control group received no intervention. The physical activity levels of both groups were measured at baseline and then again four weeks later (post-intervention). To explore the impact of the intervention and the positives and negatives of exer-game usage, participants from the intervention group were interviewed during the post-intervention measurement session.

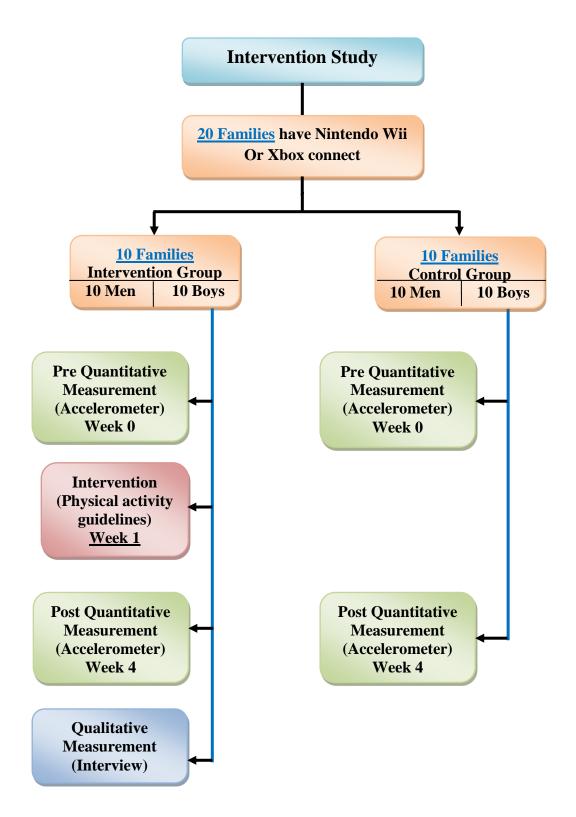


Figure 5.1 Study 3 data collection process

# **5.4 Intervention**

Participants in the intervention group received the physical activity guidelines (PAG, Department of Health, 2011a; see appendices 2 & 3) in order to improve their knowledge of how much PA is recommended for different age groups. The PAG was translated into Arabic and participants received both the translated and the original English versions as well. Each father received factsheet 4 for adults (19-64) and each son received factsheet 3 for children and young people (5-18). Four fathers received the PAG for them and their sons at LJMU, four fathers received it at the Al-Raham mosque, and two fathers at the Saudi school. All fathers and sons received the PAG from the researcher directly, with the exception of three participants who were studying at Liverpool John Moores University and were asked to pass the information onto their sons. All participants were informed about the results of studies 1 and 2 and about the aims of this study. All participants were given a chance to ask questions regarding the whole study or in connection with the intervention, additionally all fathers were given the researcher's contact details in case of any queries. Participants were not given any other instructions to improve their physical activity except the PAG.

#### 5.4.1 Measures

The physical activity levels of both groups were measured using accelerometry at baseline then again four weeks later. The intervention group also took part in a semi-structured interview at the four-week point.

# **5.4.2** Physical activity levels (Accelerometery)

Physical activity was measured using accelerometery. Participants wore an ActiGraph Accelerometer (Kuffel *et al.*, 2011) for three consecutive days which included two weekdays and one weekend. Three days was deemed an appropriate period as it was long enough to capture both weekend and weekdays, yet it was not considered too burdensome on participants and was a realistic time to monitor activity levels (Jackson, 2003). Three days has proved an appropriate measurement period elsewhere (Jackson, 2003; JS *et al.*, 2011; O'Dwyer *et al.*, 2012). The monitor was attached securely to the right hip, as previously described in study 1 (see section 3.3.3) and it was set to record in 1 minute epochs. Accelerometery is considered an objective measure and it used widely to assess physical activity in adults and children (Robertson *et al.*, 2010). This measurement method provides information on the amount, frequency and duration of activities performed and also data can be achieved about day-time and night-time activity patterns and activity intensity.

#### 5.4.3 Semi-structured interviews

Participants from the intervention group were invited to attend a semi-structured interview after the four week intervention period. The aim of the interview was to assess whether the PAG intervention encouraged the intervention group to be more physically active, and to explore their views about the intervention. In addition, the interviews explored the positives and negatives of exer-game console usage as a means of being physically active at home. Full interview schedules are provided in appendices 4 (men) and 5 (boys).

Interviews took place at either Liverpool John Moores University or the Saudi School in Liverpool. Interviews were conducted with men and boys separately and lasted

approximately 45 minutes and 30 minutes respectively. Interviews with men were carried out individually, and interviews with boys were carried out in the presence of their fathers. However it was ensured fathers were not seated facing their sons to minimise the effect they might have on the boys' opinions or point of view, and fathers were asked not to answer questions on their sons' behalf. To enhance trustworthiness of the findings, participants were given comprehensive information about the study and the purpose of the interview and were assured that both positive and negative views were important. They were guaranteed full anonymity and told they did not have to answer any questions they did not wish to. Boys did not attend the interview with their fathers so as not to be affected by their views.

The interviews were conducted in Arabic and recorded using a digital recorder. They were transcribed verbatim then translated into English. At the end of each conversation participants were asked if there was anything further they would like to comment on. Ethical approval was granted by the Liverpool John Moores University research ethics committee.

#### **5.4.4 Data Analysis**

Full data were obtained for 20 father-son dyads (10 control group and 10 intervention group). A minimum of 8 hours per day (i.e. 24 hours over the 3 days) of activity monitoring between the hours of 8:00 am and 10:00 pm was the prerequisite for inclusion in the analysis as a valid measurement day. A mean duration of monitoring >9 hours per day was achieved. The accelerometry data was analysed and converted into categories of physical activity using the ActiLife 5 analysis software package. The Freedson *et al.* (1989) cut points were used for men and the Ekelund *et al.* (2004) cut points for children to determine time spent being sedentary or performing physical activity in light, moderate

and moderate-to-vigorous physical activity (MVPA). This data was analysed using ANCOVA and presented in a tabular form.

Differences in PA for each category of activity intensity from baseline to post intervention were analysed using ANCOVA. ANCOVA was used in order to normalise the data for different individual levels of PA at baseline.

The interview discussions were digitally recorded, transcribed, and translated into English. Content analysis was used to identify themes in the data. A full description of this process is provided in section 4.3.3 in relation to the study 2 analysis. Although the data collection techniques differed for studies 2 (focus groups) and 3 (individual interviews), the content analysis approach used was the same. Pen profiles were used as a method to present the interview data (as used by Knowles *et al.*, 2009; Ridgers *et al.*, 2012). This data presentation technique provides a reliable representation of the interviews' themes via indicating the main theme and its subthemes, an example of a participants' response and the frequency with which the response was mentioned (Ridgers *et al.*, 2012). Further details about the pen profile method are provided in section 4.3.3. The credibility of the findings was enhanced by employing triangulation for the content analysis, through discussing the results with the second supervisor and with an expert in pen profiles to agree theme classification.

#### 5.5 Results

This study aimed to investigate whether a brief intervention designed to increase knowledge of physical activity guidelines affected the physical activity levels of Arabic males who have exer-gaming consoles at home. A secondary aim was to explore the positives and negatives of exer-game usage.

**Table 5.1 Baseline characteristics**.

20 Families have Nintendo Wii Or Xbox connect	Total father-son 20	Mean age (years)	Mean BMI	Type of exer-gaming console	
Control group fathers	10 fathers	38.2	27.15	(2) X Box, (8) Nintendo	
Control group sons	10 sons	10.6	18.57	Wii	
Intervention group fathers	10 fathers	39.8	29.04	(3) X Box, (7) Nintendo wii	
Intervention group sons	10 sons	11	19.02		

Table 5.1 shows the mean baseline characteristics of the sample. Mean BMI and age in the intervention group for both men and boys was slightly higher than mean BMI and age in the control group, however these differences were not significant (P > 0.05).

Table 5.2 Mean baseline physical activity levels by category and group.

20 Families have Nintendo	Mean baseline of PA (minutes per day)				
Wii Or Xbox connect	Sedentary	Light	Moderate	MVPA	
Control group fathers	465.6	77.10	50.10	52.3	
Control group sons	393.9	143.5	82.5	85.4	
Intervention group fathers	581.5	89.7	43.4	46.9	
Intervention group sons	488.6	128.6	79.8	93.8	

Table 5.2 shows the mean baseline of PA among the sample. It is clear that fathers were more sedentary than their sons for both control and intervention groups while boys had higher PA levels in both groups. There were no significant differences between the control and intervention groups on either sedentary time or any of the PA variables (P > 0.05).

#### 5.5.1 Physical activity levels

#### Men

Table 5.3 ANCOVA mean changes in PA intensity from baseline to post-test, adjusting for baseline scores for men.

PA intensity	CON Adjusted Mean (minutes per day)	INT Adjusted Mean (minutes per day)	Difference (CON vs. INT) (minutes per day)	95% CI (minutes per day)	P
Sedentary	-84.45	-116.97	31.64	(-71.42 to 134.71)	0.526
Light	-6.47	58.79	-64.55	(-100.38 to-28.73)	0.001**
Moderate	-9.43	18.27	-27.46	(-45.90 to -9.16)	0.006**
MVPA	-10.64	21.34	-31.98	(-52.49 to -11.47)	0.004**

<sup>95%</sup> Cl = Confidence intervals for adjusted mean difference between groups.

CON = Control Group.

INT = Intervention Group.

Table 5.3 demonstrates the mean change for sedentary behaviour and each of the physical activity intensities from pre- to post-intervention for men within the control and the intervention groups. Mean change scores are shown for the control and intervention groups and for the difference between the two groups. Light, moderate and MVPA physical activity increased by significantly more in the intervention group than in the control group, where physical activity of all intensities decreased slightly (P < 0.05). However, there was no significant difference in the change in sedentary behaviour between the intervention group and the control group, both groups reducing their sedentary behaviour from pre- to post-intervention (P > 0.05).

<sup>\*\*</sup>P <0.01; significant difference between groups.

Table 5.4 ANCOVA mean changes in PA intensity from baseline to post-test, adjusting for baseline scores in boys.

PA intensity (Boys)	CON Adjusted Mean (minutes per day)	Exp Adjusted Mean (minutes per day)	Difference (CON vs. EXP) (minutes per day)	95% CI (minutes per day)	P
Sedentary	45.60	-99.71	145.32	(47.96 to 243.54)	0.006**
Light	5.90	65.93	-60.27	(-102.20 to -17.85)	0.008**
Moderate	0.63	40.84	-40.21	(-71.32 to -9.10)	0.014*
MVPA	-6.12	21.81	-27.82	(-64.16 to 8.51)	0.125

<sup>95%</sup> Cl = Confidence intervals for adjusted mean difference between groups.

CON = Control Group.

INT = Intervention Group.

Table 5.4 shows the mean change for sedentary behaviour and each of the physical activity intensities from pre- to post-intervention for boys within the control and the intervention groups. Mean change scores are shown for the control and intervention groups and for the difference between the two groups. There was a significantly higher decrease in sedentary time for the intervention group than the control group, and a significantly higher increase in light and moderate physical activity (P < 0.05). Although the intervention group increased MVPA by more than the control group, this difference did not reach significance (P > 0.05).

#### 5.5.2 Interviews

Interview data is presented using pen profiles to demonstrate the general dimension themes of Physical activity guidelines (PAG) and Exer-gaming Nintendo Wii / X-Box (ENX) for men and boys. Each diagram shows a hierarchical thematic structure. The general

<sup>\*</sup>P <0.05; significant difference between groups

<sup>\*\*</sup>p<0.01; significant difference between groups

dimension theme is coloured in blue and refers to the main interview topic under investigation. Branched off this theme are the **higher order themes**. The higher order themes are in green and illustrate the main ideas that emerged for each of the general dimension themes. Branched off the higher order themes are the **raw data themes**, and branched off these are the **sub-raw data themes**. Each pen profile provides verbatim quotes as examples of participant responses (shown in brackets) and a frequency count that refers to the number of participants who commented on each theme (shown as "n=").

# **Impact of physical activity guidelines intervention**

### **Interview (Men)**

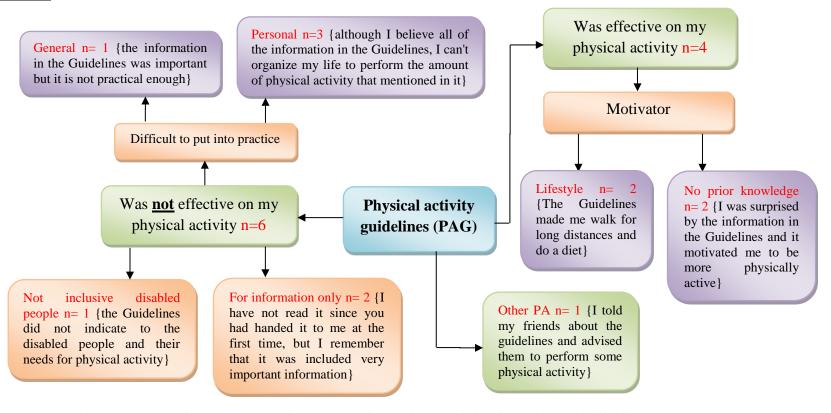


Figure 5.2 The General dimension theme of Physical Activity Guidelines (PAG) for men.

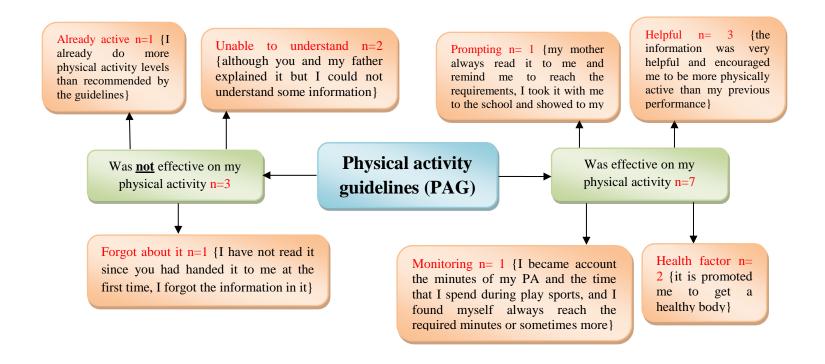


Figure 5.3 The General dimension theme of Physical Activity Guidelines (PAG) for boy

A general dimension theme.

A higher order theme.

A raw data theme.

A sub-raw data theme.

n= digit number of participants agree with this idea.

Figure 5.2 reveals the general dimension theme of the Physical Activity Guidelines (PAG) for men. The majority of men felt the PAG intervention was not effective in helping them increase their physical activity levels. Some men felt the guidelines were difficult to put into practice, and another commented how the guidelines contained little information for disabled individuals. Two participants acknowledged they had not revisited the guidelines since they were first given to them. On the other hand, some men were positive about the PAG intervention and felt it contributed to them increasing their PA during the intervention period. For example "I was surprised by the information in the Guidelines and it motivated me to be more physically active".

In contrast to the men, boys (figure 5.3) were more affected by the PAG intervention and they found it successful to improve their physical activity levels. One boy expressed that "the information was very helpful and encouraged me to be more physically active than my previous performance". Some of the boys actively used techniques to help them improve their physical activity. For example, one boy described how he monitored his physical activity levels and another described how

his mother would use the guidelines as a prompt to motivate him, which he in turn used to motivate his friends (the use of the guidelines to motivate friends was also described by one man participant). Where boys felt the PAG intervention was ineffective, this was mostly due to not being able to understand the guidelines. Although one boy acknowledged he had forgotten about it, and another felt he was already active enough so the intervention had little effect.

# **Experiences of exer-gaming**

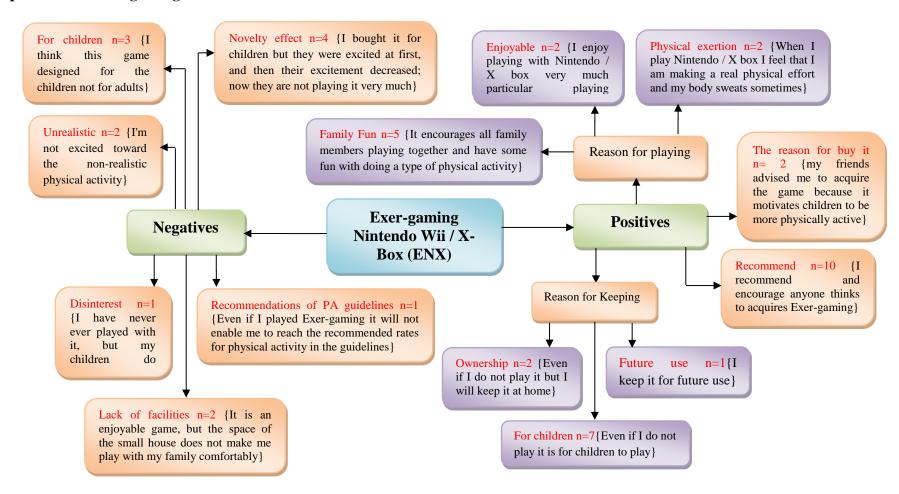


Figure 5.4 The General dimension them of Exer-gaming Nintendo Wii / X-Box (ENX) for men.

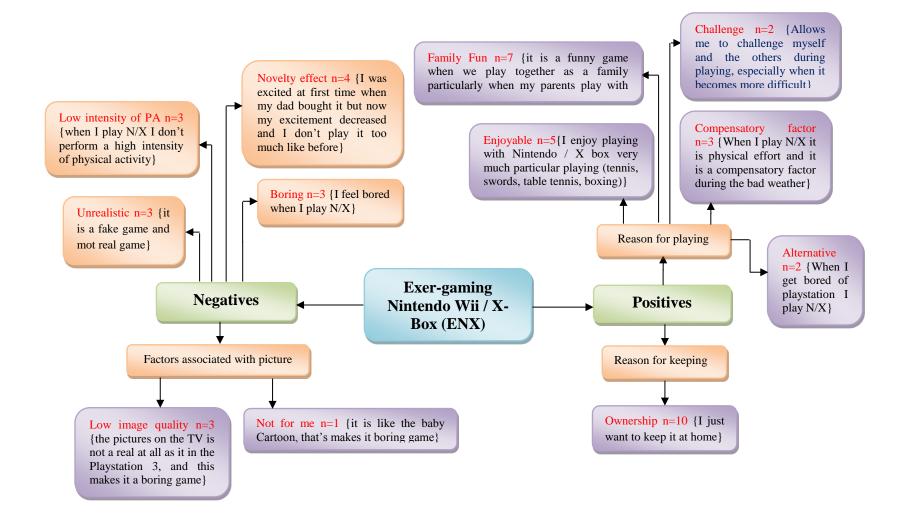


Figure 5.5 The General dimension theme of Exer-gaming Nintendo Wii / X-Box (ENX) for boys.

Figure 5.4 demonstrates the general dimension theme of the Exer-gaming Nintendo Wii/ X-Box Connect (ENX) for men and figure 5.5 for the same general dimension theme for boys. This general dimension theme includes two higher order themes for both men and boys: negatives and positives of exer-gaming. All 10 men in the study sample were positive about owning an ENX, agreeing with the idea of "I recommend and encourage anyone thinks to acquires Exer-gaming". However there was a feeling that the initial attraction and excitement of ENX wears off in time. For example 4 men highlighted the negative side of it, one man saying "I bought it for children but they were excited at first, and then their excitement decreased; now they are not playing it very much" Other negative sides of ENX mentioned by men included the perception that is was for children, the games were not comparable with "real PA" and playing them required a lot of space at home.

Boys expressed similar views to ENX as their fathers. All boys (n=10) preferred to keep the ENX at their home (even if they did not use it regularly). Furthermore, more than 7 out of 10 boys considered the (ENX) a fun game when they play as a family "it is a funny game when we play together as a family particularly when my parents play with us as well".

On the negative side there was compatibility between boys and their fathers in a number of answers, such as *unrealistic games*, whereby fathers expressed their opinion toward exergames with the example "I'm not excited toward the non-realistic physical activity" and some boys said "it is a fake game and not real game". Similarly both men and boys felt that exer-gaming did not allow them to meet the required intensity levels of PA. For example, fathers said "even if I played Exer-gaming it will not enable me to reach the recommended rates for physical activity in the guidelines" and boys said "when I play N/X I don't perform a high intensity of physical activity".

Both fathers and their sons described a decreasing interest in the exer-game after time. For example, one boy noted that "I was excited at first time when my dad bought it but now my excitement decreased and I don't play it too much like before" which was very compatible with some fathers responses: "I bought it for children but they were excited at first, and then their excitement decreased; now they are not playing it very much".

Some fathers and sons also felt exer-games can lack excitement at times, with fathers saying that "I have never ever played with it, but my children do sometimes" and boys adding "I feel bored when I play N/X".

# 5.6 Discussion

The purpose of this study was to investigate the impact of a brief physical activity guidelines intervention on the physical activity levels of Arabic males. A secondary aim was to explore the perceived positive and negative factors of owning an exergaming console. Accelerometery results showed the intervention had a significant effect on the light activity, moderate activity and MVPA of the participating men but no effect on their sedentary levels. For boys, effects were seen on their sedentary, light and moderate activity but there was no significant difference between the post-intervention MVPA levels of the intervention and control groups.

Qualitative data showed that the majority of men thought that an intervention providing physical activity guidelines (PAG) alone was not sufficient to motivate them to change their physical activity levels. However, the accelerometery data demonstrated that the intervention

was effective and impacted on their physical activity levels. Perhaps this discrepancy between the qualitative and quantitative results could be attributed to their knowledge levels, whereby they were unable to evaluate the amount of physical activity they had done (Anand et al., 2011). Or perhaps there was a lack of understanding of the PAG i.e. the participants thought they had to follow the same examples that were provided by the PAG to reach the recommended PA levels. Furthermore, participants could have been motivated to increase their physical activity levels by virtue of participation in the study (which they were aware was aimed at promoting physical activity) rather than the intervention itself. For example, some participants may consciously or subconsciously have changed their behaviour to make the intervention a success or perhaps they had thought they were helpful to the researcher by increasing their levels of physical activity. It is also possible that informing participants about physical activity levels and introducing them to accelerometers at baseline might have motivated them to change their behaviour, participation in the study itself being a reminder of the importance of leading a healthy lifestyle.

It is possible an increase in exer-gaming contributed to the improved PA levels in the intervention group, however the data collected in this study does not allow conclusions to be drawn regarding time spent on the exer-gaming console. However it is plausible the positive views of exer-gaming expressed by both boys and men was influenced by their improved knowledge of the physical activity guidelines following the intervention.

In the case of men, the intervention had no impact on sedentary time, while in boys; the intervention group reduced their sedentary time significantly more than the control group. Perhaps the intervention was more successful with boys than men due to several factors such as increasing the interest of the boys in use of the ENX. It is possible also that children had

more opportunity to increase their physical activity levels during school times (Verstraete *et al.*, 2066; Aaron *et al.*, 2012).

Overall boys had higher PA levels than men, as found previously in study one. There was however no improvement in boys' MVPA as a result of the intervention, whereas men significantly improved their MVPA levels. This could be because the intervention dose was not enough to increase boys (already relatively high) MVPA levels, but it was sufficient to make an impact on the (very low) MVPA levels of men. Although some researchers have found high energy videogames produce a high energy expenditure and enhanced heart rate (Graf, 2009), others have suggested Nintendo Wii programmes may not be enough to induce MVPA level intensity (e.g. Peng *et al.*, 2011). It must also be acknowledged that the current study did not measure time spent playing on the Nintendo Wii/ Xbox Kinect, therefore it is possible participants reached the MVPA level by performing other type/s of physical activity (as a result of improving their knowledge about physical activity).

There was a significant increase in light physical activity for both men and boys following participation in the intervention. This corresponds to the first study of this thesis which pointed out that Arabic males spent more time in light intensity physical activity than moderate intensity physical activity or MVPA. Whereas exer-games are not always of sufficient intensity to increase MVPA (Peng *et al.*, 2011), it is reasonable to expect exergames to play a role in increasing light physical activity. For example, Kirkwood (2011) showed that exergames can fulfil the same energy output as traditional walking, and the fact that increases were seem with the intervention in the boys suggests it is possible to increase physical activity levels with a very brief intervention. Further research is required to explore

how the intervention could be improved to promote more substantial changes to physical activity levels.

#### 5.6.1 Physical Activity Guidelines (PAG) for men and boys

In the qualitative analysis, nearly half of the men found the physical activity guidelines ineffective as they perceived them to be unrealistic and hence unreachable. Others discussed a difficulty in translating the PAG into practice. Several men were convinced of the importance of the information contained in the PAG, but they felt unable to organize their lifestyle in line with what was required to meet the recommended levels of physical activity. This could be due to the participants' situation (either studying full-time or full-time employees) which left them in little control of their time. Practical barriers such as these were also highlighted in a recent British Heart Foundation Report (2012) which reported physical activity statistics for children and adults across England, Scotland and Northern Ireland. This perception of not being able to fit physical activity into their lives suggests Arabic males do not prioritise physical activity, despite the many health benefits associated with physical activity (Perspectives in Public Health, 2013). It is possible this is due to factors associated with the Arabic culture, as has been found by Caperchione et al. (2011). For example participants expressed that the Arabic culture prevents them being physically active as a family, particularly using swimming pools. Similarly, the lack of priority given to physical activity could be due to a lack of knowledge about physical activity and its benefits, as noted by Anand et al. (2011) who found that knowledge about physical activity guidelines was at a very low level among male and female adults.

Perhaps the perceptions of the intervention being ineffective were related to the participants' beliefs and behaviours even if the intervention increased their knowledge level about the benefits of physical activity (Heinrich *et al.*, 2011). Some participants were concerned that the PAG contained no specific recommendations for individuals with disabilities. Although there are a number of research papers about physical activity for individuals with disabilities (e.g. Martin, 2013) there are no specific physical activity guidelines for individuals with disabilities published in the UK.

In contrast to their fathers, most boys felt the PAG was effective in motivating them to be physically active. They put this down to the PAG being helpful, prompting and monitoring them to change and to the health factors associated with physical activity. Where boys felt the PAG was ineffective was because they were either unable to understand, were already active or had forgotten about it. It is possible that the boys for whom the PAG intervention was not perceived as effective were those who received the PAG from their fathers rather than from the researcher (three fathers studying at Liverpool John Moores University were asked to pass the information onto their sons). It has been shown that children are more likely to listen to messages from "credible others" rather than from their parents (Watson, 2012).

The lack of understanding of the PAG could have been due to the children's age or to their perceptive capabilities, especially as there is some overlap and similarities between the descriptions of the different intensities of physical activity in the PAG. This is supported by study 2 results that showed some boys lacked an understanding about the concept of physical activity. Further research is required to explore reasons behind this low understanding, which could include a range of intrinsic and extrinsic influences (Genevieve *et al.*, 2008; *Emma et* 

al., 2010). For example, it is possible the important role of parents and teachers can contribute to children's understanding of physical activity (*Emma et al.*, 2010).

As noted earlier, parental encouragement is important to help children achieve the recommended levels of PA (Townsend et al., 2012b). This was supported by one participant who expressed that his mother was behind him to engage and support him to reach the requirements in the PAG: "my mother always read it to me and reminds me to reach the requirements, I took it with me to the school and showed to my friends ". This role played by his mother made him happy with the PAG and proud of following its recommendation, which in turn led him to take it to school and show it to his friends. Educational and/or cultural factors may have contributed positively to this mother's attitude, as Goodway and Smith (2005) and Lindsay et al. (2009) suggested that cultural beliefs may influence physical activity behaviours in children. In addition, parents' beliefs and behaviours associated with physical activity could impede or promote physical activity among their children (Emma et al., 2010). Furthermore the British Heart Foundation National Centre (BHFNC) (2012) and Lethbridge-Çejku et al. (2004) suggested parents' educational attainment is an important factor in promoting physical activity among their children. However, research in this area is mixed. Some studies have shown an association between a high level of parent education and youth physical activity (e.g. Oehlschlaeger et al., 2004; Kantomaa et al., 2007), others have found a negative link between parent education level and child physical activity (e.g. Gorely et al., 2004). In any case the current findings again support the importance of parents in contributing to improve the PA in their children.

There were however some children who understood the PAG very well. For example, one boy was able to assess and compare his level of physical activity as he stated that his level of physical activity was already higher than the recommended levels in the (PAG): "I already do more physical activity levels that recommended by the guidelines" Although that is a positive indication which reflected good levels of understanding and a good level of knowledge, a report on physical activity for health carried out by Chief Medical Officers in the UK (2011) and Townsend et al. (2012b) indicated that being moderately to vigorously active declines with age (CMOs, 2011; Townsend et al., 2012b) thus this level of understanding could have resulted from the age of these boys.

For the few men who felt the PAG intervention was effective, they described how this helped them incorporate a diet into their lifestyle and walk more "The Guidelines made me walk for long distances and do a diet" The connection the participants made between eating patterns and physical activity indicated an implicit understanding of the importance of physical activity as part of a healthy lifestyle, despite there being no mention of diet or eating patterns in the PAG. Such connections have been made elsewhere by Roberts and Marvin (2011), who noted the relationship between knowledge, diet and physical activity. This therefore suggests the intervention had a positive effect on the knowledge, diet and physical activity of these Arabic men, which they were able to link to their health as a result of the intervention.

The PAG intervention was also perceived to be effective in cases where the information provided was totally new to the participants. For example, one participant stated: "I was surprised by the information in the Guidelines and it motivated me to be more physically active". This contrasts with some of Roberts and Marvin's (2011) findings from analyses of national level data which indicated that the majority of adults in England were conscious that physical activity recommendations (PAG) exist. However, being aware recommendations exist does not necessarily mean adults know what the recommendations are.

This study showed the potential for a brief PAG intervention not only to impact on the lifestyles of Arabic males, but also to spread among their networks. For example, one individual informed that he advised others to encourage them to be more physically active: "I told my friends about the guidelines and advised them to perform some physical activity". This reinforces the findings of Mackett and Brown (2011) who referred to the importance of sharing knowledge for doing a type of physical activity such as walking and cycling. The important role played by friends to encourage and enthuse others to be physically active has also been highlighted elsewhere (e.g. Chau, 2007; Tuagalu, 2011).

# 5.6.2 Exer-gaming Nintendo Wii / X-Box (ENX) for men and boys

Participants reported both positive and negative aspects of owning an Exer-gaming Nintendo Wii / X-Box (ENX). Whilst most participants were positive about active games and about owning an ENX, the main negative factor was the "novelty effect" associated with it. For example, "I bought it for children but they were excited at first, and then their excitement decreased; now they are not playing it very much". This may be attributed to the nature of being human, whereby repeated activities soon become boring (Svendsen, 2005). Another possible reason for the loss of interest over time is the strength of competition from other video games. New games are continuously evolving and various video game choices exist at any one time. Some children may have preferences for certain types of games, as shown by Ihori et al. (2007) who pointed out that sports or racing games ranked second stage after violent games for boys. Despite the men thinking ENX was designed for children, some boys considered the ENX to be a boring game, with graphics that are like "the baby cartoon".

This demonstrates factors related to age perceptions on the one hand, and toward the image quality level on the other hand. These results are supported by Kirsh (2003) who concluded

that the age factor affected the level of interest in video games, with younger people more interested in playing video games than older generations. Similarly both men and boys commented on the unrealistic nature of the games, which could be related to image quality as previous research suggested that players strongly prefer to play games with more realistic graphics (Wood *et al.*, 2004; Bracken *et al.*, 2009). For boys who were already physically active their non-acceptance of the ENX could be due to a lack of interest in playing a "fake game" as long as the real game is available (Bracken *et al.*, 2009).

In contrast some of the men held positive views toward the ENX whereby they perceived it as an active and effective game making the player exert a physical effort equivalent to that of playing the real sport: "When I play Nintendo / X box I feel that I am making a real physical effort and my body sweats sometimes". These participants focused on the ENX in terms of its physical outputs regardless of image quality particularly if they enjoyed playing which in turn would motivate them to be more physically active (Barnettet al., 2011) and gain the benefit of moderate-intensity physical activity (Gao et al., 2012).

Another barrier to sustained engagement according to the men was the lack of space in the home to use the ENX. This is supported by findings from the Commission for Architecture and the Built Environment (2010) who reported that the smallest homes in the EU are in the UK. However exer-gaming can be considered as a compensatory tool for physical activity when other barriers exist such as bad weather preventing families from leaving the house (Shayne *et al.*, 2012). This view was supported by participants in this study, for example: "When I play N/X it is physical effort and it is a compensatory factor during the bad weather".

As has been noted elsewhere (e.g. Dixon et al., 2010; Vet et al., 2012), many participants expressed positive views about active gaming and the ENX. Although most participants acknowledged they did not use the ENX as much as when they bought it, both boys and men were positive about owning the ENX. All of the boys wanted to keep it at their home "I just want to keep it at home" and all of the men said they would recommend it to anyone thinking of buying an ENX "I recommend and encourage anyone to think to acquire Exer-gaming". They expressed more than one reason for keeping it such as "Even if I do not play it, it's for children to play", "I keep it for future use". Even participants who did not consider the ENX as a helpful tool to make them more physically active were keen to keep the ENX in their home. This could be just for ownership, or perhaps a willingness from the children to maintain possessions even if they do not use them.

Both men and boys noted their enjoyment in playing the ENX as a family. Boys described the ENX as a good opportunity to have some fun with their family members and they emphasised the advantage of playing with their parents. This is consistent with research that suggests exer-gaming is indisputably fun among all players (Sinclair *et al.*, 2007; Grammenos 2012). Lieberman (2006) found that the top reason for playing exergames was to have fun. This consensus between parents' and children's views toward the ENX as an opportunity to have family time by playing together again highlighted the importance of the role of parents in improving their children's physical activity levels (Townsend *et al.*, 2012b). Thus, this gives a good indication about the positive side of using ENX as either a tool to promote physical activity or as an opportunity to promote a fun environment for the family which encourages them to engage in physical activity together. It is possible that this awareness of the importance of physical activity as a family is a reflection of the increased knowledge from the PAG intervention.

Although this study was strengthened by a mixed-method approach, there were several limitations that must be acknowledged. For pragmatic reasons, this study did not include a follow-up. Therefore it is not known if the intervention effect lasted beyond the initial 4-week period. Furthermore, no measure was collected of exer-game usage therefore it is not possible to draw conclusions about the impact of the PAG intervention on exer-game usage in the home. All interviews were carried out in Arabic then translated into English; therefore meaning could have been lost as a result of translation. Moreover, the study included only males of this population and excluded the females while they are an important part and also influential as family members, whether through the role of mothers or sisters. Furthermore, the sample included varying levels of education among the males which could lead to different ways and levels of expression to present their ideas during the interviews, and also different levels of understanding the questions. The PAG intervention was new for all participants thus it was not easy for them to understand all of its contents which perhaps prevented them putting it into action.

## 5.7 Conclusion

This study aimed to investigate whether a brief intervention designed to increase knowledge of physical activity guidelines impacts on the physical activity levels of Arabic males who have exer-gaming consoles available at home. A secondary aim was to explore positives and negatives of exer-game usage. The findings of the study indicated that the intervention had a significant effect on the light activity, moderate activity and MVPA of the participating men however no effect on their sedentary levels. For boys, effects were seen on their sedentary, light and moderate activity but there was no significant difference between the post-intervention MVPA levels of the intervention and control groups.

The majority of men thought that an intervention providing physical activity guidelines (PAG) alone was not sufficient to motivate them to change their physical activity levels. Nevertheless, the accelerometry data indicated that the intervention was effective and impacted on their physical activity levels. On the other hand, all of men expressed positive views of the Exer-gaming Nintendo Wii / X-Box (ENX) and said that they would recommend it to anyone who was thinking of acquiring an exer-gaming console.

In contrast boys viewed that the PAG was effective for them and had made them more physically active and this could be considered a sort of consensus with their positive view toward the ENX, particularly in terms of ownership exer-gaming.

In general, boys had higher PA levels than men, as found previously in study one. There was however no improvement in boys' MVPA as a result of the intervention, whereas men significantly improved their MVPA levels. There was a significant increase in light physical activity for both men and boys following participation in the intervention.

The study's findings suggest that it is possible to increase physical activity levels in the short-term with a brief PAG intervention. However further research is required to investigate if these effects last, and to explore the potential role of exer-games in promoting physical activity for health.

# Chapter 6

**General Discussion** 

## **6.1 General Discussion**

This thesis aimed to explore physical activity behaviour in three generations of Arabic males with a view to developing a feasible physical activity intervention for this population, and sought to achieve this goal through the completion of three main studies:-

- **Study 1:** quantitative study this study examined the patterns of physical activity in Arabic men and boys during 7 consecutive days and also examined individuals' physical self-perception profile.
- **Study 2:-** qualitative study based on the findings of study 1, this phase investigated the barriers and motivators in becoming physically active by using focus group interview techniques.
- **Study 3:-** intervention study, mixed methodology based on the findings of study 2, this phase investigated the feasibility of an exergaming and awareness raising intervention in increasing the levels of physical activity in this sample.

The major new findings of this series of studies are:-

- 1) Arabic men resident in the UK met the physical activity guidelines whereas their children did not. Results also highlighted that both men and boys were more active during weekdays than at the weekend, and moreover boys had higher physical activity levels than their fathers (**Study 1**).
- 2) that the level of body attractiveness and physical self-worth in PSPP questionnaire were higher than the other subscales in men and similarly in the YC-PSPP

questionnaire which showed greater level of body attractiveness and physical selfworth in the boys in this sample compared with previous studies (**Study 1**).

- 3) that the low levels of physical activity of Arabic male boys suggest that strategic interventions are needed with a view to provide opportunities to become more physically active in their daily routines and lifestyles (**Study 1**).
- 4) that physical activity plays a significant role in the individual's health of Arabic males and that they perceive several benefits of physical activity for the individual, such as self-confidence, mental health and improved physical condition (**Study 2**).
- 5) that responses given by participants indicated that the understanding of physical activity varied from one individual to another. For example, some respondents viewed physical activity as a type of sport, while others believed it is a factor that leads to energy expenditure and burning of fats or calories (**Study 2**).
- 6) that the results revealed that respondents differed in their satisfaction of their own physical activity levels, wherein some were satisfied, while others were unsatisfied (Study 2).
- 7) that participants cited several barriers to physical activity that included lack of time, a lack of culture for being physically activity as a family unit (males and females), particularly in public places and an emphasis on engaging in sedentary behaviours, such as opting for activities perceived to be easy, seeking distraction by watching a movie or by using the playstation (**Study 2**).

- 8) the identification of several facilitators that encouraged participants to be physically active that included religion and enjoyment. These aspects related to being a "good healthy Muslim", and also to the role the family can play in promoting an entertaining and fun environment in which to promote child physical activity (**Study 2**).
- 9) that the physical activity guidelines intervention had a significant effect on the light activity, moderate activity and MVPA of the participating men but no effect on their sedentary levels. For boys, effects were seen on their sedentary, light and moderate activity but there was no significant difference between the post-intervention MVPA levels of the intervention and control groups (**Study 3**).
- 10) that the majority of men thought that an intervention providing physical activity guidelines (PAG) alone was not sufficient to motivate them to change their physical activity levels, whereas the boys viewed the PAG as an effective instrument to signpost them to become more physically active (**Study 3**).

# **6.2 Synthesis**

Observations in both study 1 and 3 confirm findings of previous studies which suggest that boys spend more time in all physical activity categories than adult men (in this case their fathers), and less time being sedentary. This is reflected by the greater time spent in sedentary behaviour than their sons. The differences in men vs boy activity levels in this study suggests that age determines the degree of variance in the different categories of activities (Bundred et a., 2001; Reilly *et al.*, 1999; Dorosty *et al.*, 1999; Young et.al., 2009). Perhaps this is due to

the cycle of weekly commitments and obligations of parents versus children. Given that children generally have more access to physical activity opportunities, for example in school recreational breaks and physical education classes and well as general play, than their fathers, this appears unsurprising. This is particularly so, in that fathers reported relatively sedentary occupational times that included work and college and university study. From these activity profiles it is evident that adults spent much time in the sitting position, particularly given that they recorded less than 8000 steps per day on average.

Although it is evident that children are more active than their fathers, these data indicate that these numbers of minutes do not meet the minimum required minutes for the MVPA level daily of 60 minutes (Department of Health, 2011b; Riddoch et al., 2009; Strong et al., 2005; Jago et al., 2005; Department of Health., 2004; Jago et al., 2004; Biddle et al., 1998), and are somewhat less than the average amount of moderate to vigorous physical activity (MVPA) of 85 minutes per day for white British boys reported in the Joint Health Surveys Unit (2010). This lack of achieving the weekly threshold of MVPA, is reinforced by the observation that children performed the most activity in the light intensity category compared with moderate and MVPA intensity. From study 3 there is the finding that the children found the existence and knowledge of the physical activity guidelines more motivating than their fathers (and in this study reached required levels of MVPA), which suggests that if such guidelines could be marketed in a child friendly and culturally sensitive manner, then a greater proportion of this population might meet MVPA. Whilst the use of exergaming was entertaining and allowed the family unit to become recreationally active together (a key cultural need identified as a facilitator to promoting physical activity in this culture), the novelty of using these devices soon wore off and it is also questionable whether the exercise stimulus provoked would be sufficient to reach thresholds of activity in the long term.

Whereas children were not meeting recommendations, the novel new finding of this study was that Arabic men were performing moderately intense physical activity in excess of the recommended weekly guideline of 150 min per week (cumulative total of approximately 190 minutes per week). These data indicate that Arabic men in this sample exceeded the current UK guidelines for recommended physical activity, whereas the boys did not reach the levels of MVPA required, despite being more active than their fathers overall. This finding compares favourably with the UK population (39% of males in England met current guidelines).

An issue with the guidelines for physical activity is the fact that this population interpreted physical activity in many different ways. Both the men and boys studied here were most likely to view physical activity as a type of sport, although others gave a broader interpretation focused on lifestyle activities, but it is clear that each individual has their own unique view of what physical activity is (Rimmer, 2006), depending on personal interests, capabilities and environmental factors. Even though the men reached the recommended dosage of physical activity, the majority said that they found their physical activity levels insufficient, largely because their felt were sitting for long periods of time watching TV (n=9), using computers (n=9) and using the PlayStation (n=3). Manson et al. (2004) also found the most common reasons why men tend to be physically inactive are the over-use of computers and television. However, this may be the result of their lack of understanding of physical activity and the guidelines, since they were clearly performing sufficient moderate intensity activity per week. For example, the cost of owning a car in the UK and the difficulty of getting a full UK driving license led most Arabic males to use public transport, which in turn encouraged them to walk to bus stops etc. in order to reach their destinations,

and even those who had a car preferred to walk to the city centre rather than drive, due to the lack of free car parks. In addition, the green areas such as public parks provided a good opportunity to walk around or engage in physical activity, and the large shopping centres promoted family-based walking. These everyday opportunities for physical activity were evidently not recognised as contributing to recommended levels of activity. Such an observation needs to be addressed by policy makers in designing information about these thresholds of activity. As a family unit, the boys were often engaged in these activities and paradoxically, most boys were satisfied with their physical activity levels. However, these levels of activity were not intense enough to include in MVPA. Again there is a lesson here for policy makers in designing the correct information for adults and for children that makes the clear distinction between required intensities in order to hit different age-related thresholds. This is particularly important for children as in the Arabic culture there is a large focus on academic study, with parents putting pressures on their children to complete homework and attend additional classes (Garrett, 2006), which includes going to school over the weekends thereby limiting the available time for physical activity.

Of the reported barriers to becoming more physically active, lack of time, the weather, health conditions or injury and socio-cultural factors were considered important. Many noted that their social status among their families motivates them to be physically inactive: "because I am always busy (study / work) I prefer to spend the rest of the day with the family". Additionally, data from the men's focus groups suggested cultural perceptions of what constitutes relaxation may act as a barrier to physical activity since their free time is for relaxing rather than undertaking physical activity. Whereas individuals of British origin might view physical activities as a means of relaxing (Gies, 2006), the Arabic male participants in this study perceived activities requiring physical exertion as "work". It is

therefore necessary to educate different populations with distinct cultural viewpoints using bespoke strategies.

### 6.3 Recommendations for future work

In performing future work related to this topic and in similar populations, the following recommendations are made. It would be useful for research practice and policy to build a demographic database for minority groups living in the UK that includes information such as, ethnic distribution, UK geographical distribution, socioeconomic and health status (including obesity profile, nutritional habits and physical activity metrics). This data should be expressed relative to age, gender, ethnicity and educational attainment. This would allow for the precise tailoring of activity recommendations. Such a database should also distinguish between the length of habitation in the UK, since physical activity patterns could differ between those individuals that have long term vs short term residency.

#### 6.3.1 Research recommendations.

- As the studies in this thesis have outlined there are clear differences in activity levels and the perception of activity levels in men and boys. There is a need for further quantitative and qualitative research among Arabic population to identify the correct physical activity levels among girls and women such that the whole family can be catered for. This will allow the best interventions to be created for whole family activity and health. This could also take into consideration the impact of different seasons of the year on physical activity levels and prescription.
- It would be interesting to compare the physical activity levels between Arabic populations that have lived in the UK for long time or short term with the Arabic population living in the Arabic world in order to investigate and identify any

- difference in barriers and facilitators to physical activity, and in addition compare these to other ethnic minority groups in the UK and with white British citizens.
- Further research is required to investigate the efficacy of exergaming as an alternative
  tool to being physically active in light of the fact that bad weather, lack of time and
  spending time with family are barriers that might impact negatively on being regularly
  physical activity.
- There is a need to carry out more research to identify the perceptions and rates of children's understanding toward the physical activity guidelines and identify the barriers that prevent the children to achieve the recommended levels of physical activity
- Conducting more research on the ethnic minorities groups needed to identify the barriers to adopting physical activity as a part of their lifestyle which associated with their culture, religion, social culture, socioeconomic state and etc.

## 6.3.2 Practice and policy recommendations.

- It is recommended that decision and policy makers plan strategies and design permanent intervention programs to encourage Arabic population to be physically active through the utilisation of the different local communities and local agencies where such ethnic groups usually exist.
- Physical activity and dietary awareness campaigns should be established through the
  local community centres and distinct social-media networks using the Arabic
  language and inform them about the available facilities that could help them to
  enhance physical activity.
- The decision makers could invest in Mosques and Arabic schools to distribute leaflets
  in Arabic and English to advise and educate them about physical activity.

• The English language schools and the universities that minority groups attend could also be considered as good places to communicate with Arabic population and conduct programmes to help them to be physically active, particularly for those individuals only in the UK just for study for about 3-5 years. For example, competitive championships between Arabic students such as football/handball leagues or any other competitive sport could be established between the schools or the faculties or the universities, and also the Mosque, the Arabic schools and the Arabic social and cultural centres. This could also represent an important opportunity to design and carry out multicultural physical activity programmes which could support connections among the Arabic and British population.

References

## References.

- Al-Hazzaa, M H., Musaiger, A. O., & ATLS Research Group, (2011a). Arab Teens Lifestyle Study (ATLS): objectives, design, methodology and implications. Diabetes, Metabolic Syndrome and Obesity: *Targets and Therapy*, 4, 417–426.
- Al-Hazzaa, M. H. (2006). Health-enhancing physical activity among Saudi adults using the International Physical Activity Questionnaire (IPAQ). *Public Health Nutrition*, 10, 59–64.
- Al-Hazzaa, M. H., Abahussain, N. A., Al-Sobayel, H. I., Qahwaji, D. M., & Musaiger A O. (2011b). Physical activity, sedentary behaviors and dietary habits among Saudi adolescents relative to age, gender and region. *International Journal of Behavioral Nutrition and Physical Activity*, 8, 1-14.
- Allender, S., Cowburn, G., & Foster, C. (2006). Understanding participation in sport and physical activity among children and adults: a review of qualitative studies. *Health Education Research*, 21, 826-835. available at: http://her.oxfordjournals.org/content/21/6/826.short (Accessed on January 16 2012)
- Al-Nuaim, A. A., Al-Nakeeb, Y., Lyons, M., Al-Hazzaa, M. H., Nevill, A., Collins, P., & Duncan M J. (2012). The Prevalence of Physical Activity and Sedentary Behaviours Relative to Obesity among Adolescents from Al-Ahsa, Saudi Arabia. *Rural versus Urban Variations*, 12, 1-9
- Al-Refaee, S., & Al-Hazzaa, M.H. (2001). Physical activity profile of adult males in Riyadh City. *Saudi Medical Journal*, 22, 784-789.
- Al-Sabbah H., Vereecken C., Kolsteren P., Abdeen Z., & Maes L. (2007). Food habits and physical activity patterns among Palestinian adolescents: findings from the national study of Palestinian schoolchildren.2004. *Public Health Nutrition*, 7, 739–746.

- Anand, T., Tanwar, S., Kumar, R., Meena, R. S., & Ingle, G. K. (2011). Knowledge, attitude, and level of physical activity among medical undergraduate students in Delhi. *Indian Journal of Medical Sciences*, 65, 133-142.
- Andrew, S., & Halcomb, E. J. (Eds.). (2009). *Mixed methods research for nursing and the health sciences*. Chichester, UK: Blackwell.
- Asçi, F. (2003). Physical self-perception of elite athletes and non-athletes. *Perceptual and Motor Skills*, 3, 1047-1052.
- Ayotte, B. J., Margrett, J. A., & Hicks-Patrick, J. (2010). Physical Activity in Middle-aged and Young-old Adults: The Roles of Self-efficacy, Barriers, Outcome Expectancies, Self-regulatory Behaviors and Social Support. *Journal of Health Psychology*, 2, 173-185.
- Azevedo, M. R., Araújo, C. L., Reichert, F. F., Siqueira, F. V., Silva, M. C., & Hallal, P. C. (2007). Gender differences in leisure-time physical activity. *The International Journal of Public Health*, 1, 8–15.
- Badran, M & Laher, I. (2011). Obesity in Arabic-Speaking Countries, *Journal of Obesity*, 11, 1-9 available at: <a href="http://www.hindawi.com/journals/jobes/2011/686430/">http://www.hindawi.com/journals/jobes/2011/686430/</a> (Accessed on January 16 2012)
- Bagos, E. (2005). *Physical activities of Parents in Tarlac City.Tarlac*. Tarlac City: Tarlac State University.
- Balarajan, R., & Soni, R.V. (1995). Ethnicity and Health in England. *NHS Executive Health Unit*. HMSO.

- Baranowski, T., Abdelsamad, D., & Baranowski, J. (2012). Impact of an active video game on healthy children's physical activity. *Pediatrics*, 129, 636-642.
- Barnett, A., Cerin, E.,& Baranowski T.(2011). Active video games for youth: a systematic review. *Journal of Physical Activity and Health*, 8, 724-737.
- Bauman, A. E., & Bull, F. C. (2007). Environmental Correlates of Physical Activity And Walking in Adults and Children: A Review of Reviews, *Loughborough University*, 6, 1-44
- Bauman, A., Bull, F., Chey, T., Craig, C. L., Ainsworth, B. E., Sallis, J. F., Bowles, H. R., et al. (2009). The International Prevalence Study on Physical Activity: results from 20 countries. *International Journal of Behavioral Nutrition and Physical Activity*, 6, 1-11.
- Beaglehole, R., Bonita, R., Alleyne, G., Horton, R., Li, L., Lincoln, P. et al. (2011). UN high-level meeting on non-communicable diseases: addressing four questions. Lancet, 378, 449–455.
- Beaulieu, N. P. (Ed.) (2008). *Physical Activity and Children: New Research*. New York: Nova.
- Beighle A, McKenzie T.L., Ridgers N.D. (2012). Increasing Physical Activity Through Recess. Robert Wood Johnson Foundation, 1-8 at <a href="http://activelivingresearch.org/files/ALR\_Brief\_Recess.pdf">http://activelivingresearch.org/files/ALR\_Brief\_Recess.pdf</a> accessed in 01.07.2013.
- Bernard, H. R. (2011). Research methods in anthropology: qualitative and quantitative approaches. 5th ed. Lanham, MD: Altamira Press.
- Biddle, S. & Goudas, M. (2009). Analysis of Children's Physical Activity and its Association with Adult Encouragement and Social Cognitive Variables. *Journal of School*

- Health, 66, 75-78, available at: <a href="http://onlinelibrary.wiley.com/doi/10.1111/j.1746-1561.1996.tb07914.x/abstract">http://onlinelibrary.wiley.com/doi/10.1111/j.1746-1561.1996.tb07914.x/abstract</a> (Accessed on January 18 2012)
- Biddle, S. Cavill, N. Ekelund, U. & Gorely, T. (2010). Sedentary behaviour and obesity:

  Review of the current scientific evidence, Department of Health,

  <a href="http://www.laterlifetraining.co.uk/wp-content/uploads/2011/07/Sedentary-Behaviour-Public-Health-Report-2010.pdf">http://www.laterlifetraining.co.uk/wp-content/uploads/2011/07/Sedentary-Behaviour-Public-Health-Report-2010.pdf</a>
- Biddle, S. J. H., Atkin, A. J., Cavill, N., & Foster, C. (2011). Correlates of physical activity in youth: a review of quantitative systematic reviews. *International Review of Sport and Exercise Psychology*, 4, 25-49.
- Biddle, S. J. H., Brehm, W., Verheijden, M., & Hopman-Rock, M. (2012). Population physical activity behaviour change: A review for the European College of Sport Science, *European Journal of Sport Science*, 12, 367-383,
- Biddle, S. J., Gorely, T., & Stensel, D. J. (2004). Health-enhancing physical activity and sedentary behaviour in children and adolescents. *Journal of Sports Science and Medicine*, 22, 679–701.
- Blaak, E. (2001). Gender differences in fat metabolism. *Current Opinion in Clinical Nutrition* and *Metabolic Care*, 4, 499-502.
- Blair, S. N. (2009). Physical inactivity: the biggest public health problem of the 21<sup>st</sup> century. **British** Journal of **Sports Medicine**, 43, 1-2.
- Blakemore, S. J., & Choudhury, S. (2006). Development of the adolescent brain: implications for executive function and social cognition. *Journal of Child Psychology and Psychiatry*, 47, 296–312.
- Blakemore, S.J., Choudhury, S. (2006). Development of the adolescent brain: implications for executive function and social cognition. Journal of Child Psychology and Psychiatry, 47, 296–312.

- Bracken, C. C., & Skalski, P. (2009). Telepresence and Video Games: The Impact of Image Quality. *PsychNology Journal*, 7, 101 112. available at: <a href="www.psychnology.org">www.psychnology.org</a>. Accessed in 13.07.2013
- Brawley, L.R., Rejeski, W.J. & King, A.C. (2003). Promoting physical activity for older adults: the challenges for changing behavior. *American Journal of Preventative Medicine*, 25, 172–183.
- British Heart Foundation National Centre (BHFNC) 2012 Factors influencing physical activity in the early years. *Loughborough University*. available at: <a href="http://www.bhfactive.org.uk/userfiles/Documents/factorsearlyyears.pdf">http://www.bhfactive.org.uk/userfiles/Documents/factorsearlyyears.pdf</a> Accessed in 01.05.2013.
- British Heart Foundation National Centre (BHFNC). (2012). evidence briefing-sedentary behaviour, British Heart Foundation National Centre (BHFNC) for Physical Activity and Health, Loughborough University. available at:

  http://www.bhfactive.org.uk/homepage-resources-and-publications-item/328/index.html Accessed in 22.07.2013
- British Heart Foundation National Centre for Physical Activity and Health. (2009). Guidance for Referring Health Professionals Exercise Referral Professionals & Exercise Referral Scheme Commissioners. A Toolkit for the Design, Implementation & Evaluation of Exercise Referral Schemes. *Loughborough University*. Available at. http://www.bhfactive.org.uk/downloads/ER\_Toolkit\_Part2.pdf Accessed 2<sup>nd</sup> September 2009.
- Bromley, C., Corbett, J., Day, J., Doig M., Gharib, W. et al. (2011). The Scottish Health Survey. *Published by the Scottish Government*, 1, 1-284

- Brophy-Herb, H. E., Schiffman, R. F., Bocknek, E., Dupuis, S., Fitzgerald, H. et al. (2011).

  Toddlers' social-emotional competence in the contexts of maternal emotion socialization and contingent responsiveness in a low-income sample. *Social Development*, 20, 73-92.
- Brustad, R., Monte, M., Ainsworth, B., & Bassett, D. (2010). The Role of Family in Promoting Physical Activity. *President's Council on Physical Fitness and Sports*, 10, 1-8.
- Bundred, P., Kitchiner, D., & Buchan I (2001) Prevalence of overweight and obese children between 1989 and 1998: population based series of cross sectional studies. *British Medical Journal*, 322, 1–4.
- Calfas, KJ., & Taylor, WC. (2010). Effects of Physical Activity on Psychological Variables in Adolescents. *Human Kinetics Journal*,6, 406-423, available at: <a href="http://journals.humankinetics.com/pes-back-issues/PESVolume6Issue4November/EffectsofPhysicalActivityonPsychologicalVariable">http://journals.humankinetics.com/pes-back-issues/PESVolume6Issue4November/EffectsofPhysicalActivityonPsychologicalVariable</a> Accessed on January 14 2012.
- Caperchione, C. M., Kolt, G. C, Tennent, R., & Mummery, W. K. (2011). Physical activity behaviours of culturally and Linguistically Diverse (CALD) women living in Australia: A qualitative study of socio-cultural influences. *BMC Public Health.* 11, 1-10
- Carver, A., Timperio, A., Hesketh, K., & Crawford, D. (2010). Are children and adolescents less active if parents restrict their physical activity and active transport due to perceived risk. Social Science & Medicine, 70, 1799–1805.

- 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,** 100, 126–131.
- Cavill, N., Kahlmeier, S., & Racioppi, F. (2006). Physical activity and health in Europe: evidence for action. *WHO Regional Office for Europe. 1-46.* available at: <a href="http://www.euro.who.int/">http://www.euro.who.int/</a> data/assets/pdf file/0011/87545/E89490.pdf Accessed on January 22. 2012.
- Centers for Disease Control and Prevention (CDC). (2005). Trends in Leisure-Time Physical Inactivity by Age, Sex, and Race/Ethnicity --- United States, 1994--2004. *Morbidity and Mortality Weekly Report*, *54*, 991-994.
- Centers for Disease Control and Prevention (CDC). (2006). Assessing risk factors for chronic disease-- Jordan, 2004. *Morbidity and Mortality Weekly Report*, 55, 653-655.
- Centres for Disease Control and Prevention. (2011). *Youth Physical Activity:* The Role of Families. *U.S. Department of Health and Human Services*. available at: <a href="http://www.cdc.gov/healthyyouth/physicalactivity/toolkit/factsheet\_pa\_guidelines\_f">http://www.cdc.gov/healthyyouth/physicalactivity/toolkit/factsheet\_pa\_guidelines\_f</a> <a href="mailies.pdf">amilies.pdf</a>. Accessed on January 22. 2012.
- Chambers, J.C., Elliott, P., Scott, J. & Kooner, J.S. (2006). Physical Activity and Risk of Type 2 diabetes in UK Asian Indian and Northern European subjects in the London life sciences population (LOLIPOP) study. *American heart association meeting abstract*.
- Chan, C. B., & Ryan, D. A. (2009). Assessing the Effects of Weather Conditions on Physical Activity Participation Using Objective Measures. *International Journal of Environmental Research and Public Health*, 6, 2639-2654.

- Chau, J. (2007). Physical Activity and Building Stronger Communities, new centre of physical activity and health. The Premier's Council for Active Living. available at:

  <a href="http://www.pcal.nsw.gov.au/\_data/assets/file/0004/27679/Physical\_Activity\_BuildingStronger-Communities.pdf">http://www.pcal.nsw.gov.au/\_data/assets/file/0004/27679/Physical\_Activity\_BuildingStronger-Communities.pdf</a>. Accessed in 16/12/2012.
- Chau, J. Y., Grunseit, A., Midthjell, K., Holmen, J., & Holmen, TL. (2013). sedentary behaviour and risk of mortality from all-causes and cardiometabolic diseases in adults: evidence from the HUNT3 population cohort. *British Journal of Sports Medicine*, 10, 1-7
- Chen, Y.M. (2010). Perceived barriers to physical activity among older adults residing in long-term care institutions, *Journal of Clinical Nursing*, 19, 432–439.
- Chinapaw, M. J., Proper, K.I., Brug, J., Van, M. W., & Singh, A. S. (2011). Relationship between young peoples' sedentary behaviour and biomedical health indicators: a systematic review of prospective studies. *Obesity Reviews*, 12, 621-632
- Chinn, D. J., White, M., Harland, J., Drinkwater, C., & Raybould, S. (1999). Barriers to physical activity and socioeconomic position: implications for health promotion, *The Journal of Epidemiology and Community Health*, 53, 191–192.
- Chipperfield., J. G., Newall., N. E., Chuchmach., L. P., Swift., A. U., & Haynes., T. L. (2008). Differential Determinants of Men's and Women's Everyday Physical Activity in Later Life. *The Journal of Gerontology: Biological Sciences*, 63, 211-218.
- Cho, M. H. (2004). The Strength of Motivation and Physical Activity Level During Leisure

  Time among Youth in South Korea. *Youth Society*, *35*, 480-494.

- Chouinard, H. H., Davis, D. E., LaFrance, J. T. & Perloff, J.M. (2006) Fat Taxes: Big Money for Small Change. *Forum for Health Economics & Policy*, 10. 1071-1106.
- Claude, B., Peter, T. K. (2007). *Physical Activity and Obesity*. New York: Human Kinetics.
- Collison, K. S., Zaidi, M.Z., Subhani, S. N., Al-Rubeaan, K., Shoukri, M., & Al- Mohanna, F.A. (2010). Sugar-sweetened carbonated beverage consumption correlates with BMI, waist circumference, and poor dietary choices in school children. *BMC Public Health*, 10, 1-13.
- Commission for Architecture and the Built Environment. (2011). Annual report and accounts, available at: <a href="http://www.official-documents.gov.uk/document/hc1012/hc11/1177/1177.pdf">http://www.official-documents.gov.uk/document/hc1012/hc11/1177/1177.pdf</a> accessed in 23.11.2012.
- Communities and Local Government (2009). Place Survey England Headline Table Results

  2008 available at.

  <a href="http://www.communities.gov.uk/publications/corporate/statistics/placesurvey2008">http://www.communities.gov.uk/publications/corporate/statistics/placesurvey2008</a>.

  accessed in 16/10/2012.
- Crocker, P. R., Eklund, R. C. & Kowalski, K.C. (2000). Children's physical activity and physical self-perceptions. *Journal of Sports Sciences*,18,383-394, available at: <a href="http://www.tandfonline.com/doi/abs/10.1080/02640410050074313">http://www.tandfonline.com/doi/abs/10.1080/02640410050074313</a> Accessed on January 18 2012.
- Crocker, P., Sabiston, C., Forrestor, S., Kowalski, N., & Kowalski, K. (2003). Predicting change in physical activity, dietary restraint, and physique anxiety in adolescent girls: examining covariance in physical self-perceptions. *Canadian Journal of Public*

- Health, 94, 332-337. available at: <a href="http://www.ncbi.nlm.nih.gov/pubmed/14577738">http://www.ncbi.nlm.nih.gov/pubmed/14577738</a>.

  Accessed on January 22 2012.
- Dagkas, S., & Stathi, A. (2007). Exploring social and environmental factors affecting adolescents' participation in physical activity. *European Physical Education Review*, 13, 369-384.
- Davison, K. K., & Birch, L. L. (2001). Childhood overweight: a contextual model and recommendations for future research. *Obesity Review*, 2, 159 –171.
- Department for Transport (2001). *National Travel Survey 1991/2001: update*. Department for Transport: London.
- Department for Transport (2011). *National Travel Survey 2010*. Department for Transport: London.
- Department of Health (2004) At least five a week: Evidence on the impact of physical activity and its relationship to health. A report from the Chief Medical Officer. available at: <a href="http://webarchive.nationalarchives.gov.uk/+/dh.gov.uk/en/publicationsandstatistics/p">http://webarchive.nationalarchives.gov.uk/+/dh.gov.uk/en/publicationsandstatistics/p</a> <a href="http://webarchive.nationalarchives.gov.uk/+/dh.gov.uk/en/publicationsandstatistics/p">http://webarchive.nationalarchives.gov.uk/+/dh.gov.uk/en/publicationsandstatistics/p</a> <a href="http://webarchive.nationalarchives.gov.uk/+/dh.gov.uk/en/publicationsandstatistics/p">http://webarchive.nationalarchives.gov.uk/+/dh.gov.uk/en/publicationsandstatistics/p</a> <a href="http://webarchive.nationalarchives.gov.uk/">http://webarchive.nationalarchives.gov.uk/+/dh.gov.uk/en/publicationsandstatistics/p</a> <a href="http://webarchive.nationalarchives.gov.uk/">http://webarchive.nationalarchives.gov.uk/</a> <a href="http://webarchive.nationalarchives.gov.uk/">http://webarchives
- Department of Health (2011a) Start Active, Stay Active: A report on physical activity from the four home countries' Chief Medical Officers. available at: <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/21637">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/21637</a>
  <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/21637">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/21637</a>
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  <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/21637">https://www.gov.uk/government/uploads/system/uploads/
- Department of Health (2011b). *Annual Report and Accounts 2010-11*. Available at: <a href="http://www.dh.gov.uk/prod\_consum\_dh/groups/dh\_digitalassets/documents/digitalasset/dh\_130154.pdf">http://www.dh.gov.uk/prod\_consum\_dh/groups/dh\_digitalassets/documents/digitalasset/dh\_130154.pdf</a> Accessed on 08.05.2012.

- Department of Health and Human Services. (2008). *Physical Activity Guidelines for Americans*. Available at: <a href="http://www.health.gov/paguidelines/guidelines/guidelines/">http://www.health.gov/paguidelines/guidelines/</a> Accessed on 21.07.2012.
- Department of Health. (2005). *Choosing activity: a physical activity action plan*. Available at: <a href="http://www.physicalactivityplan.org/resources/UK.pdf">http://www.physicalactivityplan.org/resources/UK.pdf</a>. Accessed on 07.06.2011.
- Di-Capua, Y. (2005) Women, Gender, Sports and the Female Body: Arab States. *Leiden brill academic publishers*, 3, 440-441.
- Dixon, R., Maddison, R., Ni, M. C., Jull, A., & Meagher-Lundberg, P., et al. (2010). Parents' and children's perceptions of active video games: a focus group study. *Journal of Child Health Care for Professionals Working With Children in the Hospital and Community*, 14, 189-199. available at: <a href="http://ukpmc.ac.uk/abstract/MED/20203134/reload=0;jsessionid=HPkij7DHhfnNAh">http://ukpmc.ac.uk/abstract/MED/20203134/reload=0;jsessionid=HPkij7DHhfnNAh</a> <a href="http://ukpmc.ac.uk/abstract/MED/20203134/reload=0;jsessionid=HPkij7DHhfnNAh">http://ukpmc.ac.uk/abstract/MED/20203134/reload=0;jsessionid=HPkij7DHhfnNAh</a> <a href="http://ukpmc.ac.uk/abstract/MED/20203134/reload=0;jsessionid=HPkij7DHhfnNAh</a>
- Dorosty, A. R., Reilly, J. J., & Emmett, P. M. (1999). Prevalence of overweight and obesity in British Children: cohort study. *British Medical Journal*, 319, 1039.
- Dugdill, L., & Stratton, G. (2007). Evaluating Sport and Physical Activity Interventions.

  University of Salford. Available at

  <a href="http://usir.salford.ac.uk/3148/1/Dugdill">http://usir.salford.ac.uk/3148/1/Dugdill</a> and Stratton 2007.pdf Accessed 2<sup>nd</sup>

  September 2009.
- Dwyer GM, Baur LA, Hardy LL. (2009). the challenge of understanding and assessing physical activity in preschool-age children: Thinking beyond the framework of intensity, duration and frequency of activity. *Journal of Science and Medicine in Sport*, 12 534–536.

- Edwards, P., & Tsouros, A. (2006). Promoting physical activity and active living in urban environments. WHO Regional Office for Europe. Available at: <a href="https://www.interiorhealth.ca/YourEnvironment/HealthyBuiltEnvironment/Documents/WHO-Promoting%20Physical%20Activity.pdf">https://www.interiorhealth.ca/YourEnvironment/HealthyBuiltEnvironment/Documents/WHO-Promoting%20Physical%20Activity.pdf</a>. Accessed 02.09 2009.
- Eiosdottir, S. P., Kristjánsson, Á. L., Sigfúsdóttir, I. D., & Allegrante, J. P. (2008). Trends in physical activity and participation in sports clubs among Icelandic adolescents. The European Journal of Public Health, 18. 289-293.
- Ekelund, U., Brage, S., & Wareham, N. J. (2004). Physical activity in young children. *The Lancet*, 363,1162-1163.
- Eklund, R. C., Whitehead, J. R., & Welk, G. J. (2013). Validity of the Children and Youth Physical Self-Perception Profile: A Confirmatory Factor Analysis. *Research Quarterly for Exercise and Sport*, 68, 249-256.
- Eklund, R. C., Whitehead, J. R., & Welk., G. J. (1997). Validity of the children and youth physical self-perception profile: a confirmatory factor analysis. *Research Quarterly for Exercise and Sport*, 68, 249–256.
- Emma, L., & Jarrett, M. (2010). How We Play— Cultural Determinants of Physical Activity in Young Children. Head Start Body Start National Center for Physical Development and Outdoor Play (HSBS). Available at: <a href="http://www.aahperd.org/headstartbodystart/activityresources/upload/howweplay\_litreview.pdf">http://www.aahperd.org/headstartbodystart/activityresources/upload/howweplay\_litreview.pdf</a> Accessed 02.09 2009.
- Esliger, D. W., & Tremblay, M. (2006). Technical reliability assessment of three accelerometer models in a mechanical setup. *Medicine & Science in Sports & Exercise*, 38, 2173-2181.
- Esteghamati, A., Khalilzadeh, O., Ashraf, H., Zandieh, A., & Morteza et al. (2010). Physical Activity is correlated with Serum LeptinIndependent of Obesity: Results of the

- National Surveillance of Risk Factors of Noncommunicable Diseases in Iran (Surfncd-2007). Metabolism Clinical and Experimental, 59, 1730-1735.
- Evdoxia, K., Miltiadis, P., & Evgenia, G. (2013). physical self worth, athletic engagement and goal orientations in Greek female athletes, *Pamukkale Journal of Sport Sciences*, 2, 79-93.
- Fairclough, S. J., & Ridgers, N. D. (2010). Relationships between maturity status, physical activity, and physical self-perceptions in primary school children. *Journal of Sports Sciences*, 28, 1-9.
- Findlay, L., & Bowker, A. (2009). The link between competitive sport participation and self-concept in early adolescence: A consideration of gender and sport orientation. *Journal of Youth and Adolescence*, 38, 29-40.
- Fischbacher, CM, Hunt, S and Alexander, L. (2004). How physically active are South Asians in the United Kingdom? A literature review, *Journal of Public Health*, 26, 250-258,
- Fogelholm, M., Nuutinen, O., Pasanen, M., MyoÈhaÈnen, E., & SaÈaÈtelaÈ, T. (1999).

  Parent-child relationship of physical activity patterns and obesity. *International Journal of Obesity*, 23, 1262-1268.
- Foweather, L. (2010) The effects of Interventions on Fundamental Movement Skills, Physical Activity, and Psychological Well-being among Children. PhD thesis, Liverpool John Moores University.
- Fox, K. (1990). *The physical self-perception profile manual (PRN monograph)*. Dekalb, IL: Northern Illinois University Office for Health Promotion.
- Fox, K.R. (Ed.). (1997). *The physical self: from motivation to well-being*. Champaign, IL: Human Kinetics.
- Fox, K.R.& Corbin, C.B. (1989). The Physical Self-Perception Profile: Development and Preliminary Validation, *Journal of Sport and Exercise Psychology*, 11, 408–430

- Freedson, P., Sirard and Debold, E. (1998). Calibration of the Computer Science and Applications, Inc. (CSA) accelerometer. *Medicine and Sport Exercise Science*, 5, 777-7778.
- Gao, Y., & Mandryk, R.L. (2012). The Acute Cognitive Benefits of Casual Exergame Play.

  In CHI '12: Proceedings of the 30th international conference on Human factors in computing systems., Austin, Texas, USA. 1863-1872.
- Garrett, K. E. (2006). Living In America: Challenges Facing New Immigrantsand Refugees,

  Prepared for the Robert Wood Johnson Foundation by Lake Snell Perry

  Mermin/Decision Research *Robert Wood Johnson Foundation*. available at:

  http://research.policyarchive.org/21623.pdf Accessed on 14.01. 2012
- Geffken, DF, Cushman, M., Sakkinen, P.A., & Tracy, R. P. (2001). Association between Physical Activity and Markers of Inflammation in a Healthy Elderly Population.

  American Journal of Epidemiology, 153, 242-250.
- Gies, E. (2006). The health benefits *of* parks, *The Trust for Public Land, San Francisco*, 1-26.

  Available from:

  <a href="http://www.eastshorepark.org/HealthBenefitsReport\_FINAL\_010307.pdf">http://www.eastshorepark.org/HealthBenefitsReport\_FINAL\_010307.pdf</a> . Accessed on 15.07.2012.
- Global Advocacy for Physical Activity (GAPA). (2011). The Advocacy Council of the International Society for Physical Activity and Health (ISPAH). *NCD Prevention:*\*Investments\*\* that work for physical activity. Available at:

  \*www.globalpa.org.uk/investmentsthatwork. Accessed on 18.03.2012.
- Gorely, T., Atkin, A. J., Biddle, S. J. H., & Marshall, S. J. (2009). Family circumstance, sedentary behaviour and physical activity in adolescents living in England: Project STIL. *The International Journal of Behavioral Nutrition and Physical Activity* 6, 1-8.

- Gorely, T., Marshall, S. J., & Biddle, S. J. (2004). Couch kids: correlates of television viewing among youth. *The International Journal of Behavioral Medicine*, 11, 152–163.
- Graf, DL. Pratt, LV. Hester, CN. (2009). Playing active video games increases energy expenditure in children, *Journal of Pediatrics*, 124, 534-540.
- Grammenos D, Margetis G, Koutlemanis P, Zabulis X. (2012). Using a Fun Exergame Installation for Advertising Traditional Food Products. *Springer-Verlag Berlin Heidelberg*, 7624, 214–229.
- Griffith, D. M., King, A. & Allen, J. O. (2012). Male Peer Influence on African American Men's Motivation for Physical Activity Men's and Women's Perspectives.

  \*American Journal of Men's Health, 7, 169-78
- Grossman, M.D. & Stewart, A.L. (2003). You aren't going to get better by just sitting around': physical activity perceptions, motivations, and barriers in adults 75 years of age or older. *American Journal of Geriatric Cardiology*, 12, 33–37.
- Hagger, M. S., Asçi, F. H., & Lindwall, M. (2004). A cross-cultural evaluation of a multidimensional and hierarchical model of physical self-perceptions in three national samples. *Journal of Applied Social Psychology*, 34, 1075–1107.
- Hagger, M. S., Biddle, S. J., & Wang, C. K. (2005). Physical Self-Concept in Adolescence: Generalizability of a Multidimensional, Hierarchical Model Across Gender and Grade. *Educational and Psychological Measurement*, 65, 297-322.
- Hagger, M. S., Hein, V., & Chatzisarantis, N.L.D. (2011). Achievement goals, physical selfconcept and social physique anxiety in a physical activity context, *Journal of Applied Social Psychology*, 41, 1299–1339.

- Hagger, M. S., Stevenson, A., Chatzisarantis, N. L.D., Gaspar, P.M.P., Ferreira, J.P.L., & Rave, J. M.G. (2009). Physical self-concept and social physique anxiety: Invariance across culture, gender, and age. *Stress & Health*, 26, 304–329.
- Hale, L.A., Jaya, P. &, Ines B. (2008). Measuring Free Living Physical Activity in AdultsWith and Without Neurologic Dysfunction With a Triaxial Accelerometer. *Archives of Physical Medicine and Rehabilitation*, 89, 1765-71.
- Hamer, M. Stamatakis, E. & Mishra, GD. (2010) Television- and Screen-Based Activity and Mental Well-Being in Adults. *The American Journal of Preventive Medicine*. 38, 375-380.
- Hamer, M., Stamatakis, E., & Steptoe, A. (2009). Dose-response relationship between physical activity and mental health: the Scottish Health Survey. *British Journal of Sports Medicine*, 43, 1111-1114.
- Hansen, L. & Sanders, S. W. (2011). Active gaming: A new paradigm in childhood physical activity. *Digital Culture & Education*, 3, 123-139.
- Hardman, A.E. & Stensel, D.J. (2009). *Physical Activity and Health: The Evidence Explained*. (2<sup>nd</sup> Ed). New York: Human Kinetics.
- Harter, S. (1989). Causes correlates, and the functional role of global self-worth: A life-span perspective. In J. Kolligian, & R. Sternberg (Eds.), Perceptions of competence and incompetence across the lifespan. New Haven, CT: Yale University Press.
- Haskell, W. L., Lee, I. M., Pate, R. R., & Powell, K.E. (2007). Physical Activity and Public Health: Updated Recommendation for Adults from the American College of Sports Medicine and the American Heart Association. *Medicine and Science in Sports and Exercise*, 39, 1423-1434.

- Hayes, L., White, M., Unwin, N., Bhopal, R., Fischbacher, C., et al. (2002). Patterns of physical activity and relationship with risk markers for cardiovascular disease and diabetes in Indian, Pakistani, Bangladeshi and European adults in a UK population. *Journal of Public Health Medicine*, 24, 170-178.
- Hayes, S. D., Crocker, P. R. E., & Kowalski, K. C. (1999). Gender differences in physical self-perception, global self-esteem and physical activity: Evaluation of the physical self-perception profile model. *Journal of Sport Behavior*, 22, 1-14.
- Health Survey for England, (2012). The Health and Social Care Information Centre, 2012.

  Available at: <a href="https://catalogue.ic.nhs.uk/publications/public-health/surveys/heal-surv-eng-2012-earl-resu/heal-surv-eng-2012-earl-resu-pra.pdf">https://catalogue.ic.nhs.uk/publications/public-health/surveys/heal-surv-eng-2012-earl-resu-pra.pdf</a>.
- Heine, S.J., Lehman, D. R., Peng, K., & Greenholtz, J. (2002). What's wrong with crosscultural. *Journal of Personality and Social Psychology*, 82, 903–918.
- Heinrich, K.M., Maddock, J., & Bauman, A. (2011). Exploring the Relationship Between Physical Activity Knowledge, Health Outcomes Expectancies, and Behavior.

  \*Journal of Physical Activity and Health, 8, 404-409.
- Hendelman, D., Miller, K., Debold, E. & Freedson, P. (2000). Validity of accelerometry for the assessment of moderate intensity physical activity in the field. *Medicine and Science in Sports and Exercise*, 32, 442-449.
- Henry, C. J., Lightowler, H. J., & Al-Hourani, H. M. (2004). Physical activity and levels of inactivity in adolescent females ages 11-16 years in the United Arab Emirates. The American Journal of Human Biology, 16, 346-353.
- Higgins, V., & Dale, A. (2009). Ethnic Differences in Physical Activity and obesity, *The Cathie Marsh Centre for Census and Survey Research*, 3, 1-24.

- Hillsdon, M., Foster, C., Cavill, N., Crombie, H. and Naidoo, B. (2005). *The effectiveness of public health interventions for increasing physical activity among adults: a review of reviews* (2<sup>nd</sup> edition). London, HAD
- Hu, F.B., Stampfer, M.J., Colditz, G.A., Willett, W.C. & Rimm, E.B. (2001). Physical Activity and Television Watching in Relation to Risk for Type 2 Diabetes Mellitus in Men. *Arch Intern Med*, 16,1542-1548.
- Ihori, N., Sakamoto, A., Shibuya, A., Yukawa, 2007 Effect of Video Games on Children's Aggressive Behaviour and Pro-social Behaviour: A Panel Study with Elementary School Students. *Proceedings of DiGRA 2007 Conference*. 170-177.
- Jackson, A. W. (2004). *Physical Activity for Health and Fitness*. Champaign, IL: Human Kinetics.
- Jago, R, Baranowski, T., Yoo, S., Cullen, K. W., Zakeri, I., et al. (2004). Relationship between physical activity and diet among African-American girls. *Obesity Research Journal*, 12, 55-63.
- Jago, R., Anderson, C., Baranowski, T., & Watson, K. (2005). Adolescent patterns of physical activity: Differences by gender, day and time of day. *American Journal of Preventive Medicine*, 28, 447-452.
- Jakicic, J. M., & Otto, A. D. (2005). Physical activity considerations for the treatment and prevention of obesity. *The American Journal of Clinical Nutrition*, 82, 226-229.
- Johnson, I, Tilgren, P and Hagstromer, M. (2009). Understanding and interpreting the concept of physical activity a focus group study among Swedish women. Scandinavian Journal of Public Health, 37, 20-27, available at: http://sjp.sagepub.com/content/37/1/20.short (Accessed on 14.07.2012.

- Joint Health Surveys Unit (2010). Health Survey for England 2008: Physical activity and fitness. The Information Centre: Leeds. available at: <a href="http://www.hscic.gov.uk/pubs/hse08physicalactivity">http://www.hscic.gov.uk/pubs/hse08physicalactivity</a>. Accessed on 22.07.2012.
- Jones, A., Bentham, G., Foster, C., Hillsdon, M., & Panter, J. (2007). Foresight Tackling

  Obesities: Future Choices Obesogenic Environments Evidence Review, Future

  Choices. London, Department of Innovation Universities and Skills.
- Kahn, E. B., Ramsey, L. T., Brownson, R. C., Heath, G. W., Howze, E. H. (2002). The Effectiveness of Interventions to Increase Physical Activity A Systematic Review. *The* American Journal of *Preventive* Medicine, 22, 73–107.
- Kalaja, S., Jaakkola, T., & Liukkonen, J. (2010). Fundamental movement skills and motivational factors influencing engagement in physical activity. *Perceptual and Motor Skills*, 111, 115-128.
- Kantomaa, M. T., Tammelin, T. H., Näyhä, S., Taanila, A. M. (2007). Adolescents' physical activity in relation to family income and parents' education. *Preventive Medicine*, 44, 410–415.
- Karteroliotis, K. (2008). Validation of the Physical Self-Perception Profile among college students. *Journal of Education and Human Development*, 2, 1-10.
- Kesaniemi, A., Riddoch, C. J., Reeder, B., Sorensen, T. I. A. (2010). Advancing the future of physical activity guidelines in Canada: an independent expert panel interpretation of the evidence. *International Journal of Behavioral Nutrition and Physical Activity* 7, 1-14.
- Kesby, M. (2007) Methodological insights on and from Children's Geographies. *Children's Geographies*, 5,193-205.

- Khatib, O. (2004). Noncommunicable diseases: risk factors and regional strategies for prevention and care. *Eastern Mediterranean Health Journal*, 10, 778–788.
- Kimm, S., Glynn, W., Kriska, M., Barton, A., Kronsberg, S., et al. (2002). Decline in physical activity in black girls and white girls during adolescence. *The New England Journal of Medicine*, 347, 709-715.
- Kirkwood, D. (2011). The effects of playing exergames on energy expenditure. Thesis

  Masters. Western Kentucky University
- Kirsh, S. J. (2003). The effects of violent video games on adolescents the overlooked influence of development. *Aggression and Violent Behavior*, 8, 377–389.
- Knowles, Z. (2009). Exploring the themes and processes of reflection: enhancing professional training curricula in higher education and sports social sciences. Thesis (PhD). Liverpool John Moores University.
- Koosam, V. K. (2013). Evaluation of Methodologies of Physical Activity: Self Reported International Physical Activity Questionnaires (IPAQ) Categories and Accelerometer Registration, as an E-health Tool. *Indian Journal of Medicine and Healthcare*, 2, 266-270.
- Kowalski, K., Crocker, P., Kowalski, N., Chad, K., & Humbert, L. (2003). Examining the physical self in adolescent girls over time: Further evidence against the hierarchical model. *Journal of Sport & Exercise Psychology*, 25, 5-18.
- Kuffel, E. E., Crouter, S. E., Haas, J. D., Frongillo, E. A., & Bassett, D. R. (2011) Validity of estimating minute-by-minute energy expenditure of continuous walking bouts by accelerometery. *International Journal of Behavioral Nutrition and Physical Activity*, 8, 1-7.

- Lakka, T., & Salonen, J. (1992). Intra-person variability of various physical activity assessments in the Kuopio Ischaemic Heart Disease Risk Factor Study. *International Journal of Epidemiology*, 21, 467-472.
- Lange, B., Flynn, S., & Rizzo, A. (2009). Initial usability assessment of off-the-shelf video game consoles for clinical game-based motor rehabilitation, *Physical Therapy Reviews*, 14, 355-363.
- Lee, I. M., Shiroma, E. J., Lobelo, P., Blair, S. N., & Katzmarzyk, P. (2012). Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy, *The Lancet*, 380, 219 – 229.
- Leicester, A. & Windmeijer, F. (2004). *The 'fat tax': economic incentives to reduce obesity*. (IFS Briefing Notes BN49). Institute for Fiscal Studies: London, UK. Available at: http://eprints.ucl.ac.uk/14931 Accessed on 22.06.2012.
- Lethbridge-Cejku, M., Schiller, J. S., & Bernadel, L. (2004). Summary health statistics for U.S. adults: National Health Interview Survey, 2002. *National Center for Health Statistics*. *Vital Health Statistics*, 10, 1–151.
- Liamputtong, P. (2011). Focus group methodology: Principles and practice. Thousand Oaks, CA: Sage.
- Lieberman, D. A. (2006). Dance Games and Other Exergames: What the Research Says [Electronic Version]. Retrieved 15<sup>th</sup> July 2013 from http://www.comm.ucsb.edu/faculty/lieberman/exergames.htm.
- Lincoln, Y.S. & Guba, E.G., (1985) *Naturalistic inquiry*, Beverly Hills: Sage,.
- Lindsay, A. C., Sussner, K. M., Greaney, M. L., & Peterson, K. F. (2009). Influence of social context on eating, physical activity, and sedentary behaviors of Latina mothers and their preschool-age children. *Health Education and Behavior*, 36, 81-96.

- Lindsay, A., Sussner, K., Kim, J., & Gortmaker S. (2006). The role of parents in preventing childhood obesity. *The Future of Children*, 16, 169-86.
- Lindstro, M., Sudnqust, J. (2001). Immigration and leisure-time physical inactivity: a population-based study. *Ethnicity and Health*, 6, 77-85.
- Lindwall, M. (2004). Exercising the self: On the role of exercise, gender and culture for physical self-perceptions. Unpublished doctoral dissertation. Department of Psychology, Stockholm University: Intellecta Docusys AB.
- Lobstein, T., Baur, L., & Uauy, R. (2004). Obesity in children and young people: a crisis in public health. *Obesity Review*, 5, 4-85.
- Macdonald, H. M., New, S. A., Campbell, M. K. & Reid, D.M. (2003). Longitudinal Changes in Weight in Perimenopausal and Early Postmenopausal Women: Effects of Dietary Energy Intake, Energy Expenditure, Dietary Calcium Intake and Hormone Therapy.

  International Journal of Obesity and Related Metabolic Disorders, 27, 669–676.
- Mackett, R. L., & Brown, B. (2011). Transport, Physical Activity and Health: Present knowledge and the way ahead. *Department for Transport, London, Great Britain*. available at: <a href="http://www.ucl.ac.uk/news/pdf/transportactivityhealth.pdf">http://www.ucl.ac.uk/news/pdf/transportactivityhealth.pdf</a> . Accessed on 16.07, 2012.
- Maddah, M., Rashidi, A., Mohammadpour, B., Vafa, R., & Karandish, M. (2009). In-School Snacking, Breakfast Consumption, and Sleeping Patterns of Normal and Overweight Iranian High School Girls: A Study in Urban and Rural Areas in Guilan, Iran. *Journal of Nutrition Education and Behavior*, 41, 27-31.
- Maddah, M., Shahraki, T., & Shahraki, M. (2010). Underweight and Overweight among Children in Zahedan, South-East Iran. *Public Health Nutr.* 13, 1519-1521.

- Malete, L., Sullivan, P., & Matthies, B. (2008). Examing Physical Self-Perceptions and physical activity of Jamaican youths: A cultural extension of the PSPP. *International Journal of Sport & Exercise Psychology*, 6, 39-52.
- Manson, J. E., Skerrett, P. J., Greenland, P., & VanItallie, T. B. (2004). The Escalating Pandemics of Obesity and Sedentary Lifestyle. *Archives of Internal Medicine*, 164, 249-258.
- Marcus, B. H., Williams, D. M., Dubbert, P. M., James, F., Sallis, A. C., et al. (2006).

  Physical Activity Intervention Studies What We Know and What We Need to Know. *American Heart Association*, 114, 2739-2752.
- Marsh, H. W. (1993). Physical fitness self-concept: relations of physical fitness to field and technical indicators for boys and girls aged 9–15. *Journal of Sports and Exercise Psychology*, 15, 184–206.
- Martin, J. J. (2013). Benefits and barriers to physical activity for individuals with disabilities: a social-relational model of disability perspective. *Disability and Rehabilitation* 1-8. Available at: Disability

  <a href="http://informahealthcare.com/doi/abs/10.3109/09638288.2013.802377">http://informahealthcare.com/doi/abs/10.3109/09638288.2013.802377</a>.
- McNamara E., Hudson Z., & Taylor, S., C. (2010). Measuring activity levels of young people: the validity of pedometers. **British Medical Bulletin**, 95, 121–137.
- Media and Communication in Australian Families Series. (2008). internet use and social networking by young people, *Media and Communication in Australian Families*Series. available at:

  <a href="http://www.acma.gov.au/webwr/assets/main/lib310665/no1">http://www.acma.gov.au/webwr/assets/main/lib310665/no1</a> internet use social ne
- Milenkovic, J. & Timmons, B. W. (2013). preschooler active video game focus, *child Health* and Exercise Medicine Program. available at:

tworking young people.pdf. Accessed on 16.03.2012.

- http://www.canchild.ca/en/childrenfamilies/resources/chemp\_newsletter\_9.pdf.
  Accessed on 20..37.2013.
- Miles, M., & Huberman, A. (1994). *Qualitative data analysis* (2<sup>nd</sup> Ed.). Thousand Oaks, CA: Sage.
- Mokhtar, N. J., Elati, R., & Chabir, Bour A., Elkari K. et al. (2001) Diet culture and obesity in northern Africa. *Journal of Nutrition*, 131, 887-892
- Moore, J. B., Jilcott, S. B., Shores, K. A., Evenson, K. R., Brownson, R. C., et al. (2010). A qualitative examination of perceived barriers and facilitators of physical activity for urban and rural youth. *Health Education Research*, 25, 355-367.
- Moreno, J. A. M., Gimeno, E. C. G., Lacarcel, J. A. V., & Rerez, L. M. R. (2007). Physical Self-Concept of Spanish Schoolchildren: Differences by Gender, Sport Practice and Levels of Sport Involvement. *Journal of Education and Human Development, 1*, 1-17.
- Moreno, J. A., & Cervelló, E. (2005). Physical self-perception in Spanish adolescents: effects of gender and involvent in physical activity. *Journal of Human Movement Studies*, 48, 291-311.
- Moussa, M. A., Skaik, M. B., Selwanes, S. B., Yaghy, O. Y and Bin-Othman, S A. (1994).

  Contribution of body fat and fat pattern to blood pressure level in school children.

  European Journal of Clinical Nutrition, 48, 587-590.
- Moy, K.L. (2005). Physical activity and fitness measures in New Zealand: a study of validation and correlation with cardiovascular risk factors, A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy in Population Health, PhD thesis *The University of Auckland*.

- Mullen, S.P., Olson, E.A., Phillips, S.M., Szabo, A.N., Wojcicki, T.R., Mailey, E.L., (2011).

  Measuring enjoyment of physical activity in older adults: invariance of the physical activity enjoyment scale (paces) across groups and time. *International Journal of Behavioral Nutrition and Physical Activity*, 8, 1-9.
- Murcia, JA, Gimeno, EC & Perez, L. M. R. (2007). Physical Self-Concept of Spanish Schoolchildren: Differences by Gender, Sport Practice and Levels of Sport Involvement, *Journal of Education and Human Development*, 1, 1-17. available at: <a href="http://www.scientificjournals.org/journals2007/articles/1180.pdf">http://www.scientificjournals.org/journals2007/articles/1180.pdf</a> (Accessed on January 18 2012)
- Musaiger, A, O. (2007). Overweight and Obesity in the Arab Countries: The Need for Action, *Bahrain Centre for Studies and Research* 1-27. available at: <a href="http://www.aub.edu.lb/fhs/phaw/regional-resources/Documents/phaw">http://www.aub.edu.lb/fhs/phaw/regional-resources/Documents/phaw</a> 2012 musaiger%20et%20al overweight-obesity-in-EMR-annotated-bibliography.pdf. Accessed on 26.05. 2012.
- Musaiger, A. O. (2004) Overweight and obesity in the Eastern Mediterranean Region: can we control it? *Eastern Mediterranean Health Journal*, 10, 789-793. available at: <a href="http://www.emro.who.int/publications/emhj/1006/Overweight.htm">http://www.emro.who.int/publications/emhj/1006/Overweight.htm</a> (Accessed on January 16 2012).musaiger
- Musaiger, A. O., Hazzaa, M. A. H., Al-Qahtani, A., Elati J, Ramadan, J., et al. (2011a). Strategy to combat obesity and to promote physical activity in Arab countries, Diabetes, Metabolic Syndrome and Obesity. *Targets and Therapy*, 4, 89–97.
- Musaiger, A. O., Hassan, A. S., Obeid, O. (2011b). The Paradox of Nutrition-Related Diseases in the Arab Countries: The Need for Action. *International Journal of Environmental Research and Public Health*, 8, 3637-3671.

- Myers, A. M., Malott, O. W., Gray, E., Tudor-Locke, C., Ecclestone, N. A., et al. (1999).

  Measuring Accumulated Health-Related Benefits of Exercise Participation for Older

  Adults: The Vitality Plus Scale. *J Gerontol A Biol Sci Med Sci*, 54, 456-466.
- Naghmeh, Z, M., Suzana S., Noor A. M. Yusoff, M. M. Ghayour M., Ali, R. D. & Mohamad,
  T. S. (2011). Lower Level of Physical Activity Predisposes Iranian Adolescent Girls
  to Obesity and Its Metabolic Consequences. *Pakistan Journal of Nutrition* 10, 728-734.
- National Institute for Health and Clinical Excellence (NICE) (2009) Promoting physical activity, active play and sport for pre-school and school-age children and young people in family, pre-school, school and community settings. available at: <a href="http://www.nice.org.uk/nicemedia/pdf/ph017guidance.pdf">http://www.nice.org.uk/nicemedia/pdf/ph017guidance.pdf</a> Accessed on 12.03. 2013.
- National Institute for Health and Clinical Excellence NICE (2006) guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children Available at.

  <a href="http://www.nice.org.uk/nicemedia/live/11000/30365/30365.pdf">http://www.nice.org.uk/nicemedia/live/11000/30365/30365.pdf</a> Accessed on. 02.09 2009.
- National Institute for Health and Clinical Excellence NICE Public Health Collaborating

  Centre. (2008). Promoting Physical activity and children Review 7: intervention
  review: family and community. available at:

  <a href="http://www.sport.admin.ch/compi/dateien/dokumentation/NICE\_PromotingPhysical-ActivityChildrenReview7FamilyCommunityInterventions.pdf">http://www.sport.admin.ch/compi/dateien/dokumentation/NICE\_PromotingPhysical-ActivityChildrenReview7FamilyCommunityInterventions.pdf</a> Accessed on 07.05.

  2013.

- National Obesity Forum (2006) *Barriers to Physical Activity*. [Online] Available at: <a href="http://nationalobesityforum.org.uk/content/blogcategory/74/191/">http://nationalobesityforum.org.uk/content/blogcategory/74/191/</a>. Accessed 14.09. 2011.
- Ng, S. W., Zaghlool, S., Ali, H.I., Harrison, G., & Popkin, B. M. (2011). The prevalence and trends of overweight, obesity and nutrition-related non communicable diseases in the Arab Gulf states. *Obesity Review*, 12, 1–13.
- Ninot, G., Fortes, M., & Delignières, D. (2006). Validation of a shortened instrument for assessing the dynamics of the global self-esteem and physical self in adults. Perceptual and Motor Skills, 103, 531-542.
- O'Cathain, A., Murphy, E., & Nicholl, J. (2007). Why, and how, mixed methods research is undertaken in health services research in England: a mixed methods study. *BMC Health Services Research*. 7, 1-11.
- O'Dea, J. A. (2003). why do kids eat healthful food? Perceived benefits of and barriers to healthful eating and physical activity among children and adolescents. *Journal of the American Dietetic Association*, 103, 497–504.
- O'Dwyer, M.V., Knowles, Z., Fairclough, S.J., Stratton., G. (2012). Effect of a family focused active play intervention on sedentary time and physical activity in preschool children. *International Journal of Behavioral Nutrition and Physical Activity*, 9:1-13.
- Obeisat, S. (2012). Physical Activity Behaviour of Jordanian Adolescents and its Associated Factors. *European Journal of Scientific Research*, 67, 433-443.

- O'Connor, T., Jago, R., & Baranowski, T. (2009). Engaging parents to increase youth physical activity: a systematic review. *The American Journal of Preventive Medicine*, 37,141–149.
- Oehlschlaeger, M. H. K., Pinheiro, R. T., Horta, B., Gelatti, C., San'Tana, P. (2004).

  Prevalence of sedentarism and its associated factors among urban adolescents.

  Revista de Saúde Pública Journal of Public Health, 38, 157–163.
- Owen, N., Healy, G.N., Matthews, C.E., & Dunstan, D.W. (2010). Too much sitting: the population health science of sedentary behavior. *Exercise and Sport Sciences Reviews*, 38, 105–113.
- Page, A., Ashford, B., Fox, K., & Biddle, S. (1993). Evidence of cross-cultural validity for the physical self-perception profile. *Personality and Individual Differences*, 14, 585– 590.
- Parahoo, K. (2006). *Nursing Research: Principles, Process and Issues*, 2nd edn. Palgrave MacMillian, Houndsmill.
- Pate, R. R., O'Neill, J. R., & Lobelo, F. (2008). The evolving definition of "sedentary". .

  Exercise and Sport Sciences Reviews, 36, 173–178.
- Pate, R.R., Davis, M.G., Robinson, T.N., Stone, E.J. Mckenzie, T.L., & Young, J.C. (2006).
  Promoting Physical Activity in Children and Youth: A Leadership Role for Schools:
  A Scientific Statement From the American Heart Association Council on Nutrition,
  Physical Activity, and Metabolism (Physical Activity Committee) in Collaboration
  With the Councils on Cardiovascular Disease in the Young and Cardiovascular
  Nursing. American Heart Association, 114, 1214-1224.

- Patton, M. (2002). *Qualitative research and evaluation methods* (3<sup>rd</sup> Ed.). Thousand Oakes, CA: Sage.
- Peng, W., Lin, J.H. & Crouse, J (2011). Is playing exergames really exercising? A metaanalysis of energy expenditure in active video games, Journal of Cyberpsychology, Behavior, and Social Networking, 14, 681-688.
- Peng, W., Crouse, J. C., Lin, J. (2012). Using Active Video Games for Physical Activity

  Promotion: A Systematic Review of the Current State of Research. *Health Education & Behavior*, 40,171-192.
- Perryman, M. L. (2011). Ethical Family Interventions for Childhood Obesity, Preventing Chronic Disease; 8 pp 1-3 *Personality and Social Psychology*, 82, 903-918.
- Perspectives in Public Health (2013) Let's get physical: a public health priority. SAGE

  Publications. available at:

  <a href="http://www.rsph.org.uk/filemanager/root/site">http://www.rsph.org.uk/filemanager/root/site</a> assets/membership/nuffield/clinical m

  eetings journals/133 2 lets get physical.pdf. Accessed on 14.03. 2013.
- Peterson, J. J., Lowe, J. B., Peterson, N. A., and Janz, K. F. (2006). The relationship between active living and health-related quality of life: income as a moderator. *Health Education Research*, 21, 146 156.
- Peterson, T. R. & Tucker, L. A. (2008). Physical Activity and Body Composition: A 20-Month Prospective Study of Middle-Age Women. *The Open Sports Sciences Journal*, 1, 38-44.
- Pomerleau, J., McKeigue, P.M. & Chaturvedi, N. (1999), Factors associated with obesity in South Asian, Afro-Caribbean and European women. *International journal of obesity* 23, 25-33.

- Public health agency (2010) Promoting physical activity at work: a guide for employers, *Health* and Social Wellbeing Improvement. available at.

  <a href="http://www.publichealth.hscni.net/publications/promoting-physical-activity-work-guide-employers">http://www.publichealth.hscni.net/publications/promoting-physical-activity-work-guide-employers</a> accessed in 28.11.2012.
- Purcell, L. (2005). Sport readiness in children and youth. *Paediatr Child Health*. 10, 343–344.
- Rae, P. (2007). *Jump Into Literacy: Active Learning for Preschool Children*. New York: Gryphon House.
- Rai DK., & Finch H. (1997). Physical Activity 'From Our Point of View'. Qualitative

  Research Among South Asian and Black Communities. London: Health Education

  Authority.
- Raustorp, A., Gudasic, H., Kinnunen, A. & Mattsson, E. (2004). Physical activity and self-perception in school children assessed with the Children and Youth Physical Self-Perception Profile, *Scandinavian Journal of Medicine & Science in Sports*, 15, 126-134.
- Ray, C. (2001). Black Liverpool: The Early History of Britain's Oldest Black Community 1730-1918. Liverpool: Picton Press. 1-873245-07-6.
- Reichert, F. F., Barros, A. J., Domingues, M. R., and Hallal, P. C. (2007). The Role of Perceived Personal Barriers to Engagement in Leisure-Time Physical Activity. *The American Journal of Public Health*, 97, 515-519.
- Reilly, J. J., Penpraze, V., Hislop, J., Davies, G., Grant, S., & Paton, J. Y. (2008). Objective measurement of physical activity and sedentary behaviour: Review with new data. *Archives of Disease in Childhood*, 93, 614-619.

- Reilly, J.J., & Dorosty, A. R. (1999) Epidemic of obesity in UK children. *The Lancet*, 354, 1874–1875.
- Reilly, T., Waterhouse, J., and Atkinson, G. (1997). Aging, rhythms of physical performance, and adjustment to changes in the sleep-activity cycle. *Occupational and Environmental Medicine*, *54*, 812-816.
- Richman, E. L. & Shafferm, D. R. (2000). If you let me play sports: how might sports participation influence the self-esteem of adolescent females? *Psychology of Women Quarterly*, 24, 189-199.
- Riddoch, C. J., Calum, M., Kevin, D., Jo S., Jo, K., Tilling, K., et al. (2009) Objective measurement of levels and patterns of physical activity. *Archives of Disease in Childhood*. 92, 963-969.
- Ridgers, N. D., Knowles Z. R., & Sayers, J. (2012). Encouraging play in the natural environment: a child-focused case study of Forest School, *Children's Geographies*, 10, 55–71.
- Rimmer, J. H. (2006). Use of the ICF in identifying factors that impact participation in physical activity/rehabilitation among people with disabilities. *Disabil. Rehabil*, 28, 1087–1095.
- Rimmer, J. H., Riley, B., Wang, E., Rauworth, A., Jurkowski, J. (2004). Physical Activity

  Participation Among Persons with Disabilities Barriers and Facilitators. *American Journal of Preventive Medicine*, 26, 419–425.
- Robbins, L.B., Pender, N.J. & Kazanis, A.S. (2003). Barriers to Physical Activity Perceived by Adolescent Girls. *Journal of Midwifery and Women's Health*, 48, 206-212
- Robert J. S., Elias D. S., & Joseph L. F. (2005). Perceived Physical Competence in Adults:

  An Examination of the Physical Self-Perception Profile. *Journal of Sport & Exercise Psychology*. 14, 207 221.

- Robertson, W., Wilcock, E. & Thorogood, M. (2010). Utility of Accelerometers to Measure

  Physical Activity in Children Attending an Obesity Treatment Intervention, *Journal of Obesity*, Vol 2011, available at:

  <a href="http://www.hindawi.com/journals/jobes/2011/398918/">http://www.hindawi.com/journals/jobes/2011/398918/</a> Accessed on 18.01.2012.
- Robinson, J. P., & Kestnbaum, M. (1999). The Personal Computer, Culture and Other Uses of Free Time. *Social Science Computer Review*, 17, 209–216.
- Sadeghipour, H. R, Rahnama, A., Salesi, M., Rahnama, N., & Mojtahedi. H. (2010).
   Relationship between C-Reactive Protein and Physical Fitness, Physical Activity,
   Obesity and Selected Cardiovascular Risk Factors in Schoolchildren. nternational
   Journal of Preventive Medicine, 1, 242-246.
- Salmon, J., Timperio, A., Telford, A., Carver, A., Crawford, D. (2005). Association of Family Environment with Children's Television Viewing and with Low Level of Physical Activity. *Obesity research*, 13, 1939-1951.
- Saxena, S., Ambler, G., Cole, T. J., & Majeed, A. (2004). Ethnic group differences in overweight and obese children and young people in England: cross sectional survey. *Archives of Disease in Childhood*; 89, 30-36.
- Scarborough, P., Bhatnagar, P., Wickramasinghe, K. K., Allender, S., Foster, C., et al. (2011). The economic burden of ill health due to diet, physical inactivity, smoking,

- alcohol and obesity in the UK: An update to 2006-2007 NHS costs. *Journal of Public Health*, 33, 527-535.
- Schwalbe, M.L., & Staples, C.L. (1991). Gender differences in sources of self-esteem. *Social Psychology Quarterly* 54:158-168.
- Seabra, A.F., Mendonca, D.M, Goring H.H., Thomis, MA, Maia, J.A. (2008). Genetic and environmental factors in familial clustering in physical activity. *the European Journal of Epidemiology*, 23, 205-211.
- Sears, W., Sears, M., Sears, J., & Sears, R. (2006). The healthiest kid in the neighbourhood: ten ways to get your family on the right nutritional track. New York (NY): Little, Brown and Co.
- Sharif, S. (2011) Guidelines: Promoting physical activity with black and minority ethnic groups. [Online] Available at:

  <a href="http://www.nice.org.uk/nicemedia/documents/act4life\_black.pdf">http://www.nice.org.uk/nicemedia/documents/act4life\_black.pdf</a>. Accessed 13.08 2011.
- Shayne, R. K., Fogel, V. A., Miltenberger, R. G., Koehler, S. (2012). the effects of exergaming on physical activity in a third-grade physical education class. *journal of applied behavior analysis*, 45, 211–215
- Shepherd, R. J. (2003). Limits to the measurement of habitual physical activity by questionnaires, *British Journal of Sports Medicine*, 37, 197-206.
- Sherwood, N., & Jeffery, R. (2000). The behavioural determinants of exercise: implications for physical activity interventions. *Annual Review of Nutrition*, 20, 21-44.

- Shuval, K., Weissblueth, E., Amira, A., Brezis, M., Faridi, Z., Ali, A., et al. (2008). The Role of Culture, Environment, and Religion in the Promotion of Physical Activity Among Arab Israelis. *Preventing* **Chronic Disease**, *5*, 1-8.
- Sims, S.T., Larson, J.C., Lamonte, M.J., Michael, Y.L., Martin, L.W., et al.(2012). Physical activity and body mass: changes in younger vs. older postmenopausal women.

  Medicine & Science in Sports & Exercise, 44, 89–97.
- Sinclair, J., Hingston, P., Masek M. (2007). Considerations for the design of exergames,
  Association for Computing Machinery, 1, 289-295.
- Smith, A. L. & Biddle, S. (2008). Youth Physical Activity and Sedentary Behaviour;

  Challenges and Solutions. New York: Human Kinetics
- Sonstroem, R. J., Speliotis, E. D., & Fava, J. L. (1992). Perceived Physical Competence in Adults: An examination of the Physical Perception Profile. *Journal of Sport and Exercise Psychology*, 14, 207-221.
- Speck, B. J., & Harrell, J. S. (2003). Maintaining regular physical activity in women: Evidence to date. *Journal of Cardiovascular Nursing*, 18, 282-291.
- Stamatakis, E. P., Primatesta, S., Chinn, R. Rona, E. (2005). Overweight and obesity trends from 1974 to 2003 in English children: what is the role of socioeconomic factors?. *Archives of Disease in Childhood*. 90, 999–1004.
- Stanner, S. & Leung, G. (2011). Diets of minority ethnic groups in the UK: influence on chronic disease risk and implications for prevention, *Nutrition Bulletin*, 36, 161-198, available at: <a href="http://onlinelibrary.wiley.com/doi/10.1111/j.1467-3010.2011.01889.x/full">http://onlinelibrary.wiley.com/doi/10.1111/j.1467-3010.2011.01889.x/full</a>. Accessed on 16.07. 2012.

- STEPwise (2007). Data from selected countries in the Eastern Mediterranean Region, 2003–2007. WHO EMRO available at:, <a href="http://www.emro.who.int/ncd/stepwise.htm">http://www.emro.who.int/ncd/stepwise.htm</a>. Accessed on 16.01, 2012.
- Stratton, G. (2000). Promoting children's physical activity in primary school: an intervention study using playground markings. *Ergonomics*, 43, 1538-1546.
- Strauss, S.S., Rodzilsky, D., Burack, G., Colin, M. (2001). Psychosocial Correlates of Physical Activity in Healthy Children. *Archives of Pediatrics and Adolescent Medicine*, 155, 897-902.
- Strong, W, B., Malina, R. M, & Blimkie, C.J. (2005). Evidence based physical activity for school-age youth. *The Journal of Pediatrics*, 146, 732-737.
- Svendsen, L. (2005). A Philosophy of Boredom. Stanford University Press., Stanford.
- Swaminathan, S, & Vaz, M. (2013). Childhood Physical Activity, Sports and Exercise and Noncommunicable Disease: A Special Focus on India. *The Indian Journal of Pediatrics*, 80, 63-70.
- Swinburn, B. A., Caterson, J. C., Seidell & WPT, J. (2004) Diet, nutrition and the prevention of excess weight gain and obesity *Public Health Nutrition*, 7, 123–146.
  - Szczepura, A. (2004). Access to healthcare for ethnic minority populations. *Postgraduate Medical Journal*. 81,141-147.
- Szczepura, A., Anil, G., Diane, C., Peter, E., Mark, J., et al. (2004). **Review of the occupational health and safety of Britain's ethnic minorities.** Sudbury, Suffolk: HSE Books. (Health and Safety Executive research report available at <a href="http://www.hse.gov.uk/research/rrpdf/rr221.pdf">http://www.hse.gov.uk/research/rrpdf/rr221.pdf</a> Accessed on 02.09. 2009.
- Tandon, Zhou, C., Sallis, J. F., Cain, K. L., Lawrence, D. F., et al. (2012). Home environment relationships with children's physical activity, sedentary time, and screen time by

- socioeconomic status. *International Journal of Behavioral Nutrition and Physical Activity*, 9, 1-9. http://www.ijbnpa.org/content/9/1/88.
- Taylor, M. J. D., McCormick, D., MBChB, T. S., Impson, R., Griffin, M. (2011). Activity-promoting gaming systems in exercise and rehabilitation. *Journal of rehabilitation Research & Development*, 48, 1171–1186.
- Teijlingen, E, Simkhada, P and Koshoedo, SA. (2009). Review of Barriers to Engaging Black and Minority Ethnic Groups in Physical Activity in the United Kingdom. *Global Journal of Health Science*, 1, 85-96.
- Tenenbaum, G., Eklund, R. & Kamata, A. (Eds.) (2011). *Measurement in Sport and Exercise Psychology*. Human Kinetics.
- The EU Working Group "Sport & Health" (2008) EU Physical Activity Guidelines Recommended Policy Actions in Support of Health-Enhancing Physical Activity. 1-38. available at: <a href="http://ec.europa.eu/sport/library/documents/c1/eu-physical-activity-guidelines-2008\_en.pdf">http://ec.europa.eu/sport/library/documents/c1/eu-physical-activity-guidelines-2008\_en.pdf</a>. Accessed on 14.07.2012.
- The Information Centre for Health and Social Care (2011). Statistics on obesity, physical activity and diet England, 2011. Available at:

  <a href="http://www.hscic.gov.uk/pubs/opad11">http://www.hscic.gov.uk/pubs/opad11</a> Accessed on 18.07, 2011.
- The Information Centre for Health and Social Care (2008). *Statistics on obesity, physical activity and diet England 2008*. Available at:

  http://www.hscic.gov.uk/pubs/opadjan08 Accessed on 16.01. 2012.
- The Information Centre for Health and Social Care (2010). *Statistics on obesity, physical activity and diet England, 2010.* Available at:

  http://www.hscic.gov.uk/pubs/opad10

- The Information Centre for Health and Social Care (2013). Statistics on obesity, physical activity and diet England, 2013. Available at:

  <a href="http://www.hscic.gov.uk/catalogue/PUB10364">http://www.hscic.gov.uk/catalogue/PUB10364</a>
- Thøgersen-Ntoumani, C., & Ntoumanis, N. (2007). A Self-determination Theory Approach to the Study of Body Image Concerns, Self-presentation and Self-perceptions in a Sample of Aerobic Instructors. *Journal of Health Psychology*, 12, 301-315.
- Thomas, J.R, Nelson, J. K., & Silverman, S.J. (2005) *Research Methods in Physical Activity*, 5th edn. Champaign, IL: Human Kinetics.
- Timmons, B. W, Naylor, P. J., & Pfeiffer, K.A. (2007). Physical activity for preschool children how much and how?, *Applied Physiology, Nutrition and Metabolism*, 32,122-134.
- TNS Opinion & Social (2010). Blood donation and blood transfusions, Avenue Herrmann

  Debroux. Available at.

  <a href="http://www.icpsr.umich.edu/icpsrweb/ICPSR/biblio/resources?type%5B0%5D=Rep">http://www.icpsr.umich.edu/icpsrweb/ICPSR/biblio/resources?type%5B0%5D=Rep</a>

  ort&author%5B0%5D=TNS+Opinion+%26+Social&paging.startRow=1

  Accessed

  02.08. 2013.
- Todd, M. K., Reis-Bergan, M. J., Sidman, C.L., Flohr, J. A., Jameson-Walker, K., et al. (2008) Effect of a family-based intervention on electronic media use and body composition among boys aged 8–11 years: a pilot study. *Journal of Child Health Care*.12, 344–358.
- Townsend, N., Bhatnagar, P., Wickramasinghe. K., Scarborough, P., Foster, C.& Rayner, M. (2012a). Physical activity statistics 2012 Nick Townsend, British Heart Foundation.
- Townsend, N., Wickramasinghe, K., Bhatnagar, P., Smolina, K., Nichols, M., Leal, J., et al. (2012b). Coronary heart disease statistics: A compendium of health statistics 2012 edition. London, England: British Heart Foundation and Oxford, England:

- University of Oxford. available at: <a href="http://www.bhf.org.uk/publications/view-publication.aspx?ps=1002097">http://www.bhf.org.uk/publications/view-publication.aspx?ps=1002097</a>. Accessed on 16.07. 2013.
- Tremblay, M. (2012). Standardized use of the terms "sedentary" and "sedentary behaviours, Applied Physiology, Nutrition, and Metabolism, 37, 540–542.
- Tremblay, M.S., Colley, R.C., Saunders, T.J., Healy, G.N., and Owen, N. (2010)

  Physiological and health implications of a sedentary lifestyle. Appl. *Applied Physiology, Nutrition, and Metabolism*, 35, 725–740.
- Trost, S. G., and Loprinzi, P. D. (2011). Parental Influences on Physical Activity Behavior in Children and Adolescents: A Brief Review. *Journal of Lifestyle Medicine*, 5, 171-181.
- Trost, S.G., Owen, N., Bauman, A.E., Sallis, J. F., Brown, W. (2002) Correlates of Adult's participation in physical activity: Review and Update. **Medicine** & **Science** in **Sports** & **Exercise**, 34, 1996-2001.
- Trost, S.G., Sallis, J.F., Pate, R.R., Freedson, P.S., Taylor, W.S., & Dowda, M. (2003).

  Evaluating a model of parental influence on youth physical activity. *American Journal of Preventive Medicine*, 4, 277–282.
- Tuagalu, C. (2011). Young People's Perceptions and Experiences of Physical Activity in Apia, Samoa. *Pacific Health Dialog March*, 17, 55-64.
- Twum-Danso, A. (2009). Situating participatory methodologies in context: the impact of culture on adult–child interactions in research and other projects. *Children's Geographies*, 7, 379-389.
- U.S. Department of Health and Human Services (2008) Physical Activity Guidelines for Americans. available at:
  <a href="http://www.health.gov/paguidelines/guidelines/default.aspx">http://www.health.gov/paguidelines/guidelines/default.aspx</a>. Accessed on 27.07.
  2012.

- Van Sluijs, E.M.F., McMinn, A. M., & Griffin, S. J. (2007). Effectiveness of interventions to promote physical activity in children and adolescents: systematic review of controlled trials. *British Medical Journal*, 335, 703-707.
- Van Sluijs., E., Van, P. M., Twisk, W., Brug, J.,& Van M. W. (2005). The positive effect on determinants of physical activity of a tailored, general practice-based physical activity intervention. *Health Education Research*, 20, 345-356.
- Verstraete, S. J., Cardon, G. M., Clercq, D. L. (2006). Increasing Children's Physical Activity Levels During Recess Periods in Elementary Schools: The Effects of Providing Game Equipment. *European Journal of Public Health*, 16, 415–419.
- Vet, E. D, Simons, M. & Wesselman, M. (2012). Dutch children and parents' views on active and non-active video gaming, *Health Promotion International*. 4, 1-9
- Warburton, D., Nicol, C. W., & Bredin, S. S, D. (2006). Health benefits of physical activity: the evidence, *Canadian Medical Association Journal* 174, 801-809.
- Wareham, N.J., Van, S., & Ekelund, U. (2005). Physical Activity and Obesity Prevention: A Review of the Current Evidence. *Proceedings of the Nutrition Society*, 64, 229–247.
- Warren, J. M., Ekelund, U., Besson, H., Mezzani, A., Geladas, N., & et al. (2010).

  Assessment of physical activity: A review of methodologies with reference to epidemiological research: a report of the exercise physiology section of the European Association of Cardiovascular Prevention and Rehabilitation. European *Journal of Cardiovascular Prevention & Rehabilitation*.17,127-139
- Watson, P. (2012) feasibility evaluation and long-term follow up of a family-based behavior chamge intervention for overweight children (GOALS) PhD thesis, Liverpool John Moores University.

- Weber, R. P. (1990). Basic Content Analysis, (2<sup>nd</sup> Ed). Newbury Park, CA.
- Welk, G. J, & Schaben, J. A. (2004). Psychosocial correlates of physical activity in children:

  A study of relationships when children have similar opportunities to be active.

  Measurement in Physical Education and Exercise Science, 8, 63-81.
- Welk, G. J. Corbin, C. B., Dowell M. N., & Harris, H. (1997). The Validity and Reliability of Two Different Versions of the Children and Youth Physical Self-Perception Profile, *Measurement in Physical Education and Exercise Science*, 1, 163-177.
- Welk, G. J., & Eklund, B. (2005). Validation of the children and youth physical self perceptions profile for young children. *Psychology of Sport and Exercise*, 6, 51-65.
- Welsh Assembly Government (2011). *Health Behaviour in School aged Children: initial* findings from the 2009/10 survey in Wales. Social Research Division: Cardiff.
- Wenche, D.B., Holmen, J., Kruger, O. and Midthjell, K. (2004). Leisure Time Physical Activity and Change in Body Mass Index and 11-Year Follow-Up Study of 9,357 Normal-Weight Healthy Women 20–49 Years Old. *Journal of Women's Health*, 13, 55–62.
- White, J. L., Ransdell, L. B, Vener, J, & Flohr, J. A. (2005). Factors related to physical activity adherence in women: review and suggestions for future research. *Women Health*, 41, 123-48.
- Whitelaw, S., Swift, J., Goodwin, A., & Clark, D. (2008). Physical Activity and Mental Health: the role of physical activity in promoting mental wellbeing and preventing mental health problems, NHS Health Scotland. available at: <a href="http://www.playfieldinstitute.co.uk/information/pdfs/publications/nhs/PhysicalActivity.pdf">http://www.playfieldinstitute.co.uk/information/pdfs/publications/nhs/PhysicalActivity.pdf</a>. Accessed on 16.07. 2012.

- Wood, R. T., Griffiths, M. D., Chappell, D. & Davies, M. N. (2004). The structural characteristics of video games: A psycho-structural analysis. *Cyberpsychology & Behavior*, 7, 1-10.
- World Health Organization. (2000), Obesity: Preventing and Managing the Global Epidemic.

  Report of a WHO Consultation. WHO Technical Report Series, 894, 1-253.
- World Health Organization. (2002a). A physically active life through everyday transport with a special focus on children and older people and examples and approaches from Europe. World health organization, regional office for Europe. available at: <a href="http://www.euro.who.int/">http://www.euro.who.int/</a> data/assets/pdf file/0011/87572/E75662.pdf Accessed on 08.07, 2012.
- World Health Organization. (2002b). The world health report 2002. Reducing risks promoting healthy life. Geneva: WHO. available at:

  http://www.who.int/whr/2002/en/ Accessed on 16.07. 2012.
- World Health Organization. (2004). Global Strategy on Diet, Physical Activity and Health.

  Geneva, Switzerland. available at:

  <a href="http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy\_english\_web.pdf">http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy\_english\_web.pdf</a>

  Accessed on 16.07. 2012.
- World Health Organization. (2007a). Promoting physical activity in schools: an important element of a health-promoting school. *World Health Organization*, document twelve. available at:

  <a href="http://www.who.int/school\_youth\_health/resources/information\_series/FINAL%20">http://www.who.int/school\_youth\_health/resources/information\_series/FINAL%20</a>
  <a href="mail.pdf">inal.pdf</a>. Accessed on 13.08. 2012.</a>
- World Health Organization WHO EMRO. (2007b). STEP wise data from selected countries in the Eastern Mediterranean Region, 2003-2007. [Online] Available at: <a href="http://www.emro.who.int/ncd/risk\_factors.htm">http://www.emro.who.int/ncd/risk\_factors.htm</a> Accessed 13.07. 2011.

- World Health Organisation. (2010a). Global recommendations on physical activity for health.

  Geneva, Switzerland: available at:

  <a href="http://whqlibdoc.who.int/publications/2010/9789241599979\_eng.pdf">http://whqlibdoc.who.int/publications/2010/9789241599979\_eng.pdf</a>. Accessed on 16.03. 2012.
- World Health Organization WHO. (2010 b). practical guide to developing and implementing, school policy on diet and physical activity, World Health Organization. Regional Office for the Eastern Mediterranean.
- World Health Organization. (2011a). Global recommendations on physical activity for health,

  World Health Organization, available at:

  <a href="http://www.who.int/dietphysicalactivity/leaflet-physical-activity-">http://www.who.int/dietphysicalactivity/leaflet-physical-activity-</a>
  recommendations.pdf Accessed on 07.07.2012.
- World Health Organization. (2011b). Global status report on noncommunicable diseases

  2010. World Health Organization 2011. available at:

  <a href="http://www.who.int/nmh/publications/ncd\_report2010/en/">http://www.who.int/nmh/publications/ncd\_report2010/en/</a> Accessed on 16.04. 2013.
- World Health Organization. (2013). Follow-up to the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases. The Sixty-sixth World Health Assembly. available at: <a href="http://apps.who.int/gb/ebwha/pdf">http://apps.who.int/gb/ebwha/pdf</a> files/WHA66/A66 R10-en.pdf Accessed on 26.02, 2012.
- Wyse, J., Mercer, T., Ashford, B., Buxton, K., & Gleeson, N. (1995). Evidence for the validity and utility of the Stages of Exercise Behaviour Change scale in young adults. *Health Education Research*, 10, 365-377.

- Xu, F., Chepyator-Thomson, J., Liu, W., & Schmidlein, R. (2010). Association between social and environmental factors and physical activity opportunities in middle schools. *European Physical Education Review*, 16, 183-194.
- Yang, X., Telama, R., Hirvensalo, M., Hintsanen, M., Hintsa, T., Pulkki-Råback, L., et al. (2010). The benefits of sustained leisure-time physical activity on job strain.

  \*\*Occupational Medicine\*, 60, 369-375.\*\*
- Yeora, K. (2003). The impact of the internet on children's daily lives: physical, social and psychological well-being. PhD thesis, The University of Georgia in Partial
- Young, D. R., Gerald, J., Chuhe, C., Daniel, L., William, M., & Vollmer. (2009). Patterns of Physical Activity Among Overweight and Obese Adults. *Preventing Chronic Disease*, 6, 1-9.
- Youssef, M. M, Mohsen, A., Abou, El-Soud, N. H., Kazem, Y, A. (2010). Energy Intake,
  Diet Composition among Low Social Class Overweight and Obese Egyptian
  Adolescents. *Journal of American Science*, 6,160-168.
- Zaghlool, S. N, S., Ali, H. I., Harrison, G., & Popkin, B. M. (2011). The prevalence and trends of overweight, obesity and nutrition-related non-communicable diseases in the Arab Gulf states. *Obesity Review*, 12, 1–13.
- Zorba, E, A., Yi, F. H., A. C. (1999). Cross-cultural validity and reliability of physical self-perception profile. *International Journal of Sport Psychology*, 30, 399–406.

# **Appendices**



# Appendix (1) Focus groups Interview Schedule (for both, Men and Boys)

Торіс	Questions of interest	Relation to Welk (1999) Youth Physical Activity Promotion Model
Terminology	What do participants understand by the terms physical activity, exercise and sport?	
Physical activity behaviour	How active do participants feel they are? What types of physical activity do participants engage in? Do their current activity levels and types of activity differ from when they lived in their home countries?	
Sedentary behaviour	What sedentary pastimes do participants engage in? Are the most active individuals always the least sedentary? What drives participants' choices to engage in sedentary behaviours (explore cultural and religious factors)?	
Physical self- perceptions	How important are the dimensions of physical conditioning, sports competence, body attractiveness and strength to these participants? How do these concepts influence, and how are they influenced by, physical activity levels?  Further exploration of physical self-perceptions based on the questionnaire responses from phase 1	Am I able? / Is it worth it?
Benefits of PA	How important is it for participants to be physically active? What benefits of physical activity are they aware of?	
Barriers to PA (esp. <u>low</u> active groups)	What prevents participants from being physically active? How could these barriers be overcome? What differences exist in the coping strategies for overcoming barriers between physically <i>active</i> and physically <i>inactive</i> individuals?	Enabling factors / Am I able?
Motivations for PA (esp. high active groups)	Why do participants engage in physical activity? What motivates participants to make an active rather than a sedentary choice? (ie. explore decision-making processes) What types of physical activity do participants enjoy?	Reinforcing factors / Is it worth it?
Family factors	Do participants engage in physical activity as a family? Are there gender differences in the physical activity behaviours within their family?	Pre-disposing factors / Enabling factors / Reinforcing factors
Religion	How do religious practices affect participants' physical activity beliefs and behaviour?	

#### Appendix (2) physical activity guidelines for children aged (5-18)



Physical activity guidelines for

CHILDREN AND YOUNG PEOPLE (5–18 YEARS)

- All children and young people should engage in moderate to vigorous intensity physical activity for at least 60 minutes and up to several hours every day.
- Vigorous intensity activities, including those that strengthen muscle and bone, should be incorporated at least three days a week.
- All children and young people should minimise the amount of time spent being sedentary (sitting) for extended periods.

Individual physical and mental capabilities should be considered when interpreting the guidelines.

# Examples of physical activity that meet the guidelines

Moderate intensity physical activities will cause children to get warmer and breathe harder and their hearts to beat faster, but they should still be able to carry on a conversation. Examples include:

- Bike riding
- Playground activities

Vigorous intensity physical activities will cause children to get warmer and breathe much harder and their hearts to beat rapidly, making it more difficult to carry on a conversation. Examples include:

- Fast running
- · Sports such as swimming or football

Physical activities that strengthen muscle and bone involve using body weight or working against a resistance. Examples include:

- Swinging on playground equipment
- Hopping and skipping
- Sports such as gymnastics or tennis

Minimising sedentary behaviour may include:

- Reducing time spent watching TV, using the computer or playing video games
- Breaking up sedentary time such as swapping a long bus or car journey for walking part of the way

# What are the benefits of being active for at least 60 minutes each day?

- · Improves cardiovascular health
- Maintains a healthy weight
- Improves bone health
- Improves self-confidence
   Develops new social skills

For further information: Start Active, Stay Active: A report on physical activity for health from the four home countries' Chief Medical Officers (2011)









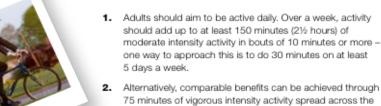
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## Appendix (3) physical activity guidelines for adults aged (19-64)

# **FACTSHEET 4**

Physical activity guidelines for

ADULTS (19-64 YEARS)



activity.

 Adults should also undertake physical activity to improve muscle strength on at least two days a week.

week or combinations of moderate and vigorous intensity

 All adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

Individual physical and mental capabilities should be considered when interpreting the guidelines.

# Examples of physical activity that meet the guidelines

Moderate intensity physical activities will cause adults to get warmer and breathe harder and their hearts to beat faster, but they should still be able to carry on a conversation. Examples include:

- Brisk walking
- Cycling

Vigorous intensity physical activities will cause adults to get warmer and breathe much harder and their hearts to beat rapidly, making it more difficult to carry on a conversation. Examples include:

- Running
- Sports such as swimming or football

Physical activities that strengthen muscles involve using body weight or working against a resistance. This should involve using all the major muscle groups. Examples include:

- Exercising with weights
- Carrying or moving heavy loads such as groceries

Minimising sedentary behaviour may include:

- Reducing time spent watching TV, using the computer or playing video games
- Taking regular breaks at work
- Breaking up sedentary time such as swapping a long bus or car journey for walking part of the way

## What are the benefits of being active daily?

- Reduces risk of a range of diseases, e.g. coronary heart disease, stroke, type 2 diabetes
- · Helps maintain a healthy weight
- Helps maintain ability to perform everyday tasks with ease
- Improves self-esteem
- Reduces symptoms of depression and anxiety

For further information: Start Active, Stay Active: A report on physical activity for health from the four home countries' Chief Medical Officers (2011)









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### **Appendix (4) Interview Schedule (Fathers)**



### **Intervention group: Interview Schedule (Fathers - Post-intervention)**

**Introductory statement:** Hi my name is Khaled Refaie.

This discussion should take about 45 minutes, however if you no longer wish to continue at any time please let me know and we can finish our discussion. On the basis that you have read the participant information sheet and signed the informed consent form we will begin our discussion.

- 1. How active are you? How active are your children?
- 2. What activities do you do to be active at present (how much, how long)? What activities do your children do to be active at present (how much, how long)?
- 3. Do you know how much physical activity children should do each week? Do you know how much physical activity adults should do each week?
- 4. What do the guidelines suggest about the time adults spend inactive? What do the guidelines suggest about the time children spend inactive?
- 5. Why is it important to be physically active? Why is it important to reduce the time you and your children are inactive?
- 6. 4 weeks ago a researcher informed you of the physical activity guidelines for children and adults. Did this impact on your physical activity levels/ time spent inactive? If so, how? Did this impact on your children's physical activity levels/ time spent inactive? If so, how?
- 7. How do you feel about using the Nintendo Wii/ X-Box Connect to reduce time spent inactive/ to increase physical activity levels?
- 8. Can you describe to me if/how you have used the Nintendo Wii/ X-Box Connect during the last 4 weeks? (games played, favourites, frequency of use, amount of time spent playing, playing with others)
- **9.** What was your experience of using the Nintendo Wii/ X-Box Connect over the last 4 weeks like? ( **about positives** and negatives)
- 10. What factors affected your participation playing on the Nintendo Wii/ X-Box Connect? (about motivation, barriers and facilitators)
- 11. Can you describe if/how the Nintendo Wii/ X-Box Connect influenced your physical activity levels/ time spent inactive. Can you describe if/how the Nintendo Wii/ X-Box Connect influenced your children's physical activity levels/ time spent inactive.

- 12. For you/ your children/ your family, what are the benefits of using the Ninetendo Wii/ X-Box Connect?
- 13. How do you feel the Nintendo Wii/ X-Box Connect has influenced your PA levels/ inactive behaviour? How do you feel the Nintendo Wii/ X-Box Connect has influenced your children's PA levels/ inactive behaviour?
- 14. What advice would you give to other families thinking about using the Nintendo Wii/X-Box Connect to increase their physical activity levels/ reduce their time spent inactive?
- 15. Would you like to continue using the Nintendo Wii/ x box connect to increase your physical activity levels/ reduce time spent inactive? (if so, how and why?) Would you like to continue using the Nintendo Wii/ x box connect to increase your children's physical activity levels/ reduce time spent inactive? (if so, how and why?)

# **Appendix (5) Interview Schedule (boys)**



### **Interview Schedule (Children - Post-intervention)**

**Introductory statement:** Hi my name is Khaled Refaie.

- . This discussion should take about 30 minutes, however if want to stop at any time please let me know and we can finish. Do you have any questions before we begin?
  - 1. How active do you think you are?
  - 2. What activities do you do (how much, how long, where (in school/ outside of school)?
  - 3. How much physical activity do you think children should do each week? How should your body feel when you do this activity? What do the guidelines say about the time children spend inactive or sitting down?
  - 4. Why is it important to be physically active?
  - 5. 4 weeks ago a researcher told you about the physical activity guidelines, how did this make you feel? Did this affect the amount of time you spend physically active/ the amount of time you spend inactive or sitting down? If so, how
  - 6. How do you feel about using the Nintendo Wii/ X-Box Connect to reduce the time you spend inactive or sitting down/ to increase the amount of physical activity you do?
  - 7. Can you describe to me if/how you have used the Nintendo Wii/ X-Box Connect during the last 4 weeks? (games played, favourites, frequency of use, amount of time spent playing, playing with others)
  - 8. What was your experience of using the Nintendo Wii/ X-Box Connect over the last 4 weeks like? (**positive and negatives** = enjoyable, frustrating, different)
  - 9. Over the last 4 weeks, what things stopped/encouraged you to play on the Nintendo Wii/ X-Box Connect? (motivation, barriers and facilitators)
  - 10. Can you describe if/how the Nintendo Wii/ X-Box Connect influenced the amount of physical activity you do/ the amount of time you spend inactive or sitting down
  - 11. For you, what are the advantages of using the Ninetendo Wii/ X-Box Connect?
  - 12. How do you feel the Nintendo Wii/ X-Box Connect has influenced the amount of physical activity you do/ the time you spend sitting or inactive?
  - 13. What would you tell other children thinking about using the Nintendo Wii/ X-Box Connect to increase the amount of physical activity levels they do/ reduce the amount of time they spend inactive or sitting down?

14. Would you like to continue using the Nintendo Wii/ X-Box Connect to increase the amount of physical activity you do/ reduce the amount of time you spend inactive or sitting down? (if so, how and why?)		

### Appendix (6) focus gropes Interview in Arabic (MEN)

لنبداء الحوار بطرح سؤال مرتبط بشكل عام بالمعرفة ومعلوماتكم العماة بالدرجة الأولى عن الموضوع  $_{13}$  أتمنى على كل منك أن يعطيني فكرة عامة عن معرفته عن شيء يسمى ( النشاط البدني )

س. ما هو النشاط البدني بالنسبة لك كثقافة عامة دعنا مما تقوم به أنت فقط أو التعرف على مستوى معرفتك ومعلوماتك العامة عما يعرف بالنشاط البدني.

المشارك 1: بسم الله بالنسبة للنشاط البدني حسب معرفتي هو جميع ما يقوم به الإنسان خلال نشاطه اليومي منذ الإستقاض حتى النوم الليومي منذ الإستقاض حتى النوم هذا كمفهوم عام للنشاط البدني بالتالي هو محصلة مجموع الأداءت للنشطة التي قام بها خلال اليوم بالكامل .

هذا حسب مفهومي أنا للنشاط البدني ممكن الأن أسامة عنده وجهة نظر أخرى

المشارك 2 <sub>,,</sub> بالنسبة للنشاط البدني يختلف من <mark>شخص لشخص من جنس لجنس الشاب الصغير يختلف عن الكبير عن الطفل الصغير <sub>.</sub> الطفل الصغير <u>.</u></mark>

المشارك 1: هو يشمل جميع النشاطات التي تقوم بها في اليوم سواء كان نشاط بدني رياضي شواء كان أي نشاط أخر تمارسه فهذا حسب نظرتي.

المشارك 2: تماما هذه وجهة نظري أيضا.

المشارك 1: لا أدري ما هي وجهة نظر خالد.

المشارك 4: وجهة نظري حول النشاط البدني هي كما قال يوسف سابقا هو مجموعة نشاطات بدنية يقوم بها لإنسان على مدار اليوم ولكنها تختلف من سن لأخرى أو نوعية النشاط أو الجنس.

المشارك 3: يتضح الأمر من خلال الإسم حيث أنه مرتبط بالعملية الحركية وليست ذهنية بدني ذلك يعني أنه يتعلق بحركة البدن وهي ما يقوم به الشخص من حركات يوم من خلالها بتحريك عضلات الجسم ما يؤدي إلى استهلاك طاقة وسعرات حرارية وكذا بالتالي فإنه سيكون سبب في عملية حرق الدهون الزائدة في الجسم وبناء الحسم وتشكيله بحسب ما يرضاه الإنسان أو يرفضه.

الباحث : قد يكون وقد لا يكون , والمسئلة ترجع إلى وجهة نظركم قد تكون هناك فوائد تعود على الشخص من ممارسة النشاط البدني , وأتمنى عليكم إخباري عن أي فوائد تعرفونها و

# س. أو ما هي الفوائد المجناة من خلال ممارسة أي نوع من النشاط البدني كان , إذا كانت تشعر أو تعتقد أن هناك فوائد تعود علينا جراء ممارسة النشاط البدني ؟؟؟؟

المشارك 1: أنت تتحدث عن الفوائد المكتسبة من النشاط البدني؟

الباحث: نعم أي أي أن كانت هناك فوائد فما هي

المشارك 1 :: الأولين قالو أن الحركة فيها بركة فبالحرك أنت تحرق دهون وتحرق طاقة معينة بالتالي فإن الإنسان دائما نقول بقدر ما يأكل بقدر ما يحرق و لا يكون أكله أكثر من حرقه فهذه مشكلة تتراكم عنده الدهون ويبقى في تصوري أنه ليس كل نشاط بدني سيكون مفيد فهناك بعض الأنشطة الغير مفيدة ولماذا ؟ لأنك أن كنت تمارس نشاط بدني ما وفي وضعية غير صحيحة مثلا فقد يترتب عنه أصابة ومشاكل فليس كل نشاط بدني مفيد أحيانا فهناك بعض الأنشطة هي صحيح مفيدة بالتالي فأهم شيئ أن يؤدى بشكل صتحيح بحيث أنه يعود عليك بالنفع وأنا في تصوري ليست حميع الأنشطة مفيدة وهي الحركة في حد داتها شيء جيد ولكن أحيانا ستكون هناك خركة على مجميع عضلية معينة على حساب مجاميع عضلية أخرى بالتاي هذا سيخلق مشكلة في التوازن العضلي أحيانا زضبعا هذا موضوعي (ضحكات)

الباحث: حتى من خلال ثقافتك العامة فاطرح الذي لذيك قدمه لنا

المشارك 1: على سبيل المثال وهذا مفصل عندي (يشير إلى المرفق) عندما أنمي هذه العضلة مقابل عضلة ضعيفة في المجانب الأخر هذا يخلق مشاكل في المفصل بحيث سيكون المفصل به جانب ضعيف وأخر قوي (خلفية وعدم توازن) فسيكون هنا إختلال توازن ولا يوجد توازن عضلي لايوجد توازن ما بين العضلات وهذا ممكن أن يخلق مشاكل فالنشاط العضلي من المهم أن يخدم المجاميع العضلية في الجسم بالكامل ولا يقتصر على مجميع عضبسة دون أخرى لأن هذا ممكن أن يخلق مشاكل وحتى تشوهات في الجسم تكون هناك عذلة مشاء الله بنائها جيد وأخرى بنائها ضعيف هذا قد يخلق مشاكل والله أعلم و (04:52) فما هو رأيك يا أسامة

المشارك 2: لو أنك تود التركيز على الفوائد فقط ,,, بالنسبة لي , فوائد النشاط البدني , فأن اليوم الذي لا أبذل فيه أي مجهود ولم أقم فيه بأي نشاطات فيكون يوم كله خمول وحتى النشاط الذهي يصاب بنوع من الركود , وذلك يجعلني لاأعرف حتى كيف أفكر , فأ،ا أتوقع أن من لذيه معدل نشاط كبير وبشكل مستمر فإنه سيكون أنشط وأحسن من من الذي في حالة خمول .

# الباحث: س. إذا أنت ترى بأنه ينعكس على الأداء الذهني؟؟

المشارك 2 : أكيد .

المشارك 1: بالطبع بالطبع

المشارك 2: أكيده هذه ستكون فوائد

المشارك 1: طبعا الإنعكاس النفسى مهعم جدا.

المشارك 2 : ذلك يحدث معي , فاليوم الذي أكون فيه في حالة ركود بعض الشيئ ولم أقم بشيئ نفسيتي تتعب من ذلك .

المشارك 1 : و في المقابل عند ممارسة عضلي تشعر بالسعادة لأنك قمت بشيء عاد عليك بالنفع على جسدك , وهذا ينعكس حتى على أدائك في حياتك اليومية عندما تمارس نشاط ما لا تلهث جراءه وهذا يعطيك أنطباع جيد , فماريأيكم.

أسامة خالد أحمد: نعم

المشارك 3: ومن فوائد الرياضة تعطي الثقة بالنفس فكل ما كان جسم الإنسام متناسق , ومع العامل الجسمي فكل و إجمالا الشكل الخارجي للجسم يعطي الإعتداد والثقة بالنفس وهذا ينعكس على أدائه وهذاك شيء أخر أو فوائد أخرى و إذ أن العلم لا يزل يتثب يوما ان الممارسين للرياضة أخثر حصولا للأكسجين والدم النقي وعمليا البناء داخل الجسم وأقل أمراض .

المشارك 1: وأقل عرضة للإصابة أقل عرضة للمرض أقل عرضة الأشياء كثيرة .

المشارك 3 : فوائد عديدة.

الرفاعي: لنتكلم بشكل فردي أي كل شخص عن نفسه وكل شخص يعتبر السؤال موجه له شخصيا فعندما يجيب تكون إجابته مرتبطة بنفسه.

### الباحث. إلى أي مدى ترى نفسك بأنك إنسان نشط بدنيا. كيف تقيم نفسك ومستوى أدائك؟

المشارك 2: في الوقت الحالى تعنى .

الباحث: نعم في الوقت الحالي.

المشارك 1: بالنسبة اشخصي صراحة صراحة مقارنة بأوقات سابقة , فإني أصنف نفسي من الخاملين إلى حد ما على اعتبار أن معظم أوقاتنا ( أكيد هناك بعض النشاط لأن البقاء على جهاز الكمبيوتر هو يعتبر نشاط في حد ذاته ولكن كاستهلاك لسعرات حرارية سيكون أقل , أما نشاط بدني كنشاط بدني صرف لا طبعا هو كنشاط ( 08.09 ) بدني , أتحدث بصفة عامة هذا شيء مختلف نشاطي البدني صراحة لا أصنفه كنشاط شخص يحمل في أشياء وينقلها أكيد نشاطه البدني سيكون أقوى من نشاطه باعتباري أجلس على جهاز فأنا صراحة أنظر إلى نشاطي الحالي مقارنة بنشاطاتي السابقة صرحة أجد نفسي أني فعلا خمول صراحة لا يوجد ذلك النشاط ولا يوجد ذلك الأنشطة التي نمارسها بشكل .... هذه وجهة نظري صرحه في الوقت الراهن أنا لست براضي على ذلك في الوقت الراهن هذا خاصة نحن متخصصين في تلاحظ ذلك ) حتى أوزاننا زادت والعملة لم تكن ..... كان من الممكن أن يكون أفضل هذا خاصة نحن متخصصين في مجال كهذا فهذه ووجهة نظري بالنسبة لي , لا أدري ؟ ...

المشارك 2: وجهة نظري بالنسبة لي فيما يخصني أنا لذي معدل نشاط بدني يساوي صفر حالبا زلي فترة على هذا المنوال لأكثر من حوالي 3 أو 4 سنوات نتيجة إصابتي بانزلاق غضروفي في ظهري , ثم من سنة حتى الأن كان تحت ضغط منه لأنه يؤثر على الأعصاب فكان متعبا لي لمدة كم سنة ومن سنة فاتت حتى الأن أجريت عملية هذه العملية ......

المشارك 1: تجري على السير الأن ؟؟

المشارك 2: ولكن لا أستطيع التحرك براحة حيث أني أستخدم في النشاطات البسيطة جدا و ولي فترة لا أستطيع ممارستها فأعتبر نفسى بأن وزنى أيضا زاد عن ذي قبل حيث بلغت الزيادة لأكثر من 15 كيلو

المشارك 1: طبيعي طبيعي..

المشارك 4 : أنا أعتقد أن نشاطي البدني أفضل من يوسف وأسامة <mark>ولكن مشكلتي أن الشاط الذي أقوم به والسعرات التي</mark> أخرقها أسارع بتعويضهم بسرعة في الأكل هذه هي مشكلتي

المشارك 1: كنشاط و حاليه هل تمارس أي نشاط أو رياضة ما؟

المشارك 4: ليست رياضة ولكن أبذل في جهود كبير ,,, المشي لمسافات طويلة عمل أحيانا التفكير الذهني العميق والكثير يكون جزء من النشاط البدني لأنه يجبرك أنك تتحرك وتقوم ردود أفعال معينة .

الباحث ·

# س. يمكن أن نقول أنك كنشاط أنت راضي عن مستوى أدائك ولكنك لست براضي على تعويض ذلك بالأكل ؟

المشارك 4: نعم تماما تماما مثلا يكون لذي عمل كبير في الجامعة وأتحرك من من مكان لمكان لمسافات طويلة |أحيانا حيث أحضر محاضرة في مكان ساعة ثم أنتقل لمكان أخر لمحاضرة ساعتين ثم عندي عمل في الليل فأجد نفسي في اليوم التالي محتاج أن أرتاح ليوم كامل فالمجهود الذي بذلته في اليوم السابق عوضه في يوم أخر يعني يومي الأول كان نشاط وحركة وبشكل كبير وفي اليوم الثاني أجد نفسي في فراغ وأجد نفسي جالسا في البيت ليوم كامل.

## الباحث: وبقاء البيت يترتب عليه أكل ؟

المشارك 4: تماما هذا ما يحدث.

المشارك 3 : أنا في ليبيا كنت معتادا على الشغل العضلي وهنا في بريطانيا عوضه بالمشي وكنت أمارس الرياضة في ليبيا في النادي المشارك به وهنا أفضل أن أمشي على أن أركب الناص ثم أني أعمل فقي مطعم وهذا يجعلني أعوض أيضا وحتى أن الناس الذين يعرفون يشعرون أن هناك نقص في وزني وبشكل عام هناك رضي عن جسمي لاني شعرت أن هناك تشكيل في العضلات وفي الأفخاذ وحتى أني اليوم وقفت أمام المرأة وجدت العضلات ( الثنائية والثلاثة ) ( ضحكات جماعية ) وصرخة خلال عملي في المطعم دائما هناك تحميل ونقل صناديق ورفع وما إلى ذلك وأنا أراعي أن أطبق فيه القواعد الرياضية مثلا في وضعية الفخذين عند الرفع.

المشارك 1 تشرك أكبر مجموعة عضلية.

المشارك 3: إلى حد ما أنا راضي عن نفسي لأني وازنت بين ما كان قبل حضور لبريطانيا وبين الأن ,,, في ليبيا كنت أمارس الرياضة يوميا ساعتين في اليوم ,,, أذهب للنادي ثم أعود لمشاهدة التلفزيون ,,, عند حضوري هنا بقت في البيت كثيرا ترهلت و ظهرت بعض البروزات في جسمي فأبحت وزوجتي نسير على الأرجل أفضل من الباص .

المشارك 2: هذا ما كنت سأشير إليه

المشارك 1: صراحة كنشاط رياضي فإن ذلك مبنى ومتعلق بظروف الشخص نفسه.

الباحث: عفوا هذا بند مستقل سنصله.

الباحث: أنا كان أي شخص يرى ( ولو إلى حد ما ) أنه نشط بدنيا كما في حالة خالد أو أحمد أو إلى حد ما يوسف الذي يمارس بعض النشاط وأسامة كذلك قلت أنك تستعمل السير للمشي ...

س. بشكل عام أتمنى عليك لو أنك تمارس في أي نشاط رياضي إن كاتن أخبرنا عنه ولمدة كم تمارسه؟؟؟؟

المشارك 1: أنت تعلم قبل حضورنا من ليبيا,

الباحث: عفوا: دعنا نتكلم عن الأن أقصد وقت وجودك في بريطانيا.

المشارك 1: فترة وجودي في بريطانيا, خلال لفترة الماضية كنت إلى حتى ما لذي بعض الوقت وكنت أمارس بعض الأنشطة الرياضية لوجود وقت ,, ولكن كلما اقتربنا من نهاية مدة الدراسة زاد علي الضغط في المدة وأنت تعلم هذا يزيد الضغط بشكل أكبر ( 14:24 ) فتجد نفسك تقلل من ممارسة النشاط الرياضي والتفرغ للدراسة وهذا ينعكس على الجسم وحتى على الحالة النفسية أنا غير راضي صراحة عن وضعي و جسمي لما ؟ لأنني لم أتعود هكذا ففي ليبيا كنت أمارس الرياضة الجري, لعب الكرة وتخصصي أصلا تدريس فقد كنت أدرس في السباحة والألعاب الجماعية فكنت دائما نشط حيث أني لا أسمح بسم وحد تبرزه بطني ولم أمر بها في السابق أبدا ونجن هنا أصبحنا في خمول بصراحة, قل نشاطنا وبطبيعة الحال أصبحا جالسون على الأجهزة أربع وعشرين ساعة.

المشارك 3: والمطبخ بجانب غرفة المعيشة.

المشارك 4: قربه جدا, أنت تعرف الصالة في المطبخ, أجمالا وصراحة مشكلة.

# الباحث: هل تمارس أي نوع من النشاط؟

المشارك 2: أنا والله شيء واحد, أكثر الأطباء الذين راجعتهم ورأيتهم ينصحون في بالمشي لأنه هناك بعض الآلات لا أستطيع العمل عليها وتتعب ظهري حتى أني ألهت منها, لماذا ؟ لاني متعود دائما على السيارة والآن أنا أكثر من 6 أشهر من غير سيارة ووزني زاد كثيرا أكثر من 15 كيلو فلم أعد قادرا فلجأت إلى المشي .

## الباحث: هل وضعت معدلا يوما للمشي أم فقط الظروف أجبرتك لعدم وجود سيارة؟

المشارك 2 : والله 60% أنا أمشي يوميا , والله أنا أتعمد , مرات أخرج من البت وأمشي إلى مركز التسوق على شيء غير وهم ولا يستوجب أن أسير مشي فقط لأني أريد المشي , وما يجعلني لا أمشي فأننا نعود إلى النقطة الأولى وهي أن تكون أمطار قوية .

المشارك 1: الظروف الجوية.

المشارك 2: زايد أني أرغب في المشي لأني بالخروج نفسيتي وذهني ينشطان أفضل من أبقي يوما لا أخرج فيه.

# الباحث: خالد هل نفس قصة أسامة هل تعتبر في نشاطك هو نشاط متعمد مقصود هو موضوع المشي أم أن هناك نشاط أخر ؟

المشارك 4: هو موضوع المشي ولكن في الآونة الأخيرة تعلمت عادة سيئة حيث أني أصبحت أستعمل في كرت الباص ما ترتب عنه أني أصبحت أستسهله عن المشي في بداية حضوري إلى بريطانيا فدت الكثير من وزني أذكر أني بعد وصولي عن طريق لندن وكان لذي صديق لي قست وزني عنده وذلك في نفس ليلة وصولي لبريطانيا حيث كان وزني 112 كيلو وبعد 6 أشهر لم أصدق حيث وصل وزني 93 أو 94 كيلو حيث أني فقدت الكثير من الوزن ولكن بعدها وكما أخبرتك تعلمت عادة أستعمل الكرت فنقص معدل المشي.

# الباحث: بشكل ملحوظ؟

المشارك 4: بشكل ملحوظ حتى أنى أعتقد أن وزني الأن أكثر من الأول.

المشارك 3: بالنسبة لي فإن المشي أكثر شيء أعتبره كرياضة, وهناك شيء أخر حيث أنسي في البيت أحيانا وليس بشكل متكرر ولا هو منتظم أمارس بعض التمارين الرياضية كأن أضع رجلي تحت الخزانة وأقوم بالضغط ( تمرين بطن ) وبعض الحركات الرياضية التي كنت أمارسها, والشيء الأخر هن أي أشيء أجده في البيت يؤدي إلى نشاط بدني أقوم به كما رآني أسامة تقل من غرفة إلى غرفة قمت به في ليلة 18:43 أيضا قمت بشحن بضاعة حيث كان ملء الحاوية جهد , فإنزال البضائع من الشقة بمفردي عد مع 19 درجة من السلم على كم مرة .

# الباحث : يوسف عهدي بك نلعب في كرة قدم ؟

المشارك 1: كنت ألعب ولكن الأونة الأخيرة لم أعد ألعب تعرف لما ؟ لأني أصبحت أكثر انشغالا فقل النشاط بطبيعة الحال

# الباحث: هذا الحوار يقودنا إلى سؤال بعضكم وجد نفسه مجبرا على التطرق له وهو لو أردنا أن

# س. نقارن مستوى الأداء البدني أو معدلات النشاط البدني الأن وما كانت عليه في البد القادم منه ؟

المشارك 1: من وجهة نظري هذه القضية مرتبطة بشكل أساسي بالظروف الشخصية للفرد الحالية كما تعلم محكومين بظروف فإذا كانت ظروفك مهيئة وتستطيع الممارسة ولديك وقت فراغ لما لا وستجد نفسك متجها نجو الجري أو التريض لأجل الصحة على الأقل ولكن الأمر أصبح للأسف ,,, نحن لدينا قناعة كبيرة بالرياضة ولكن أصبحت الأمور مرتبطة بظروفنا وبالتالي عندما أقارن نشاطي الحالي بنشاطي السابق بتأكيد لا يوجد وجه مقارنة حيث أنه كان أفضل بكثير كان أفضل بكثير لأننا هنا حاليا لا نقوم بأنشطة رياضية بينما كنت سابقا يوما أمارس الرياضة يوميا أمارس الرياضة كنت ضروري من أن أجري يوميا إذا عندما أقارن نفسي في الوقت السابق والحالي,,,, أنا كنت 5 كلم كأنها شرب ماء فكانت الأمور جيدة كنا دائما نتريض يوميا شاركت في ماراتون 42 كلم جريتها فيعني كانت الصحة أفضل بينما الأن وضعنا للأسف ظروف , فأنا من رأيي ممارسة الرياضة مقرونة بظروف الشخص ( 20.02 ) إذا كان ظرفك جيد يؤهلك لما لا.

المشارك 2: أود توضيح وضعي ,,, أنا في ليبيا صراحة حتى بغض النظر عن أني أمارس رياضة الحركة التي أقوم بها والإلتزامت التي لذي والتي أقوم بها والعمل الذي أقوم به كان في حد ذاته يغطي عن أن أمارس أي رياضة أخرى في قاعة رياضية أو غير ها حيث أن البيئة وطبيعة عملي فكنت أخرج منذ الصباح إذ أني كنت أصحو مبكرا في ليبيا وأخرج منذ الصباح وأحيانا أعود للغداء وأحيانا لا أعود فأحيانا لا أعود إلا في الليل فكل هذا الوقت يكون حركة وعمل بعكس هنا حتى ولو خرجت أو بذلت مجهود سيكون ساعة ساعتين أو ثلاث وبعدها باقي الوقت كله جلوس على الكمبيوتر أو النافزيون أقو أكل أو شرب أنا أرى أنه لا وجود لوجه مقارنة بين ليبيا وبين هنا.

المشارك 1: يعنى في رأيك نشاطك عهنا كان أفضل؟

المشارك 2: لا في ليبيا كان أفضل بكثير في ليبيا كان أفضل بكثير أكيد.

المشارك 1: أنا في تصوري حتى سبل الراحة هناك متاحة أكثر بعض الشيء على اعتبار عندك سيارة وعندك خيارات أفضل ولمكن الناس هنا ليوجد لديها ذلك وهنا البيئة أيضا تحكم أي ظروفك الأنية الحالية علاوة على البيئة التي تعيش فيها تشجعك .... الطقس أيضا هناك أمور عديدة قد تساهم .

المشارك 4: بالنسبة لحالتي بين هنا وهناك تختلف تماما حيث عندما كنت في ليبيا كان أغلب حركتي محدودة السيارة والبيت مثلا مناسبة اجتماعية مثلا عمل أي لا يوجد ذاك الجهد البدني إن كانت المقارنة بهنا فأنا أعتقد بأنه أكبر وفرق كبير لكن وكما أخبرتك بعض العادات السيئة هي التي جعلت نفس الحالة بالنسبة للوزن ولكن كحركة ونشاطات هنا أعتقد أنها أكثر من هناك .

### الباحث: ماذا عنك أحمد ؟

المشارك 3: بالنسبة للنشاط الرياضي كممارسة نشاط رياضي ,,, كمنت في ليبيا أفضل من هنا غير ذلك كان عملي عضلي في ليبيا ,, نقصت في الوزن لما كنت هناك عضلي في ليبيا ,, نقصت في الوزن لما كنت هناك أمارس لم يكن هناك نقص في الوزن كنت عادي نومي جيد وأصحو بشكل جيد ولكن هنا ,,, فمثلا أن كان هناك 80% فهنا سيكون 65% يعنى بالتأكيد هناك أحسن .

# الباحث : مقارنة معدلات النشاط البدني ؟

المشارك 3: هناك أفضل

الباحث : على الرغم من وجود نقص في الوزن هنا ولكتك ترى أن لا علاقة له مباشرة أي ليس هو ناتج عن معدلات نشاط بدني .

المشارك 1: نقص الوزن قد ينتج عن أمور أخرى.

المشارك 2 : أود إضافة نقطة أخرى هي أيضا لها دور كبير جدا في نقص الوزن, العامل النفسي حيث أن العامل النفسي هنا يجعلك تنقص بسرعة حتى ولو تأكل في المعدل ,,

المشارك 3 هناك ثلاث وجبات ليس كما هنا وجبة واحدة فطور وغداء و عشاء.

الباحث: كما نعرف أنك لأجل أن تتسلى وتقضي وقت ما في متعة هناك أنواع كثيرة من الوسائل والطرق للاستمتاع أو أي نوع من التسلية ,,,, بعضها يعتمد على النشاط البدني وبعضها الأخر لا يعتمد ,,,

# س. هل هناك أي منكم يمارس أي نوع من الأنشطة التي تعتمد على الخمول البدني (25:54) ؟

المشارك 4: التلفزيون

المشارك 1: التلفزيون عادة بصراحة في نظري أنه عادة لكن التسلية غالبا إذا كان الشخص يفكر في أن يسلي نفسه ممكن أن يفكر أن يطلع في نزهة مع عائلته أو يود.

# الباحث: أبحث عن التسلية في حالة خمول؟

المشارك 1: التلفزيون غالبا هو السائد إن أراد الشخص التسلية أو تغيير المزاج.

المشارك 4: وهناك من يغير إلى إستعمال الألعاب الحديثة كالبلايستيشن.

المشارك 1: صراحة أنا هنا في بريطانيا لا يوجد وثقت للتسلية (24:44)

المشارك 4: ممكن لأن حالتي تختلف فأنا مرافق وليس كوضعك

المشارك 2 عنده وقت

المشارك 4: أجيانا بالرغم من أنى أحيانا ...... ولكن هناك أناس أراهم مرافقين مثلى جزء منهم يتسلون بهذه الطريقة

المشارك 1: صح صح للترفيه عن النفس بعض الشيء .

المشارك 3: زد على ذلك تصفح النت.

المشارك 1: ذلك أيضا قد يكون تسلية

المشارك 3: عدا الدراسة يستخد البعض النت لانه لا يوجد فراغ أن الأنسانم يقراءة قصة .....

المشارك 1: اليوتيوب أجيانا.

الباحث: جميعنا إتفقنا نظريا وعمليه أيضا من خلال واقع حياتكم أنه هناك بعض طرق التسلية من خلال أدائك وأنت في حالة خمول تام أي أن تستمتع وتتسلى دون بذل نشاط بدني هنا نتسائل عن الأسباب والدوافع التي تجعلك تتسلى وتستمتع وتستعمل وسيلة تعتمند على الخمول التسلية بينما جميعنا يعرف أنه هناك وسائل أخرى مسلية وممتعة وجميلة وفيها نشاط بدني فمالذي يجعلك تهمل وتتجه تتجه نحو الأخرى التي تعتمد على الخمول كالتلفزيون والبلايبيستشن أو تصفح النت ,,,, س. ما هي الدوافع للتسلية التي تعتمد على الخمول البدني؟

المشارك 1: أولا التوجه للتسلية والقيام بهذا النوع من التسلية يأتي مدفوع بحبك لهذا النوع منها, وفي نفس الوقت كنوع من الإبتعاد عن الروتين يعني كي نطرد الضغط الواقع جراء الدراسة فهذين سببين رئيسيين أعتقد في نظري أن تلجاء لهذا النوع بالذات من التسلية.

المشارك 2 : أود منك أن توضح لي شيء ما ... هل أنت تقصد في الوضع الحالي هنا أم أنك تقصد كحياة عامة .

## الباحث: لا أنا أقصد هنا في بريطانيا؟

المشارك 2: أوكي, بالنسبة لي الأسباب الرئيسية تعود إلى ظروفي الصحية بالإضافة إلى وضعي الإجتماعي إذ أني لأكثر من 6 أشهر أنا أعيش فيب مدينة أخرى ولا يوجد لذي أصدقاء بقربي فأكثر الوقت أحاول أن أكون قريبا من عائلتي في البيت فهذا أيضا أحد الأسباب على الرغم من ذلك هناك الجيم قريب من بيتي وهناك سينما تجعلني أكون قادر على الخروج والترفيه فالنشاطات التي أقوم بها هي أني أمشي, من جهة لبذل الجهد و من جهة أخرى للتسوق.

المشارك 1: ولكن أنت أحيانا قد تلجاء لهذه التسلية بالذات والتي تعتمد على الخمول لماذا؟

الباحث: نعم هذا ما أريد قوله على الرغم من أنك ذكرت بأن الجيم قريب منك؟

المشارك 2 : أن هذا الوضع ناتج أصلاً عن أن تركيبتي ليس لذي هذه الهوايات ممكن هذا نوعي وأحب الشيء المريح.

الباحث : خالد كنت قد أشرت إلى موضوع البلايستشن ، وسواء فيما يخصك شخصيا أو كما رأيت البعض يمارس ذلك

المشارك 4: أنا فهت السؤال و أنا أعتقد أن العامل النفسي في هذه النقطة يلعب دور وسأحكي عن نفسي على سبيل المثال أن أردت الراحة في البيت فإني سألجاء إلى شيء بسيط وقريب جدا مني كما التلفزيون أو البلايستشن وهي قريبة بعكس التفكير في الخروج للجيم وهذا يعني أنك سنقوم بنشاط أخر وهنا أفكر طالما أنا جالس و مرتاح فما السبب للقيام بأي جهد فأجد نفسي أبحث عن الشيء السهل بمعنى العامل النفسي يلعب هنا .

المشارك 1: شيء سهل ومريح.

المشارك 4: تماما.

المشارك 2: كل ذلك يرجع على انتهاز أوقات الفراغ يعني أن وقت الفراغ ليس منظم, فعندما تشعر بتوفر وقت فراغ تجد نفسك تود استثماره في هواية لأجل الترفيه عن النفس.

المشارك 1: لما الترفق = يه هذا بالذات؟

المشارك 4: لأن الإنسان بطبيعته يلجاء إلى الأقرب له ولأن هذا الوقت أسمه راحة يرغب الشخص فيها في الراحة فلا يبذل أي جهد أو أي شيء فيلجاء لنوع من الركون.

الباحث: أنت ترى بأنه طالما الشخص يبحث عن المتعة والراحة فإنه ليس ملزما ببذل جهد.

المشارك 1: قد يفتح فلما لمشاهدته.

أحمد: قد يكون ذلك موروث ثقافي أي من أراد الراحة عليه أن يستريح تماما وبالكامل وليس مطلوبا منه طالما يريد الراحة أن يبذل جهد وهذا فيه اختلاف عند الغرب وهذا ناتج عن اختلاف ثقافات حتى عندما يريد الخروج للاستجمام والراحة فإنه يمارس رياضة وتشاهدهم على الشواطئ البحر يهرولون ويمارسون رياضتهم المعتادة يفيق في الصباح الباكر يمارس المشي ولو أن مشي فهو راحة واستجمام بينما ثقافتنا طالما راحة فإنها راحة تامة 32:30

الباحث: وجهة نظر.

المشارك 1: هناك نوعين , أحدهما راحة إيجابية والأخرى راحة سلبية , والسلبية هي النوم فقط كما لعب البلايستيشن ولو أن هناك حركة ولكنها قليلة جدا لا تذكر .

الباحث : الأن لدينا مجموعة من المتغيرات أو العوامل وسأشير في كل مرة لأحدها , أرجو منك أن تعلمني

المشارك 1: الحالة البدنية هي الحالة التي عليها الشخص نفسه أي المواصفات التي يتصف بها الشخص.

الباحث: ما هي درجة أهميتها لشخصك فلهمية الحالة البدنية بالنسبة لك في

المشارك 1: الحالة البدنية بالنسبة لي تتأتى من كوني أستطيع القيام بأي شيء أريد القيام به بينما إن كانت حالتي البدنية لا تؤهلني للقيام بهذا الشيء فإني سأشعر بشيء من عدم الرضي بالتالي أن كانت الحالة البدنية جيدة والحالة البدنية تؤهل للقيام بأي شيء يقوم به أي شخص أخر فإنه يعطي شيء من الرضي عن الذات بالتالي فالحالة البدنية تعتبر مهمة أكيد وأكبد جدا

المشارك 2: الحالة البدنية بالنسبة لي هي مهمة جدا ولكن نعود للنشاط البدني وبما أن نشاطي البدني ضعيف ولات أمارس أي نشاط وأي رياضة فأشعر أن الحالة البدنية الخاصة بي سيئة جدا وأولا جسمي ليس متناسقا لا يوجد لذي حركة خفيفة وألهت بسرعة .

الباحث: ولكن هل تشعر بأن هناك أهمية للحالة البدنية؟

المشارك 2: طبعا أكيد أكيد تماما.

المشارك 1: بدونها أنت لا شيء, لا تستطيع القيام بأي شيء.

المشارك 4: أعنقد بأن الحالة البدنية أهميتها تكمن في أنها تعطيك الثقة أن تتحرك بسرعة على الرغم من وجود عوامل تؤثر عليها مثلا كما أسامة مريض نتمنوله الشفاء أو مشكلة الأرق أما عن نفسي فأنا أجريت عملية على الرقبة أي أن الإصابات أحيانا تلعب دور فيما يتعلق بها ولكن تبقى مهمة جدا للشخص حيث أنه يتحرك بثقة وبسرعة ويمكنه أن ينجز عمله في وقت قصير.

الباحث: مشارك 3 ... درجة أهمية الحالة البدنية بالنسبة لك.

المشارك 3 : أكيد مهمة مهمة لأي إنسان وتعرف أهميتها عند فقدانها حيث لو عجز الإنسان عن ممارسة شيء أو إبتغائه أو حتى شيء من الغوز والشعور بالانتقاص لما ذاك بهذه الصورة وأنا بهذه وأنا بهذه والمراح والم

# الباحث: لو انتقلنا إلى عامل أخر وهو التنافس الرياضي درجة أهمية التنافس الرياضي بالنسبة لك.

المشارك 1: التنافس الرياضي يعتبر حافز عندما تكون هناك منافسة

### الباحث: هل ترى أنه مهم؟

المشارك 1: طبعا مهم جدا من وجهة نظري أن التنافس صراحة بدونه سوف لن يحصل تطور جيد بخلاف لو أتنافس أنا وخالد مثلا وكل منا يحاول أن يبذل أفضل ما لديه وأقصى ما لديه وبهذا الشكل سوف يكون هناك تحسن أي سيحصل تطور عند خالد أما إن لم تكن هناك منافسة فبطبيعة الحال سوف لك يحصل تطور فأهمية المنافسة كبيرة جدا وتلعب دور مهم جدا في تحسين المستوى في تحسين اللياقة البدنية في تحسين كل شيء وبدونا التقدم فيس اللأأداء سيكون ذعيف جدا.

المشارك 2: التنافس الرياضي بالنسبة لي أستفيد منه وأشعر أنه مهم جدا عندما أمشي مع يوسف (ضحك جماعي) عندما أمشي معه خطواته طويلة وأشعر أن لا أنافس أي شخص أخر كما أنافسه (ضحك جماعي) حيث أني المشوار الذي يحتاج نصف ساعة عطي ساعة بينما هو ينجزه في 10 دقائق .

## الباحث: من هنا ما هي درجة أهمية التنافس الرياضي بالنسبة لك ؟؟

المشارك 2: مهم جدا أنا أرى بأنه مهم جدا.

المشارك 4: التنافس الرياضي مهم لانه يعطي الإنسان دافع بأن يحاول أن يصل إلى مستوى الشخص الذي أمامه على الرغم من أن هناك عامل أساسي في هذه النقطة وهي نوعية الشخص الذي ستنافسه إذا كان هو مثلا أساسا إنسان رياضي وله فترة يتريض وأنت بدأت الأن فقط معه وتحاول أن تنافسه أكيد سيؤثر عليك نفسيا لأنه مستواه أصلا سيكون عالى.

المشارك 1: أنت تتحدث عن الفروق.

المشارك 4: تماما تكزن أنت و إنسان أخر في نفس الحالة.

المشارك 1: في عدم وجود تجانس تكون هناك مشكلة

المشارك 4: أكيد و على سبيل المثال عندما قال يوسف أنه هنا سيعيش الظروف أنا أيضا سأقوم بنفس الشيء وهنا سيكن هناك تنافس إما يسبقني أو أني أسبقه ونوعية الأنشطة التي سنقوم بها ستؤثر على التنافس.

### الباحث: هل أرى بأنه مهم؟

المشارك 4: مهم جدا.

المشارك 1: مثلا أنا أعرف أن أسامة أفضل منى ولكن عندما أنافسه وأغلبه فإن ذلك سيعود على النفسية بشكل جيد.

المشارك 4: نعم ولكتن أنا أتحدث عن بداية ممكن بعد البقاء معه فترة طويلة صحيح أنك تصل إلى هذه المرحلة بحيث تكون ترغب في الوصول إلى هذه الدرجة بحكم أنه إنسان خبير و مريض قديم فبعد إنجاز ذلك تشعر بأنك أنجزت شيء مهم, لكن في البداية ستتعبك نفسيا وممكن أن يؤثر عليك أي مرده عليك سلبا (38:59) وهنا تؤثر عليك حتى نوعية الأنشطة التى تمارسها.

المشارك 3: التنافس يمكن أن يكون ما الشخص نفسه بنتائج حققها هو في السابق أو شيء يرغب في تحقيقه فيمكن أن يتنفس مع نفسه لإتباث شيء يرضيه أو ما كنتم قد أشرتم إليه أي مع أناس آخرين أي أشياء داخلية بين الشخص وداته أو

يكون بين الشخص وآخرين ويسعى لتحقيق نتائج والتنافس هو الذي أوجد الاختلافات و الفروق بين الناس وأوجد أناس يتتبعوا عملية الرياضة ويعون لها مسابقات و هي منذ بدء الخليقة قد تكون هذا التنافس.

# الباحث: تعني أنه مهم.

المشارك 3 : مهم جدا لأنه هو الذي أوجد البطولات وأوجد الأبطال وأوجد النتائج والفروق وأوجد الدراسات التيب قامت على الرياضة .

# الباحث: ماذا لو تحدثنا على الجاذبية الجسمية ودرجة أهميتها.

المشارك 1: الجاذبية الجسمية ببغير أو لي.

# الباحث: الجاذبية لك أنت ودرجة الرضى عن جسمك وأنه جذاب في أعين الآخرين.

المشارك 1: طبعا ما في ذلك شك فذلك مهم جدا, فأنا سأتحدث عن نفسي بحكم أني إنسان متخصص في الرياضة فأنا صراحة أعتبر نفسي, سأنتقد نفسي عندما يكون جسمي ليس بجسم رياضي ,,, ليس جذاب سأنتقد نفسي أي عيب في حقي لما, لأني رجل متخصص في علوم الرياضة ويكون جسمي بدون تناسق هذا يعتبر نقطة سوداء فأنا عن نفسي وهموما, صراحة لكل الناس مهم جدا لأنه إذا كان الإنسان ليس لديه تناسق في جسمه ستقل جاذبية الناس له فيصفونه بالمكتنز, أو نحيف, هذه المناظر الناس لا يرغبونها أكيد

### الباحث: ماذا عنك أسامة فيما يخص أهمية جاذبية الجسم.

المشارك 2 : أنا سأجيب جواب صريح جدا جدا بالنسبة لي يؤثر في كثيرا و منذ فترة أثر في أنا صراحة كنت أركز على ذلك كنت أحب أن يكون جسمي جيد ومتناسق وأكثر شيء أعاني منه 8 الأن هو منطقة البطن.

المشارك 1: جميعنا

المشارك 2: لا بالنسبة لي بشكل خاص لذي البطن تقلقني جدا دائما أحب أن ألبس ملابس تظهر بشكل جيد. ولكن عندما أرى بطني بارزو بهذا الشكل تشوه اللباس بالكامل لا يعود هناك تنسيق ولا شكل فأشعر أنها في نظر الآخرين.... وأنز عج منها.

### الباحث: هل ترى بأن لها أهمية كبيرة بالنسبة لك؟

المشارك 2: جدا جدا نعم جدا جدا.

#### الباحث: ماذا عنك خالد.

المشارك 4: أعتقد أن أهمية الجاذبية الجسمية تكمن في العامل النفسي وهنا نعود من جديد إلى نفس النقطة.... أنا ذهبت في رحلة من الشباب إلى هدر سفيلد وقد رأيت صديق لي لم أره منذ حوالي 3 سنوات فقال لي يا خالد أن وزنك زائد كثيرا حيث أنه لم يكن رني بهذه الصورة جراء هذا الشيء أصبت بإحباط شديد جدا فشعرت أنه ليس هذا وضعي أي ليس هذا المفروض شكلي ووضعي فشعرت بأني مقصر في حق نفسي كثيرا.

## الباحث: يعنى أنك ترى من وجهة نظرك أن هناك أهمية للجاذبية الجسمية؟

المشارك 4 : أكيد أكيد أكيد أكيد لأن هذا الشيء لا تلاحظه في نفسك بشكل سريع ولكن الناس يمكن أن يلاحظونه بشكل أسرع

المشارك 2: أنا أضيف شيء أخر.

المشارك 1: لا ننسى العنصر ( الجنس الأخر ) الأخر

## الباحث: تقصد أن يكون جسمك جذاب من وجهة نظر الجنس الأخر

المشارك 2 : أنا أضيف شيء أخر في هذه النقطة حيث أنها أصبحت إحدى وسائل المجاملة مع الآخرين كي يدخل الفرح لهم من خلال المجاملة بالنسبة لي أنني بدأت أعود لهم من خلال المجاملة بالقول أن وزنك نازل و أنا تفرحني عندما تقول لي أنك نازل و هذا معناه بالنسبة لي أنني بدأت أعود للوضع الطبيعي.

المشارك 1: مرات يقول لك هذا الكلام من باب أنه يريدك أن تأكل عندما تأتي لبيته من بابا الكرم .

المشارك 2: هذا يضرك.

المشارك 2: اليوم قاتها لأحمد بأن وزنه نازل.

### الباحث: أحمد درجة أهمية الجانبية الجسمية بالنسبة ليك ؟

المشارك 3: هي أكيدة من أولويات الإنسان أن يكون محاط بإهتمام الأخرين فأهمية الجادبية الجسمية هي إحدى العوامل لأن شكاك ضاهر ويضخر للعيان وهو جسمك و والمعرفة واللسان والتلكم للأخرين يظهر البواطن بالمرتبة الأولى أنه جسمانيا عامل يشكل هاجس كبير بالنسبة لي وأعمل عليه كثيرا لأنها هي الشكل الذي توضع عليه الملابس وهي الشكل الذي نقابل به الأخرين فهي تشكل أهمية كبيرة.

الباحث . فيما يخص عوامل الأهمية هناك عامل أخير نود التكلم عليه و هو عامل القوة البدنية إلى أي مدى ترى أنهل مهمة كعامل في تكوينك أو تركيبتك أو شخصيتك؟ أي حصولك على درجةما من القوة البدني.

المشارك 1: طبعا القوة البدنية مرغوبة وهي مطلب ضروري جدا خصوصا أننا نعيش في بيئة هنا نحتاج لها تحتاج أن ترفع رتحتاج أن تنقل حقائب فتحتاج للقوة في حياتك بصفة عامة فالقوة البدنية تعطيك ثقة في نفسك إلى حد ما بخلاف الإنسان الضعيف الذي في كل شيئ يحتاج المساعدة فالقوة البدنية طبعا مهمة جدا ولا يمكن لأحد الإستغناء عنها.

المشارك 2 : وهي نعمة .

المشارك 1: نعمة من الله.

المشارك 2: القوة البدنية ، أنت مالذي يهمك أكثر فيها فوائدها ومنافعها أو سلبياتها؟؟

الباحث: لا هذا ولا ذلك يهمني درجة أهميةتها بالنسبة لك فقد يأتي أدهم ويقول أنها ليست مهمة أبدله وحيث هناك ثقنية فأنا لا أحتاج للقوة فأنا لست ثور والبعض يقول لا أرى أن عامل القوة البدنية عامل مهم حتى في الثقة بنفسي الرضى عن الذات.

المشارك 1 تتعرض لمواقف كثيرة تحتاج فيهاى إلى القوة .

الباحث : وشخص أخر يقول أي موقف يمكن أن أتعرض له يمكن أن أحله بدون قوة , فهذا ما أقصده درجة أهمية عنصر القوة بالنسبة ليك .

المشارك 2: والله درجة أهميتها كبيرة جدا وانا أرشحها من أهم الحاجات أن يكون الشخص ( بصحته ) صرحة لأنه أجيانا الشخص أصلا يكون ضعيف وليس شرطا أن يوكون مصابا بشيء أو لذيه مشكلة أي هو أصلا تكون بنيته ضعيفة فتشعر أنه إلى حد ما ( على حسب الشخص ) مهزوز بعض الشيء بعكس الذي تجده مفتول العضلات تجده حتى وإن كان ضعيف في ( قلبه ) ( أي غير شجاع ) ولكن تجده يظهر بأن قوي وله هيبة أكثر فأشعر بأن القوة البدنية عامل مهم حتى نفسيا بعض الشيء.

المشارك 1: تحد نفسك مرتاحا معها.

المشارك 2: تحد نفسك مرتاحا معها.

المشارك 4: أعتقد بأن أهميتها تساعدك في جياتك اليومية في أنجاز أعمالك وتسهل عليك الأمور صح كثيرا, وكما قلت أنت ما لا تحتاج مساعدة كثرة من الناس وتكون تعتمد على نفسك أكثر من الأخر.

# الباحث: نعم أحمد رم هل ترى بأن القوة البدنية عامل ممهم

المشارك 3: أكيد في تحديد أطار شخصية الأنسان أن يكون مستقل بقوة بدنية تكفيه لأنه لو حصل فيها إعتلال سيؤثر ذلك في نفسيته في الشخصية العامة للشخص فبقدر ما كان مكتمل جسميا ولديه القوة البدنية التي تكفيه عن الإستغناء عن الأخرين ولو أن الإنسان وجد بطبعه إجتماعي يحتاج إلى الأخرين مهما كان ( 41:41) ولا غنى له عن الناس لكن نوعا ما وبشكل كبير هي ضرورية لأنها تسد حاجات نقص كثيرة في الإنسان لإغن كان وكما قال أسامة إنسان كامل ومعتمد على شخصه تمام.

الباحث: أوكي أعتقد بأن السؤال القادم في جزء من خوارنا كنا قد جاوبنا عليه ولكن نحجاول ان نركز عليه بحث كل واحد تكون إجابته مركزة بعض الشيء مات هي الأسباب تمنعك أو تحول دون أن تمارس نشاط بدني ما ؟ يوسف سابقا أشرت لجزئية خالد أسامة أحمد كل واحد أشار لبعض الجزئيات و المرتبطة باضروزف المراتبطة بادراسة بالعمل و بالعامل الصحي و نحاول أن نركز قليلا في نقاط محددة أو نقطة ما ترى أنها السبب الرئيسي أو هذه النقاط هي الأسباب الرئيسية التي تحول دون أن تكون نشط بدنيا تحول دون ممارستك للنشاط البدني.

المشارك 1: أولا أنت عارف طبعا....

الباحث: حتى لو أردت إعادة جزء من كلامك اليسابق.

المشارك 1: لا أحكى عن وضعى أنا شخصيا ولكن أن أتكلم بشكل عام في ضروف أشروا لها سابقا.

الباحث: لا أقد نشاط رياضي فقط فقصد نشاط بدني عام

المشارك 1: أعرف ذلك في نظري أن أول شيء يحول أحيانا بينك وبين أن تمارس رياضة هو ضروفك الصحية

الباحث: ليست شرطا ممارسة رياضية للعبة ما بل نشاط بدني بشكل عام

المشارك 1: نعم نعم أنا اتحدث بصفة عامة.

الباحث: كما كتن خالد يحكي سابقا وهو كان يسستعمل ي المشي ثم سلوكه تغير بتكت الباصر

المشارك 1: نعم أنا أقول أن الضروف الصحية تحول أحيانا دون ممارسة النشاط البدني بصفة عامة , الضروف الصحية , كذلك الضروف البيئة تحول بينك وبين أنك تمارس رياضة .

الباحث. ما مفهوم البئية بالنسبة لك؟؟

أسس: الجو مرات لا يساعد

المشارك 1 /: : الطقس أحيانا لا يساعد أو ممكن بتعلق بضروفك الشخصية وقت فراغك ٫٫ هل مثلا عندك فراغ تستطيع أن تؤدي ٫ هل أنت مشغول ٫٫ أحيانا أنت لا تستطيع الخروج أحيانا لذيك شغل على جهازك.

الباحث: قصية وقت ؟؟؟؟

المشارك 1: نعم الوقت أحيانا عندك وقت فراغ وأحيانا ليس لذيك وقت فراغ , حتى الضروف النفسية قد تلعب دور أحيانا

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الباحث: تمنعك من ممارسة النشاط ؟؟

المشارك 1: تمنعك من ممارسة الرياضة, مثلا لا قدر الله جائك خبلا ليس جيد وبالتالي أصبجت مفسيتك ليست ,,, فلا تستطيع أن تخرج أصلا فتبقى منتطوي على نفسك , يعني في تصوري هناك ضروف كثيرة تحول أحيانا بين ممارستنا الرياضة.

الباحث: نعم مشارك 2 ؟؟

المشارك 2: بانسبة لي أنا دعني أعيد تعض من ( 50:11)

الباحث: أبقى أءكد أن لا أقصد الممارسة الرايضية بل النشاط البدني بشسكل عام

المشارك 2: أن سأقول لك بشكل عام.

الباحث: بشكل عام مثلا حديقة البيت لما تهملها فالعمل فيها شيء جميل

الشارك 2: تمام بشكل عام, على ذكر الحديقة, لدي حديقة العشب الذي فيها يحتاج إلى تنظيف, ولكن ليس لذي قدرة بسبب ألم ظهري على تحمل العمل فيها إلى أنحني وأقطف العشب وكل يوم أنظر لها, اقول سأنضف سأنضف ولكن لا أستطيع.

الباحث: يعنى العامل الصحي.

أسامة: العامل الصحي هو الذي يأثر علي , أنا العامل الصحي , المشكلة التي يلذي متصلة بالعامل البدني والنفسي عندما يحدث ضغط من الغضروف على العصب يؤثر على ختى في المزاج حيث يكون متدني جدا فهذا أكثر شيء إضافة إلى أني إذا نمت وأستيقضت وشعرت براحة من ظهري فإني أكون نشط جدا وفي كل شيء وعندي في الرياضة وفي الطلعة .

الباحث: يعنى أن مشكلتك الوحيد هي العامل الصحي.

أسامة: العامل الصحي باضبط.

الباحث: يعنى لو عندك وضع صحى جيد لكان نشاطك البدني يكون عالى.

أسامة : بالضبط لكن لو أني تعبت منه بعض الشيئ وأستيقضت بوحود بعض الألم فإني أكون كسول جدا ومستوى النشاط يكون منخفض .

المشارك 4 : بالنسبة لي أعتقد أن حجم الفالتزامت الويمية التي أنت ملتزم أنك تفعلها يوثر عليك كذلك وضعك البدني أو الصحي مثلا إذا كان عندك إصابات كما ذلك بعض الناس أعتقد لقلة المعلومات لديهم في الموضوع هذا الأن أغلب الناس تسأله عن الرياضة ووضعها يقول صحيح شسئ جيد للإنسان لكن لا يعرف مدى أضرار ها إن كان لا يمارسها.

الباحث: أضر إن عدم ممار ستها .

خالد : نعم عدم ممارستها (52:23) هو يعرف أن عدم ممارستها ضارة ولكنه لا يعرف حجم الضرر أو خطر عدمم ممارستها.

الباحث: الأسباب التي تحول دون أنك تكون نشط بدنيا.

أحمد : والله بالنسبة لي كمغترب حأت هنا قلة العلاقات الإجتماعية و هده تحد من أنك تتواصل بدنيا مع مع ناس تزور هم مشيا هذا هنا في بريطاتنيا وفي ليفيربول بالدات ففي كل شيء مجالك محدود ومحدودية المجال هذه تؤثر ونقوم بتعويضها ممكن بالمشي إلى وسط المدينة وكل ما أجد فرصة للمارسة الرياضة ولو أنها ليست الرياضة بمفهوم الرياضة ولكن أي جهد عضلى.

الباحث: نشاط بدني

المشارك 3: هذا ما أقصده نشاط بدني يمكنني القيام به أقوم به .

الباحث: طالما خرجت لنا كل هذه العقبات منها ما كاتن نمر تبط بالمعلومات العامة وجزء بالعامل الصخي وحزء بعامل الوقت وضروف ما ... من وجهة نظركم كيف يمكن أن نتغلب على كل هذه العقبات أو ممكن أن نضع حل لكل هذه المشاكل سواء من العامل الصحي .. الزمن .. السلوك ... الثقافة كيف يمكن أن نتغلب على كل هذه العقبات من أجل أن نرفع من معدل النشاط البدني لدينا ... أو نحل مشاكلنا هذه التي تحول دون أن نكون نشطين ؟؟؟؟؟

أسامة : أنا لذي نقطة واحدة حيث أنك وعند طرحك لهذا السؤال جاء على بالي موضوع زوجتي تجري عليه في دراسة وهي إدارة الوقت وهي أهم شيء فإن أنت إستطعت تنظيم وقتك بعض الشئ بغض النظر عن ضروف كل شخص فلو إستطعت نوعا ما من التركيز وتنظم وقتك فإنك ستجد مجال كبير أنك تمارس رياضة أو نشاط عام بصفة عامة أما أن أنت تركت الوقت مفتوح هكذا ستجد نفسك غير متحصل على الكفاية

الباحث :: فوضى زمنية

المشارك 2 :: تماما ... فأنا أقول أن تقوم بإذارة للوقت

أحمد: المشكلة لأي شخص هي كما قال أحدنا أنها إحتماعية, وأخر قال الوقت, البحث عن مشكلة ومحاولة إيجاد حلول لها حيث أنه على كل منا يحاول أن ينظر ويعرف مشكلته بيالضبط أين ويحاول إيجاد حل لها أي يعترف بوجود مشكلة يوحث لها عن حلول.

الرفاعي: خالد ما هي وجة نظرك في هذا الموضوع كيف يمكن أن نتغلب على مشاكلنا وأنت أشرت إلى أن جزء منها المعلومات العامة وهي نقطة مهمة جدا الشاباب أشاروا إلى عوامل أخرى تحول دون ممارسة الرياضة الأن كحلول لها وأحمد قال أول علينا أن عرف موطن الداء كي نتغلب عليه أسامة قال نريد إدارة للوقت ما هي وجهة نظرك في الموضوع عوده

المشارك 4: أعتقد أن حجم دراية الشخص بأهمية الرايضة , عن نفسي أنا أعرف أن هناك خطر من عدم ممارسة الرايضة فإنها ستكون جزء أساسي وتجبر نسى أن أدخلها في الجدولي الزمني.

الباحث: يعني أنك ترى بأننا علينا أن ننمي المعلومات العامة بأمية ممارسة الرياضة ومضار عدم ممارستها

المشارك 4: بالضبط بالضبط

الباحث: كيف يمكننا القيام بذلك من وجهة نظرك؟

المشارك 4. كيف نرفع مستوى المعرفة هذه عند الناس تعنى

الرفاعي: نعم عند الناس

المشارك 4: ممكن عن طريق برامج خاصة وعن طريق أنا متخصصين تظهر للناس أن هذا الموضوع مهم جدا كذلك يمكنت إستخدام طرق جديدة مع أجيال جديدة وعلى سبيل المثال السباب الصغار ومثلا أنا بعد أن كبرت عرفت أنه هناك خطر بينما لو أني تعلمت ذلك من صغري أو من المدرسة في تركيز عليه أكثر فكان من الممكن أن سيكون شيء طبيعي أو جزء من حياتي أي مهما زادت إلتزاماتي وحجم العمل عندي لكنها ستمكون أساسية عندي

الرفاعي :: جزء من خطتك .

خالد: نعم ولا أستطيع التنازل عنه

الباحث: وأنت يوسف؟

المشارك 1: والله فيما يتعلق بأهمية أن الناس تعرف أهمية الرياضة ففي تصور أن هناك أناس كثر تعرف أهمية الرياضة وفوائد الرياضة ولا يختلف عليها إثنان وأبسط مثال بحكم أني متخصص في الرياضة وأنا عارف قيمة الرياضة وأهميتها ومقدار نفعها ولكن القضية ,,,,

### الباحث: بحكم تخصصك عرفت أقصد الناس العوام

يوسف أعلم دلك , ولكن أودج القول بأن معظم الناس يعرفون أهمية الرياضة خاصة أن معظم الطلبة الذين تحدث عليهم والطلبة الذين تتحدث عليهم وخاثة في ليفيربول أغلبهم طلة دراسات وكلهم على دراية بأهمية الرياضة ولا يختلف عليها إثنين أهمية الرياضة ,,, ولكن القصية أن مشكلتنا في التسويف , أي دائما نقول سوف , أي ساقوم بها فقط بعد الإنتها من هذه و هكذا

المشارك 2: سوف سوف سوف.

المشارك 1 : أنات أحكي عن نفسي بقيت أسوف داءما بحيث أصبحت أقول لنفسي إعنمل ههذا وبعد أن أقدم أطروحتي سأهتم بالرياضة فالتسويف في حد ذاته ليس جيدا وإدارةى الوقت التي أسار لها أسامة , نقطة صراحة يعني سليمة وفي نفس الوقت إن أنت أدرت الوقت بشكل صحيح ونظمت الوقت صح يعود عليكم بالنفع بحث أنك فيه رياضة وفيه إنجاز أفضل عندك أو مار أيكم , , معي في ذلك فهذا سيعود عليك بالنفع أمكيد ولكن نحن مشكلتنا ما هي ؟؟ مشكلتنا أصبحت , تجد أحدنا يقول , والله أنا الأن لذي شغل متراكم وأراه أمامي على الطاولة , وأضيع ساعتنين أو ثلاثة في الجري فإني ساعود منهك , , أصبح وهنا أصبحت لا أفكر في الرياضة با في توابع الرياضة , على الرغم من معرفتي من أن توابع الرياضة وأنت تتطلب الإستمرارية وأنا لا أستكيع الإستمرار في الرياضة لدرجة أن أضيع كل يوم ساعة أو ساعتين في الرياضة وأنت عارف أن نقطة مهمة من أسس التدريب الإستمرارية أنك تستمر وعندما تستمر تتخلص من التقاصات وتزيل تراكم اللبنيك على في العضلات وهذا شيء جيد ولكن كل هذا يحتاج إلى وقت , والوقت , , وخاصة عندما أكون في وضعي أنا بالذات الذي في العضلات وهذا شيء جيد ولكن كل هذا يحتاج إلى وقت , والوقت , , وخاصة عندما أكون في وضعي أنا بالذات أي عندما أكون في نهاية مدة والمشرف يضغط عليك وهناك عوامل كثرة أحيانا تحول دون ممارسة الرياضة فأنت كيف نتغلب على أمور كهذه هو أن تنظم بشكل جيد وتدير وقت بشكل صحيح ولكن ولا تنسى نفسك من الدنيا دائما الوسكطية , مرتاح والله بصدق وبالأخص أن ممارسة الرياضة تعود بالسعادة عليك وستجد نفسك سعيدا عندما تمارس الرياضة وتشعر مرتاح والله بصدق وبالأخص أن ممارسة الرياضة تعود بالسعادة عليك وستجد نفسك سعيدا عندما تمارس الرياضة وتشعر بأنك أنجزت إنحجاز كبير.

الباحث: لذينا الأن أخر سؤالين , السؤال الأول قبله سؤاليقودنا إله وسأتغاضى عنه لأنني ومن خلالا حواري معكم لا أعتقد بأني أحتاج لطرحهع فكلنا عرب وليبين وثقتقتنا متقاربة وسؤالي يقف ويرتكز في النقطة الثالية إن كنت تمارس في أي نوع من النشاتط البدني وعشر خطوط تحت كلمة النشاط البدني أي بمعني أني لا أقصد الرياضي المقصود المتعمد بأن تلعب مبارة كرة قدم مع أصدقاء أو غير ذلك أو تذهب إلى الجم أقصد بكل عام نشاط بدني هل فيكم أي شخص يمارس النشاط البدني كعائلة مع زوجته وأطفاله وأو مع جزء من أطفاله أي نوع من النشاط البدني أنت وأسرتك أو جزء منها ؟؟

المشارك 1: فيما يخص النشاط اللبدني والله كمجموعة

المشارك 3: ممكن أرفع معها شيء في البيت كدو لاب

المشارك 1: والله حتى ذلك لا يوجد تحويل لدواليب.

الباحث : كم مرة إنتقلت فكل مواضيعك مرتبطة بالنقل.

المشارك 3: مؤخر ا إنتقالنا من غرفة إلى غرفة أخرى

الباحث: أنت تقصد أن كل ذلك ذاخل الشقة

المشارك 3: نعم بداخلها

### ضحك جماعي

فنا أنقل أثاث الشقة مع زوجتي من غرفة لأخرى ومن مكان لأخر وأحيانا نتجهوا للقيام ببعض الحراكات الرياضية معا ,, وهذا أحيانا .

## الباحث: كعائلة يوسف؟

يوسف : كعائلة والله صراحة لا أعرف ممكن بحكمأن زوجتي أيضا مشغولة وكان معها الأطفال فلا يوجد لذينا وقت للأسف و في ليبليا كنت قد سجلتها في صالة وتذهب لها وتمارس الرياضة وقد إشتريت لها جهاز تريدميل فعلى إعتبارى كنت أريد أن أضع غرفة مخخة لها لأجل أن تمارس نشاط وهذا مهم جدا لأنه في ضل وجود نشاط بدني لايوجد مرض بإذن الله.

أحمد : العقل السليم في الجسم السليم

يوسف : نعم أكيد تبتعد عن الأمراض تبتعد عن الخمول تبتعد عن السمنة تبتعد عن أمراض القلب و هذه كلها أمور مرتبطة ببممارسة الرياضة و عد

م الرياضة , خمول زيادة في الوزن وتترتب عنه مشاكل كثرة صحية , وبالتاللي تنجد نفسك أنت ستتعب الدرجة الأولى وفي نفس الوقت أطفالك والأسرة جميعها ستتعب.

أحمد : علم الرياضي الإجتماعي , عادا عن أن الإنسان يعود على النفع على جسمه , يكون صداقات ويلتقي مع الأخرين ويتباذل معهم.

# الباحث: تمام ولكن دعنا في إطارة الأسرة فهل أي أجد يمارس أي نشاط بدني كأسرة.

المشارك 2 : بالنسبة لي في حدزد الأسرة أنا صراحة و الفترة الماضية لم أكن مركزا عليه ولكن أخيرا ركزت عليه بالنسبة , حتى بشكل خاص النساء يركزوا كثيرا ..

### الباحث: كيف ذلك ؟؟

أسامة: من أي ناحية؟ يركزن زبالذات التي تكون مشغولة في دراسة فتجدها إما بين أكل وشرب أو الجلوس لدراستها وبالنسبة لنا نحن كليبين ومسلمين لا أستطيع أن أترك زوجتي تذهب للجم لأنك تعرف الوضع هنا فالمالذي قمت به ,,, إختصرت شريت أجهزة رياضية ووضعتها في البت وأأحفزها بحيث .

#### الباحث: هل هناك تجاوب ؟

أسامة نعم هناك تجاوب وفي نفس الوقت ختى خالج االبت تشاركني وتخرجي معي أحيانا للمشي من جهة أنا لا أمل ومن جهة أهخرى هي تستفيد وأنا أستفيد وعندما نعود للبيت تكون ساخن بعض الشيء فتقوم ب....

المشارك 1: هل تخرجون خصيصا للمشي

الباحث: هلى هناك فرق سواء جسميا أو نفسيا بين أن تمارس المشى مع زوجتك أو بمفردك؟

أسامة فيه فرق فرق كبير جدا

### الباحث: ايجابي ؟

المشارك 2: أيجابي جدا جدا حيث يمكنني أن اقول أن نسبة الإيثجابية فيه تصل إلى نسبة 100 % لماذا ؟ لأني عندما أمارس لوجدي أمل بسرعة وأدخل في التنفكير في بعض الأشياء ولكن عندما تكون معي تشحني زايد أن الوقت يمر بسرعة.

المشارك 1: هل تمشى لغاية المشى أو لغاية أخرى مثلا ؟

المشارك 2: لغاية المشى زايد أنيث أحيانا أكون متعمد أن أمشى لغرض التفرج على شيء ما أي أختلق عذرا للخروج

المشارك 4: أنا أعتقد أنه بالنسبة لهذا السؤال أنا عكس أسامة بالكامل بصدق لأني لا أملك هذه الثقافة أني أمارس تمارين أنا وزوجتي ولكن لذي رأي أخر فقي نقطة أشار لها أحمد عندما قال الواجبات أو عمل البيت فأنا أعتقد بأنه ليس نشاط رياضي.

المشارك 3: نشاط بدني.

المشارك 4: هو نشاط بدني ولكن تقوم به أنت و زجتك لأنه لا يوجد شخص أخر سيساعدك في نقل شيء من مكان لأخر وكذلك هي أيضا حيث لو أنها تستطيع قضاء عمل ما يمكن أن تقوم به بمفردها ولكن شيئ ثقيل فإنك ستطضر بأن تنوز بعنها .

الباحث: فقط لأنك ملزم بها

خالد: أحيانا غير واردة أصلا في تفكيرك .

الرفاعي: تعني أنه من غير الواغرد عندك ثقافة ممارية نشاط بدني مع زوجتك؟

المشارك 4: لا لا والله بصدق.

المشارك 3: لا والله هي من تشجعني.

المشارك 1: / ثم أنه ليس أي نشاط متناسب مع المراة . .... أنا عندما أخرج في رحلة في ليبيا فأني اقوم بتركيب أعمدة وشبكة وكرة طائرة فطبعا النساء دائما يحبن لعبة الكرة الطائرة في ألعاب تتناسب مع المرأة بخلاف ذلك لا تجدها تنفع في كرة قدم فإهتماماتك في الرياضة تختلف عن إهتمام زوجتك أحيانا ( 01: 06 ).

المشارك 3: بالنسبة لزوجتي هنا في بريطانيا, دائما تشجعني لممارسة الرياضة, بدليل أن جارنا الإنجليزي من نفس عمري يود أن يشارك في مارثون مانشيستير بات يوميا يستعد له ودائما تضعه مثلا لي وتعايرني به ودائما تشير تعيرني ببطني وهي تشكل لها هاجس وهي ترغبها على مستوى الصدر وهي تمارس الرياضة معي كي أمارس أنا ذلك

الرفاعي :/ أخر سؤال في جلستنا الكريمة هذه ما هي وجهة نظر الدين فيما يخص ممارسة النشاط البدني ؟

المشارك 1: طبعا إسلامنال يحثنا على الرياضة ويحثنا على الممارسة والأنسان لا يكون خامل وزفي حديث للرسول صلى الله عليه وسلم ( المؤمن القوي خير عند الله من المؤمن الضعبف ) فنشاطك بل على العكس الدين لم يقتصر حث على

ممارسة النشاط للرجال فقط بل على العكس للجميع وسبحان الله ,,, الدين لم يتعارض ابدا مع شيء يتعلق بصحة أو يتعلق بالنفيع بالتالي الدين يشجع على نقاط كهذه

المشارك 4: هناك أثر على سيدنا عمر يقول في (علموا أولادكم السباحة والرماية وركوب الخيل) فرضي الله عنه كان مصدره لهذا الكلام أو لهذه الفكرة عدة أشياء كنشاط بدني أو رياضي وهي تهيئة الأجيال وتلك الفترة كانت فترة فتوحات إسلامية فكان الإسلام يحتاح إلى ناس تكون صجتهم جيدة ومتعلمين من هذه الناحية.

المشترك 1: والرسول عليه الصلاة والسلام كان يقول (تخوشنوا تخوشنوا فإن النعمة لا تدوم) فمن باب أنه يحث فينا على العمل حتى أنه عندما قبل يدا ووجدها ناعمة , (((قبل يد خشنة , قبل يد ناعمة ووجدها كالمراءة)))) فالإنسان المتخوشن.

المشترك 3: والتاريخ الإسلامي بالسيرة يمجد ويدكر بالخير الناس الذين كانوا أقويا وأجسامهم على قوة بدنية وكذا كذا كانوا مصاريعين وحتى الني صلى الله عليه وسلم كان هناك رجل لا أحد يصرعه والني صلى الله عليه وسلم صرعه.

المشارك 1: كان يسابق في زوجته الرسول عليه السلام ,,, يسابق السيدة عائشة و هو كان يمارس الرياضة كعائلة , يقزل لها سابقيني , فهي مرة غلبته ومرة غلبها فقا لصلى الله عليه وسلم واحدة بواحدة .

الباحث: أسامة ماقولك؟

المشارك 2: نفس ما قال أحمد هو ما كنت أود قوله زهز سبقني به

الباحث. أي أن الدين يؤيد مسألة النشاط البدني ؟؟؟

المشارك 2: بالضبط تماما

الحمد لله

# تحليل المقابلة , الدراسة الثانية (رجال)

# \* النشاط البدني كثقافة عامة.

- هو جميع ما يقوم به الإنسان خلال نشاطه اليومي منذ الإستقاض حتى النوم.
- 👃 يختلف من شخص لشخص من جنس لجنس الشاب الصغير يختلف عن الكبير .
  - 👃 بالعملية الحركية وليست ذهنية.
  - 🚣 ما يؤدي إلى استهلاك طاقة وسعر ات حر ارية

# • الفوائد المجناة من خلال ممارسة أي نوع من النشاط البدني.

- بعض الأنشطة الغير مفيدة والماذا ؟ لأنك أن كنت تمارس نشاط بدني ما وفي وضعية غير صحيحة مثلا فقد يترتب عنه إصابة ومشاكل فليس كل نشاط بدني مفيد
- اليوم الذي لا أبذل فيه أي مجهود ولم أقم فيه بأي نشاطات فيكون يوم كله خمول وحتى النشاط الذهني يصاب بنوع من الركود ( ينعكس على الأداء الذهني ).
  - 🚣 عند ممارسة عضلي تشعر بالسعادة لأنك قمت بشيء عاد عليك بالنفع على جسدك
    - - 🕂 وأقل أمراض
      - 🚣 وأقل عرضة للإصابة أقل عرضة للمرض
    - 👃 1- أصنف نفسي من الخاملين --- أنا لست براضي على ذلك
  - 🚣 2- لذي معدل نشاط بدني يساوي صفر -- نتيجة إصابتي بانز لاق غضروفي في ظهري.
  - ♣ 3- مشكلتى أن النشاط الذي أقوم به والسعرات التي أحرقها أسارع بتعويضهم بسرعة في الأكل.
  - 4 معتادا على الشغل العضلي وهنا في بريطانيا عوضه بالمشي, أعمل فقي مطعم وهذا يجعلني أعوض أيضا.
    - 🚣 فإن المشى أكثر شىء أعتبره كرياضة.

# • معدلات النشاط البدني الأن وما كانت عليه في البلد القادم منه.

- 👃 هذه القضية مرتبطة بشكل أساسي بالظروف الشخصية.
- 🚣 كان أفضل بكثير لأننا هنا حاليا لا نقوم بأنشطة رياضية بينما كنت سابقا يوما أمارس الرياضة
  - 🚣 كان أفضل بكثير في ليبيا.
  - 🚣 عندك سيارة وعندك خيارات أفضل. ــ علاوة على البيئة ــ الطقس أيضا.
- لله كان أغلب حركتي محدودة السيارة والبيت مثلا مناسبة اجتماعية مثلا عمل أي لا يوجد ذاك الجهد البدني البدني إن كانت المقارنة بهنا فأنا أعتقد بأنه هنا أكبر.
  - 👢 👯 كنت في ليبيا أفضل من هنا غير ذلك كان عملي عضلي في ليبيا.

### الأنشطة التي تعتمد على الخمول البدني؟

- 👍 التلفزيون.
- 👍 كالبلايستيشن.
- 👃 في بريطانيا لا يوجد وقت للتسلية.
  - 👃 تصفح النت.

# الدوافع للتسلية التي تعتمد على الخمول البدني؟

- 👍 من الإبتعاد عن الروتين.
- 👃 نطرد الضغط الواقع جراء الدراسة.
  - 👃 ظروفي الصحية
  - 👍 وضعى الإجتماعي
  - 👃 تركيبتي ليس لدي هوايات .
- 🚣 ممكن هذا نوعي وأحب الشيء المريح
- 🚣 سألجاء إلى شيء بسيط وقريب جدا( قرب وسائل الترفيه التي تعتمد على الخمول ) بعكس التفكير في الخروج للجيم وهذا يعني أنك ستقوم بنشاط أخر (البحث عن الشيء السهل).
  - 🚣 وقت الفراغ ليس منظم<mark>.</mark>
  - لأن هذا الوقت أسمه راحة يرغب الشخص فيها في الراحة فلا يبذل أي جهد.
    - 🚣 فلما لمشاهدته
  - وليس مطلوبا منه طالما يريد الراحة أن يبذل جهد. (ذلك موروث ثقافي أي)

# • أهمية الحالة البدنية

- 🚣 أستطيع القيام بأي شيء أريد القيام -- الرضى عن الذات.
  - ♣ بدونها أنت لا شيء لا تستطيع القيام بأي شيء
- پتحرك بثقة وبسرعة ويمكنه أن ينجز عمله في وقت قصير.

# • أهمية الكفاءة الرياضي حافز

- 👢 مهم جدا
- ♣ التنافس جعل الناس يتابعوا الرياضة ويضعون لها مسابقات و هو منذ بدء الخليقة.
  - ♣ وأوجد الأبطال.
  - 👃 وأوجد النتائج والفروق.
    - 👍 وأوجد الدراسات.

# أهمية الجاذبية الجسمية:-<u> مهم جدا</u>

- 🛨 أعاني من منطقة البطن.
- بطنى بارزو بهذا الشكل تشوه اللباس بالكامل
- 👃 العامل النفسي --- تأثير نفسي سلبي وإحباط للجسم المكتنز .
  - 👃 ولكن الناس يمكن أن يلاحظونه

- 🕌 الجنس الأخر.
- 🚣 هي الشكل الذي توضع عليه الملابس وهي الشكل الذي نقابل به الأخرين فهي تشكل أهمية كبيرة.

# • أهمية القوة البدنية:-له تعطيك ثقة.

- 🚣 درجة أهميتها كبيرة جدا.
  - 🚣 تعتمد على نفسك.
- 🚣 نفسيته وفي الشخصية.

# الأسباب التي تحول دون ممارسة للنشاط البدني.

- → الجو مرات لا يساعد.2
- ♣ وقت فراغك. ( قلة الوقت )1 —عناية الأطفال عند دراسة الزوجة الرغبة في البقاء مع الأسرة لذي الكثير من الدراسة - عدم وجود سيارة
  - 👃 الظروف النفسية 4 المزاج.
    - 👃 يعرف حجم الضرر

# • <u>نتغلب على كل هذه العقبات:</u> إدارة الوقت.

- 🚣 البحث عن مشكلة.
- 👃 تنمية المعلومات العامة--- برامج خاصة-- إستخدام طرق جديدة مع أجيال جديدة (لو أني تعلمت ذلك من صغري أو من المدرسة في تركيز عليه أكثر فكان من الممكن أن سيكون شيء طبيعي أو جزء من حياتي أي مهما زادت التزاماتي وحجم العمل عندي لكنها ستكون أساسية عندي)
  - 👃 حجم دراية الشخص بأهمية الرياضة.

# النشاط البدني كعائلة: ـ

- 👃 أرفع معها شيء في البيت.
  - 👃 زوجتي أيضا مشغولة.
- 🚣 الوضع الإجتماعي في بريطانيا (وبالنسبة لنا نحن كليبين ومسلمين لا أستطيع أن أترك زوجتي تذهب للجم لأنك تعرف الوضع هنا)
  - 🛨 المشي
  - 👢 لا أملك هذه الثقافة.
  - وجهة نظر الدين فيما يخص ممارسة النشاط البدني.
    - 🚣 إسلامنا يحثنا على الرياضة.

### Focus Group Interview translated into English (MEN)

- ➤ Terminology & Knowledge of Physical activity (TKPA)
- Gender differences n=2 {Sports for men are different from women}
- The practice of various sports activities n=11{When I play football or go to the Gym}
- All the activities that we do from waking up till going to bed n= 2 {Anything that I do during the day}
- Energy expenditure and calories and burning excess fat in the body n= 1 {Physical activity contributes to fat burning}
- **→** Physical Activity & Sedentary Behaviour (PASB)

### 1 Satisfied with my physical activity level n=5

- Working in a restaurant and doing a hard work n=3 {I carry boxes inside the shop and move around}
- ♣ Helping my wife to do her work at home n=2 {I like to help my wife in the kitchen and the work of house}
- ♣ Overeating after doing physical activity n=2 {I am doing a good physical activity, but I compensate that by overeating}
- Walking rather than public transportation n=3{although I have a bus ticket, I prefer walking}
- $\blacksquare$  Doing a type of sport n=(5)

## 2 Unsatisfied with my physical activity level n=11

♣ Sit for a long time at the computer n=9 {because I am too busy for my study most of my time on the computer}

- ♣ Sit for a long time watching TV n=9 {I like watching TV programs or movies and that's leads me to eat more}

### 3 Physical activity level in the UK and your country

- ↓ I was more active in my country n=9 {I had a lot of free time that I used to go to the gym and play football}
- **↓** I was less active in my country n=7 {I had many social engagements and I did not have a free time but here I am able to **manage my time**}
- Positives of Physical Activity (PPA)

### 1 Benefits of PA

- ♣ I feel self-confident n=3{When my physical fitness high I feel that I am very confident}
- ♣ I feel my mind is actively n=3 {when I do a PA I feel that my mental activity rate is very high}
- ♣ I feel active to do everything n=9 {I feel that I am able to do anything and lift anything}
- ♣ I feel healthier n=10 {When I do exercise I feel that I am in a good health}
- Less susceptible to diseases and injuries n=3{when my physical fitness high that protects me of injuries such as muscle tension}

### 2 Facilitators for PA.

- ♣ Enjoyment n=8{I enjoy a lot going out with my family to the city centre and shopping, walking}
- ♣ Religion n=16{our religion encourages us to do sport}

# ➤ Barriers to PA (BPA)

## 1 Lack of time n=13{I don't have much spare time}

- ♣ Caring for children while my wife studying n=4 {because my wife doing a (PhD/M.A) I have to stay at home to care my kids}
- ♣ Busy studying n=9 {because I am busy all day for my studies I need to stay at home with my family rest of the day}
- ♣ Busy working n=4{because I am busy all day for my work I need to stay at home with my family rest of the day}
- ♣ I do not have a car n=12{because I do not have a car I would need for a long time to
  reach the facilities to do physical activity}
- ♣ Difficulty of organizing leisure time n=8 {I have a problem that I'm unable to organize and manage my time}

### 2 Health conditions n = 3

- ♣ Disease n=2 {I have a chronic disease for years ago prevents me from doing physical activity}
- ♣ Chronic injury n=1 {because I have chronic injury for years I cannot engage in sporting activity}

### 3- Sociocultural.

- **↓** Cultural n=9 {because it is my leisure time I do not want to do any work}
- ♣ Social status n=12 {because I am always busy (study / work) I prefer to spend the rest of the day with the family}
- 4- Weather inappropriate n=5{because it is always raining I cannot cycling or doing exercise outdoor/ I hate the cold and winter is very cold in Britain}
- 5- Psychological state n=7 {I don't feel any desire to engage in any physical activity when my psychological mode is bad}
- 6- Social-economic situation n=2 {my social economic situation not enables me to pay for gym or buy sports equipment}
  - **▶** Motivations for sedentary behaviour (MSB)

#### 1- Distraction

- ♣ Get away from the study pressure n=3{to stay away from the pressure of the study I prefer to play any videogame like play station}
- ♣ Get away from the daily routine n=7 {When I watch a movie that helps me to change my mood and stay away from the monotony}

#### 2- It's who I am

- ♣ Personality n=2 {I tend to be inactive guy this my personality}
- ♣ I have no hobbies n=1 {this is my nature; I have no hobbies to do}

### 3- Easy option

Looking for an easy activity n=2 {in my spare time I'm looking for anything close and easy to do}

- 4- I like this type of activity n=11 {I like to do this type of activity since I was young}
- > Family factors (FF)
  - I- Work at home n=5 {I like to help my wife to do her work at home and I think I'm physically activate through that}
  - 2- Culture n=6 {I do not have this culture}
  - 3- Walking n=8{I enjoy a lot going out with my family to the city centre and shopping, walking because I don't have a car}

### **Appendix (7) Focus Group Interview in Arabic (BOYS)**

### قبل كل شيء دعونا نتعرف على أسمائك

- المشارك 1
- المشارك 2
- المشارك 3
- المشارك 4

### الباحث هل كل منكم أخذ إذن من أسرته بالمشاركة

- المشاركون نعم
- الباحث ,,, أو لا شكرا على موافقتكم رغم صغر سنكم ولكنكم متفهمين الموقف سأحاول أن أعطيكم فكرة عامة عن البحث قبقل البدء في الأسئلة,, أوكى

أجريت دراسة أولى لمعرفة معدلات النشاط البدني عند العرب المقيمين في ليفيربول , هل نشاطكهم البدني عالي أم منخفض فللأسف كان متدنى جدا , ضعيف عند الكبار (الأباء) والأبناء (الأولاد)

في الدرساة الثانية هذه نجري في مقابلة ,, طبعا القياس الأول كان من خلال جهاز صغير يلبسه الشخص لمدة أسبوع يقيس حركة جسمه كاملة ومن ثم نأخد هذه البيانات ونقوم بتحليلها ونرى معدلات النشاط البدني ولكن للأسف كانت ضعيفة جدا الأن في الدراسة الثانية سنجري مقابلة لأجل معرفة , لماذا معدلات النشاط البدني الخاصة بهم متدنية ومنخفظة كثيرا ونحاول إيجاد الحل المناسب لأجل الرفع من مستوى النشاطك البدني ((( واضحة الفكرة الأن )))

نحن هنا سنناقش الأساب التي جعلت معدلات النشاط البدني عند العرب ضعيفة وسنحاول البحث عن طريقة لتطويرها ,, طبعا جوارنا كاملا سيكون باللغة العربية ,,, الكل يجيد اللغة العربية فسنجاول قد الإمكان |أن نتكلم عربي ,,, هل جاهزون لنبداء ؟؟

- خالد , السوال الأول ( أجيبوني براحتكم ) أعتبره حوار كما الذي كان في السيارة على الأي فون وغيره أعتبره جحوار تلقائي جدا نتكلم فيه عن النشاط البدني
  - الباحث ماذا يعنى النشاط البدني بالنسبة لك ؟؟؟ مالذي تعرفه عن النشاط البدني.

# المشارك 1 .. أن أعرفه أنه كيف أنك تأكل أكل صحى

الباحث , عبدالله هل تعرف شيء عن النشاط البدني

المشارك 2<sub>.,</sub> هو الرياضة والحركة والمشي يعني الشخص يتحرك و يمشي

المشارك 1 ,,, طريقة الجلوس كذلك موعد النوم ,, والصحو مالذي يقوم به الشخص صباحا

الباحث .. تقصد أسلوب حياته بالكامل تقصد .. مالذي تعرفه عن النشاط البدني

الباحث .. أن كنت لا تعرف أمر عادى .. ليس شرطا أن تجيب

المشارك 3, مثل ماقال الشباب, الرياضة

الباحث أي ممارسة الرياضة وممارسة النشاط البدني ؟؟

الباحث ,,, إلى أي مدى تعتبر نفسك نشط , ,, هل تعتبرون أنفسكم نشطين بدنيا ,, كل منكم يعطيني وجهة نظره حول نفسه ؟؟ أي يقيم نفسه ,,, يلاحظ ويعطى رأيه ,, - هل تعتبر نفسك شخص نشط أم لا ..؟؟؟؟

المشارك 1 . تقصد هل أنا نشيط أم لا ؟

الباحث ,,, نعم كيف تعتبر نفسك ؟

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المشارك 1,, في الوقت الحالي لا
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الباحث .. في الوقت الحالي لا ؟ مالذي تقصده بنك في الوقت الحالي لا ؟؟

المشارك 1, الأنى حوالى ثلاثة أشهر لا رياضة لا ألعب لا كرة ولا رياضة كل الوقت إلا على البلايستشن

الباحث للهذا تعتبر في نفسك خلال هذه الفترة غير نشط.

المشارك 1 ,, الفترة هذه لا

الباحث ... قبل ذلك .. كيف كان وضعك

المشارك 1 ,, كل أحد كرة قدم كل أحد تدريب وكنت أذهب للجم وأمارس السباحة أذكر كل أربعاء وسبت

الباحث , ماذا عن المدرسة , هل تقومون بأي نشاط

المشارك1,, في المدرسة, كل يوم أو يومين

الباحث .. نشاط بدني

المشارك<sub>1,1</sub> نعم خاصة لو الجو جميل نلعب كثيرا, ولكن لو الجو ليس جميل لا نلعب كثيرا

الباحث ... عبدالله ماذا عنك ؟؟

المشارك 2,,, أعتبر نفسي نشط.

الباحث ... تعتبر نفسك نشطا .. لماذا ؟؟

المشارك2<sub>0,</sub> لأننى أمشى كل يوم . 4:57

الباحث, جميل من أين إلى أين ؟؟

المشارك 2 من بيت أمى إلى بيت أبي

الباحث ,, مسافة بعيدة ؟؟؟

الباحث: كنت تمارس السباحة و الأن توقف؟؟؟؟؟

المشارك2... بسبب مشكلة المواصلات

الباحث ,,, تعني بسبب مشكلة المواصلات ؟

المشارك 2.. نعم

الباحث ... هل هو مكان بعيد الذي تمارس فيه السباحة ؟؟؟

المشارك 2, الأن يمكن أن ابداء ولكن الجو بارد جيث أنه قريب من البيت وأستطيع الذهاب له

```
الباحث , هل الحوض مفتوح أم مغلق ؟
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المشارك 2, لا أنه مغلق

المشارك 3,, ولكن بسبب البرد.

المشارك2,,, أي انك تسخن داخل المبنى ولكن عند خروجك يكون الجو بارد

المشارك 3. سلطان ... تأييد

المشارك 1, في هذه البلد الجو متقلب مرة أمطار , ومرة أخرى شمس ومرة أخرى برد في نفس اليوم؟

رياض,, كل ذلك في يوم واحد

الباحث ,, إذا مشكلة عدم الذهاب للسباحة ( على الرغم من أن المكان مهيء من الداخل أي دافيء ) لكن المشكلة عند خروجك تقصد

سلطان, لو بيمشي , ولكن لو يخرج مباشرة إلى السيارة وبجنب الباب يعتبر الأمر عادي ولكن لو بالباص

خالد ... إذا تعتبر نفسك نشط بدنيا؟

عبدالله ونعم

خالد ,,, نعم سلمان كيف تصنف نفسك

سلمان ,,, لا غير نشط

خالد ,, لماذا

سلمان ,,, لأن الجو غير جميل في الخارج: 07.03

خالد: تقصد الطقس

سلمان : نعم ,,, كنت ألعب مع فريق كرة

خالد: هل توقفت على لعب الكرة ؟؟

سلمان : نعم ( بهز الرأس )

خالد : إذا هذا هو السبب الذي يجعلك تعتبر نفسك غير نشط بدنيا,,, إذا كيف تقضى وقتك , بلايستيشن أيضا كما أخيك سلطان

سلمان: نعم

خالد: هل لديك أي نشاط بدني في المدرسة ؟؟

سلمان : نعم هناك نشاط في المدرسة

خالد : ما هو نوع النشاط البدني الدي تمارسه في المدرسة

سلمان : سباحة ,,,,, كرة يد

خالد: هل ذلك كل يوم ؟؟

سلمان: لا لا فقط جمعة و خميس

خالد: رياض كيف تصنف نفسك هل أنت تعتبر نفسك نشط بدنيا

رياض: نعم أنا نشط بدنيا

خالد: لماذا وعلى أي أساس جاء هذا التصنيف وقيمت نفسك بأنك نشط؟

رياض: لأننى أتحرك كثيرا وألعب كرة وأمارس رياضات في المدرسة

خالد: هل تلعب الكرة كل يوم

رياض: أغلب الأيام

خالد : قلت أنك تتحرك فهل تعنى بأنك تمشى كثيرا

رياض: نعم في بعض الأحيان

خالد: أين تكون مشاويرك عادة

رياض: أحيانا أعود إلى البت من المدرية مشي

خالد: هل المسافة بعيدة من البيت إلى المدرسة

عبدالله: هل تقصد مشى من المدريسة إلى البيت؟

خالد: المسافة بعيدة

عبدالله: بيته بالقرب من بيتي والمسافة بعيدة

رياض: حوالي 2 ميل.

خالد: كلنا عرب ولنا خلفيات عربية مرتبطة بدولنا العربية, وأنتم خضم تجربة النشاط البدني في دولنا العربية وهنا, فما هو الفرق من حيث معدلات النشاط البدني الخاصة بك بين هنا في بريطانيا وبين هناك؟؟؟

عبدالله: طبعا عندما تكون في البلاد العربية الأب والأم لا يخافون عليك كثيرا ويشعرون بأمان أكثر فالأمر بالنسبة لهم عادي أن تخرج وتتريض لكن هنا في بربيطانيا نحن في غربة بالتالي الأم والأب يخافون عليك وأكثر الأحيان لا يتركونك تخرج ,,, انا مثلا لو أني أرغب الذهاب إلى مكان أو أذهب إلى رحلة أو أمارس رياضة أو إلى أي مكان أنا وأصدقائي يجب أن يوصلني أحد إخواني الكبار ومثلا إدا أخبرتهم بأني ذاهب مع أصدقائي قد يقولون عادي أي مقبول , ولكن أذا رغبت أن أذهب إلى السنتر وبمفردي فلابد أن يأتي أخد إخواني يتابعني ويرعى حركتي وذلك خشية أن تحصل لى المشاكل ولكن عندما كنا في اليمن ,, كنا تقريبا نلعب كل يوم ونخرج لأي مكان.

خالد: حتى ولو كان المكان بعيد بعض الشيء ؟؟

عبدالله: نعم الأمر عادي لأن ذلك أمان, وتشعر بالأمان, تعرف الناس جميعا والجيران أما هنا فالتواصل محدود و لا يتكلمون كثيرا,,,, يعني في البلد العربي تشعر بأمان تخرج لأي مكان مع الأصدقاء أو بمفردك لأن الأم والأب يشعرون بأمان لأنهم يعرفوزن أين تخرج بينما هنا ممكن لأنهم لا يعرفون الأماكن الذي تذهب لها

خالد: هل هذا يمكنك أن تمارس نشاط بدني هنا

عبدالله: نعم , أكثر الأحيان

خالد: ما رأيك سلطان:

سلطان: نفس الشيء, بس فيما يخص الكبار ( المقصود العرب ) الذين هنا في هذه البلد خاصة الذين ليسوا في الجامعة والذين لا يعملون والذين في الدكاكين والمحلات والمطاعم ,, هم جالسون لا يتحركون

خالد : عفوا أنا أقصد الذين في أعماركم , ما هو وضع النشاط البدني عندك عندما كنت في الإمارات أو وضعك في بريطانيا ؟؟

سلطان : نفس القصة , أمى تقول لا تخروج , تخاف

خالد: في الإمارات أم هنا

سلطان: هنا

خالد: ماذا عن هناك في الإمارات؟

سلطان: هناك الأمر عادي يمكن أن أخرج عادي

خالد هذا ما أقصده ,,, أعطيني وجهة نظرك فهل هي مثل عبدالله ؟

سلطان : بالضبط

خالد: وهناك هل الأمر عادي ومسموح لك بالخروج لأي مكان

سلطان : عادي أخرج لأي مكان

خالد: هل هنا يوجد حرص مبالغ فيه

سلطان: هنا الأمر مختلف

خالد: يختلف عن هناك؟ ما نوع الأنشطة التي تمارسها هناك؟

سلطان : مثلا <mark>هناك خلف بيتى شاطىء</mark> وأمام البيت حديقة <mark>وأصدقانى هم جيرانى</mark> الملاصقين لبيتنا فنخرج معا إلى الشاطيء سواء بالدراجات أو نلعب كرة .

خالد: هل هذا أمر عادي مع والديك, ليس لديهم مشكلة في ذلك؟

سلطان : ( بهز الرأس ) نعم

خالد: هل تستطيع القيام بذلك هنا في بربيطانيا ؟؟؟

سلطان : *لا لا يوجد مجال ,,,* لا حديقة ولا غيرها ,,, حتى وأن ذهبت إلأى الحديقة مالذي يمكن أن تفعله لن تجد ما تفعله فكلها عشب , بينما في الحديقة التي أمام بيتنا في الإمارات كل شئ جاهز للكرة الطائرة متوفر , لكرة القدم متوفر للدراجات كمتوفر كل شيئ موجود

خالد: لو قارنا المدارس هنا والمدارس هناك؟

سلطان: لا المدارس هنا تختلف *أحسن* مليون مرة من هناك

خالد: أقصد من حيث النشاط البدني ,,

سلطان: نعم

خالد: هل هي مجهزة أكثر أم البرنامج نفسه أو حصص الرياضة أين الفرق

سلطان: الإستراحة هناك ما بين 10 إلى 20 دقيقة أما هنا فهي نصف ساعة

خالد : فيما يخص النشاط البدني وحصص الرياضة هل هناك إختلاف بين هنا وهناك ؟

سلطان: نعم هناك إختلاف

خالد: مالفرق بين هنا وهناك 13:26

سلطان: هناك متأخرين عن هنا , حيث هناك يختلف الأمر , مثلا عندما تحظر لاعب كرة من الإمارات أو من اليمن ولاعب كرة من هنا فإنه سيقول علموني فأنا لا أعرف شيء , لا يعرف شيء فللاعب هناك يودي كل شيء خطاء لأن مدرسين الرياضة هناك أصلا من مصر أو من اليمن أو من الإمارات وهم متخلفين لا يعرفون شيء ,,, هنا يختلف الأمر , حيث أنهم هنا يعرفون كل شيء.

خالد: من حيث المعدات وزمن حصة الرياضة

سلطان: هنا أفضل من حيث المعدات و ز من الحصة

خالد: عبدالله, ما رأيك فيما يخص وضع المدارس هنا و هناك من حيث النشاط البدني أقصد

عبدالله: لا أستطيع الكلام عن المدارس في اليمن لأني عندما كنت في اليمن كان عمري حوالي 5 سنوات و لا زلت في الروضة ولكن عند حضوري هنا بدأت الدراسة من السنة الأولى حتى الآن في الصف التاسع ولكن هنا أحسن لأن هنا المعدات وكل شيء هنا أفضل كما أنهم يوفرون شخص مختص في كل مجال فهناك مدرب كرة وأخر للسباحة وكل في مجاله ,, يعنى التقنية أفضل ففي البلدان العربية لا يمكن أن تتحصل على كل شيء وجاهز لك حيث للحصول على هذه الخدمة فإنه من الضروري أن تدفع للمدارس لكن هنا تلقى المساعدة في كل شيء.

خالد: ماذا عن حصة الرباضة بين هنا و هناك. هل هناك اختلاف

### عبدالله: لا أتذكر لأنى كنت صغير

سلطان : خصوصا للعرب الذين هنا وبالأخص الدين يدرسون يقدم لهم الخدمات بشكل أرخص فمثلا تتحصل على ما دورات السباحة أنا وأخى مجانا بينما لو يأتى انجليزي فإنه سيدفع.

خالد : سلمان ما هي وجهة نظرك في النشاط البدني هنا في بريطانيا وفي الإمارات ؟ رأيك أنت الشخصى

سلمان: نفس ما ذكر الشباب

خالد: هل هناك فرق بين هنا وهناك

سلطان : مالذي رأيته في الإمارات, و مالذي رأيته في هنا

خالد: في المدارس, مالذي رأيته هنا وهناك

سلمان : <mark>في الإمارات يمكني الخروج في أي وقت , ولكن هنا لا</mark>

خالد: تقصد اللعب في الشارع سلمان: نعم

خالد : أي انه من غير الضروري أن يكون معك شخص كبير , أمر عاديز

سلمان: نعم

خالد: ما نوع الألعاب التي تمارسونها في الشارع

سلمان : كرة القدم ـ

خالد: نعم رياض لنسمع صوتك (رياض أنت أصلا من اليمن ؟؟؟)

رياض: نعم

خالد : ما رأيك في الفرق في معدلات النشاط البدني بين ما تراه هنا في بريطانيا أو في اليمن

رياض : <mark>كل الأشياء المطلوبة متوفرة</mark> , كالرياضة هنا أفضلل من اليمن فعندما كنا في اليمن في حصة الرياضة لم نكن . نعمل أسياء كثيرة

خالد: تقصد في المدرسة

رياض : نعم ,, ولكن هنا يمكننا أن نمارس كرة اللقدم , السباحة و أشياء كثيرة

خالد: وخارج أوقات المدرسة ؟؟؟

رياض: هنا يوجد أشياع أكثر يمكن عملها في أثناء عطلة نهاية الأسبوع حيث لا توجد أشياء كثيرة نعملها في اليمن

خالد: ماذا عن باقى الأيام وأقصد أيام الأسبوع وليس العطل

رياض : يمكنك أن تخرج وتلعب كرة ولكن ليس أمان كما في اليمن

خالد: هل ذلك يستوجب أن يكون هناك شخص بالغ معك

رياض: نعم

سلطان: مثلا في المدارس العربية تبداء الساعة 6 أو 7 صباحا , فأنا عندما كنت في الإمارات أبداء عند السابعة و وعندما كنت في الروضة أيضا كنت أبداء الساعة 7 بينما هنا الروضة كما أختي الصغيرة الساعة 9 أو 12 , هنا يختلف عن هناك , هناك إذا تبداء الساعة 7 تنتهي الساعة 3 ولا يوجد هناك وقت لأن تصلي تتغدى أو أن تأكل أي شي وما فيه وقت أنك تلعب ولو الحديقة بعيدة لا يجد وقت

خالد: هل هذا هنا في بريطانيا تقصد ؟؟

سلمان: لا هناك في الإمارات هنا لا يختلف الأمر 8 أو التاسعة والنصف حيث هناك وقت للأكل أو تصلى

خالد: هل لديكم وقت للصلاة في المدرسة؟

سلطان , عبدالله : معا , , , نعم لدينا

عبدالله: نعم ويساعدنا على اذلك أنه في المدرسة هناك أستاذ عرلبي ميلم ,,, يعني كناك أكثر من أستاذ عربي يدرسون الجيزسياسي حيث في وقت الحصة يعطون فرصة للذهاب لأداء صلاة الظهر

خالد: هل لديكم أماكن لأداء صلاة الظهر

عبدالله , سلمان : نعم هناك

سلطان: إلى حد ما مساحة صغيرة

عبدالله: لا يوجد الكثير يصلون ولكن أذهب أنا وأصدقائي العرب لأداء الصلاة ثم نأكل شيء بعدها نذهب للعب الكرة

خالد: بشكل عام أتمنى على منكم أن يعطيني ملخص لنمط العام أو معدل النشاط البدني لديه في حياته العامة بين هنا وهناك فهل تعتبر نفسك أنشط من هناك.

سلمان : نعم

خالد: هذا انت سلمان وماذا عنك عبدالله؟ هل هنا أنشط مما كنت في اليمن ؟

عبدالله: أعتقد نعم لأني عندما كنت في اليمن كنت في حينها لا أزال صغير ولا أستطيع عمل أشياء كثيرة, بينما هنا بعد ما كبرت ألعب كرة, وأمارس السباحة أو أي شيء.

خالد وأنت سلمان هل تصنف نفسك هنا أكثر نشاطا أو عندما كنت في الإمارات؟

سلمان: لا هنا أكثر.

خالد : ما هو نوع النشاط الذي تمارسه والذي يجعلك تشعر بأنك نشط بدنيا أو أحسن شيء تؤديه وتشعر أنه مفيد لك بدنيا يجعلك نشط بدنيا.

ضحك جمااعي (أحدهم يؤشر إلى البلايستيشن)

سلطان: الجم ( صالة التمارين الرياضة )

خالد: هل تذهب للجم؟

سلطان نعم

خالد تشعر أنه أفضل نشاط تمارسه يجعلك نشط بدنيا ؟؟ة

سلطان: نعم

خالد: ماذا عنك عبدالله؟

عبدالله: العب الكرة

خالد: كرة القدم ؟؟

عبدالله نعم

سلمان : <mark>كرة القدم</mark>

خالد: وأنت رياض

رياض: كرة القدم.

خالد: سلطان لماذا أنت تحبذ الجم عن كرة القدم أو السباحة

سلطان: أذهب إلى الجم في الأسبوع حوالي 4 مرات بينما الكرة مرة حوالي ساعتين لو تضعها ضمن زمن الأيام فإنها ستكون ساعتين.,,, المباراة المبارة ساعة, والتدريب ساعة 20:48 ولكن الجم من الساعة 5 إلى الساعة 7 كل أربع أيام هذا الإختلاف

خالد: عبدالله لماذا ترى أن كرة القدم هي أفضل نشاط بالنسبة لك؟

عبدالله: لأنها أكثر نشاط بدني أمارسه غير المشي وباقي الأشياء فأكثر الأنشطة التي أمارسها هي كرة القدم <mark>حيث هناك</mark> مدربين خاصين أنا لأني في عمري الدراسي لا أستطيع أن أدخل الجم حيث أنه يبدا من سن الصف العاشر

خالد تقصد أن عمرك لا يسمح ؟

عبدالله: نعم

سلطان: لو أستطيع الذهاب إلى الجم سأذهب, والأن في التارم الثاني ساذهب وهناك مدرب خاص والأدوات والمعدات الخاصة بكل شيء كذلك يكون مناسبا من حيث الوقت,,, الكرة مثلا أستطيع اللعب مع فريث المدرية وكذلك بعد دوام المدرسة, كذلك مع الفريق الذي أنا مشترك معه في يوم الأحد والتدريب معه ,,,, يعني أكثر رياضة أمارسها هي كرة القدم

خالد: لماذا تعتبر كرة القدم هي أفضل نشاط بدني تمارسه ؟ لماذا تفضلها على غيرها

سلمان: لأنى أحبها

رياض : لأنه يمكن أن تلعب كرة القدم في أي وقت كذلك فيها أشياء كثيرة

خالد: مثل ماذا ؟

رياض: تكون قادرا على ممارستها وتريحني

خالد : سأسئل سؤال أخر قريب من السابق ,,, لماذا تحب أن تمارس أي نشاط بدني سواء الجم أو سباحة أو كرة قدم أو أي شيء , لماذا تنخرط فيه وتتجه لممارسته.

سلطان: تقصد لماذا أحبه ؟؟؟

خالد: ما أعنيه لماذا تمارس هذا النشاط أصلا ليس فقط لماذا تحبه دعنا نبداء بك رياض ,,, لماذا تمارس أي نشاط بدني

رياض : لأنى أحبه

خالد: فقط لأنك تحبه ؟

رياض: نعم

خالد: ألا تشعر أن فيه فوائد أخرى أو ميزات أخرى

رياض: يمكن أن تساعد في الجري أو شيء ما في الرياضة الخاصة بي 23:28

سلمان: أحبها كثير الأني عندما كنت صغير اكنت ألعب الكرة ض

خالد: كرة القدم ؟؟

سلمان: نعم

خالد: تعني أن هذا السبب الذي يجعلك تحب ممارستها ؟؟؟ الا تشعر أن هناك فوائد أخرى يمكن أن نجنيها من ممارسة النشاط البدني ؟؟

سلطان : مليون فائدة ,,,,,,,, من فوائدها مثلا يعنى أن كانت قد تعرضت لضرب تكون جاهز هههههههه

خالد: تقصد معركة وضرب ههههههههههههه

سلطان نعم هههههههههههههه

ضحك جماعي

خالد: غير ذلك

سلطان : تكون قوي

خالد : أقصد ما السبب الذي يجعلك تمارس نشاط بدني ,, ما لفائدة التي تجنيها منه ,, مالدافع الذي يجعلك تمارس نشاط بدني , ماقولك

سلطان : سهلة

خالد مثلا ؟ تقصد لأنه سهل

سلطان: نعم تنهض , تمارس , تجلس

خالد : ذلك هو ؟؟؟ هههه هل تقصد أنه لا يوجد بها جهد بدني

سلطان : لا تحتاج أن تفكر كثير . فمثلا في الجم أو أثناء السباحة . تفعل كذا . وكذا وأنتهي الأمر . لا تحتاج أن تفكر

أو تركز في أن تحرك يدك بشكل غير مطلوب, فقط كذا أو كذا فقط, هههها

خالد: تقصد هنا سهولته (ممارسة النشاط)

سلطان نعم هذه سهولته

خالد: يعني تقصد كما قال رياض أنه من السهل ممارسته ,, تمام الا توجد فوائد أخرى نجنوها منه ؟؟ عبدالله مارأيك أنت ؟

عبدالله: أحب أمارس الكرة لأنها سهلة, كذلك لتوفرها حيث أنه ليس من الصعب الحصول على كرة والعب بها كلك من الفوائد أن تبقى على لياقة بدنية جيدة, وتكون قادرا على الجري لمسافات طويلة كذلك في المستقبل لو أريد أن أشتغل مدرب أكون متدرب كثيرا فإنه من السهل إجتياز الإختبارات لأخد شهائد عالية بالتالي هذا يسهل لي الحصول على عمل في المستقبل كمدرب, كذلك في الكرة, فمثلا القيادة, بمعنى عندما تكون قائد فيرق في الكرة, فإن ذلك مستقبلا يمنحك الثقة بالنفس للتكلم مع الناس وتتعامل مع أناس لا تعرفهم و لتكون قادرا على تقديم أكثر ما تستطيع

خالد : هل هناك أي شخص لديه أي إضافة ثانية على هذه النقطة ( الأساباب التي تجعك تمارس نشاط بدني .)

خالد تمام,, لو تكلمنا على الموضوع ولكن من زاوية عكسية مغايرة تماما ؟ كنا نسأل مالذي يجعلك تمارس نشاط بدني وأنواع النشاط البدني , ولكن قبل قليلي أخبارتموني بأنكم أحيانا لا تكزنون نشطين بدنيا ,,, ما هي الأسباب من وجهة نظرك الشخصية التي تجعلك غير نشط بدنيا ولا تبذلك جهد ولا تمارس نشاط بدني,, ما هي الأساسب التي تمنعك منك من أن تكون نشط؟؟ لماذًا؟؟ فمثلا أنت قلت أنك في هذه الفترة ولمدة 3 أشهر لم تمارس على سبيل المثال

سلطان : لا أنا يختلف وضعي , حيث أني لدي ألأم في رجلي ,,,,,, ولكن الأن عالجتها ومطلوب مني 6 أشهر لا أمارس أي نشاط

خالد: تقصد أنك لديك إصابة في رجلك

سلطان: نعم لأنها أصابة الأمر يختلف, لو أني لست مصابا وأقوم بهذه الأشياء (يقصد عدم الممارسة لفترة طويلة) فإنها ستكون مشكلة كبيرة.

### خالد: تقصد أنك كنت تمارس الرياضة بشكل عادى

سلطان : سابقا كان الأمر عادي , أيضا بعد فبرايراأي عندما أنهى علاجي ,,,,

خالد: كما تبقى لك

سلطان أصلا 6 أشهر

خالد: تعنى أنك أنهيت 3 وتبقى لك 3

سلطان: نعم , باقى 3 أشهر .

خالد: عبدالله ما هي الأساباب التي تمنعك من أن تمرس أي نشاط بدني.

عبالله: الخوف من والدى ( الأب والام) الانهم يخافون علي, يقولون أنه الابد أن يكون معي أخ أكثر مني أو معي أو الاد من أبناء النايس الذين بعرفونهم كي يطمئنوا ,,, الأنهم أكثر الأحيان يخافون من المشاكل ,, لو مثلا أتعارك أنا و أي أحد ....

خالد: ما نوع المشاكل التي يخافون منها.

عبدالله : مثلا هنا كلهم يحبون (show off ) الإستعراض

خالد : مالذي تقصده بـ ( (show off )

عبدالله: المقصود لذلك ,,, يعني أنهم مثلا إذا قمت بشيء أفضل منهم فإنهم سيسعون لتخريبها من باب الحسد فتجدهم دائما يخولون أن يبقون الأحسن ولا يغلبهم أي شخص أخر ويعمل أحسن منهم ,,,, لكن في المدرسة لو قمت بعمل الأمر عادي حيث هناك أساتذة ولكن إذا ذهبت مع أصحابك ولا يوجد مع ( no adults) يعني لا يوجد أحد كبير معكم وتلعب مثلا مبارة كرة وفزت على الفريق الثاني وما يربحوا فأنهم يقولون بإنهم مخطؤن , ولكن هم يفوزون فإنهم لا يقولون شيء فالراياضة عندهم غير .

### خالد: هل تعنى أنه لا روح رياضية عالية عندهم ؟؟

عبدالله نعم

خالد: تعنى الأعمار الصغيرة

عبدالله: كل الإعمار

# خالد: لا توجد لديهم روح رياضية ؟

سلطان : مثلا عندما يخرج فريق ليفربول أو مانشيستير سيتي فأنهم لا يقولون أي شيء ولا يفعلون مشاكل لكن لو أنهم خارجا فإنهم يقومون بمشاكل .

خالد: عذرا لم أفهمك جيدا مالذي تعنيه ؟؟؟

سلطان : مثلا فريقي أنا وعبدالله نلعب مع فريق ثاني وأعرف ذلك الولد في المدرسة وانا لا أحبه وهو لا يحبني , فعندما أقوم ( أنا حركة زينة ) بمهارة جيدة وأعجبت الجميع وأبدو إعجابهم فنجده هو لا يبدي أي تعليق و يظهر إعحابه , أو مثلا أن أنا أحرزت هدفا , وهو لم يعجبه ذلك فإنه يغضب وينزعج ويحاول أن يظربني أو شيء من هذا القبيل

### خالد: تقصد أنه يحاول خلق مشكلة؟؟

سلطان نعم

رياض: أو يحاول أن يعرقله في اللعب.

سلطان : يحاول أن يعرقلني ( يكسرني ) أثناء اللعب أو شيء من هذا القبيل , بينما شيء كهذا في مبارة كبيرة وعلى التلفزيون تجدهم يتقبلون ويسكتون ولا يقولون أي شيء , لأنهم يعرفون أم مليون شخص يشاهدهم.

خالد: تقصدون هذا نوعا من المشاكل التي يخاف منها الأبوين

رياض, عبدالله , سلطان ,,, نعم

خالد : تمام ,, هذا عامل أو سبب ممكن أن يمنعك من ممارسة النشاط ,,, هل هناك أسباب أخرى

سلطان: تقصد أسباب لا تجعلنا نمارس نشاط بدني ؟؟

خالد: نعم لا تجعلك تمارس نشاط بدني .

عبدالله : **الإدمان** على التلفون أو الإكس بوكس أو الأجهزة الإلكترونية

رياض: كلالباليستشن ...

عبدالله: أو تصفح الإنترنت

رياض: التلفزيون

خالد : تقصد أنه ياخد وقتك و لا يجعلك تمارس نشاط بدني ؟ ؟ ؟؟ ما رأيك أنت ياسلمان ؟؟

عبدالله: الإستقاض منأخر يجعلك تشعر بأنك متعب , تشعر بأنه ليس لديك القدرة أن تفعل أي حاجة وتشعر بأنك تعب وغير قادر على النهوض .

خالد: تقصد أن هذه أسباب تجعلك لا تمارس نشاط بدني ,,, تمام لنتكلم في نفس الموضوع وهو عدم ممارسة نشاط بدني ,,,,, طالما أنا لا أمارس نشاط بدني ,, المفروض أن وقتي هذا سأقضيه في تسلية ما ,, عادة ما هو نوع التسلية التي تقضون فيها أوقاتكم ولا يوجد بها أي نشاط بدني ؟؟؟؟؟

عبدالله: بلايستيشن

سلطان : نعم صح هذه احسن حاجة <mark>,,, ملايين وملايين وبلابين أشخاص في العالم على الإكس بوكس أ**ون لاين**</mark>

خالد: تقصد اللعب أون لاين ؟؟

سلطان عبدالله: نعم

خالد: وأنت ( مشيرا إلى سلمان ) ما هي أحسن تسلية تؤديها بدون نشاط بدني أي نشاط لا يعتمد على الحركة

سلطان : ( في توضيح ) إكس بوكس كمبيوتر ,,, أكثر شيء <mark>الإكس بوكس</mark> هذه الشائعة عند الجميع والتلفونات , <mark>البالك</mark> بيري والأيفون

خالد - هل هذه تأخد وقت؟؟؟

سلطان ,, رياض : <mark>نعم تأخد وقت , فكل مرة تقرر أن تتوقف , يشدك</mark> , وتقرر التوقف ويشدك و هكذا .

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خالد: تأخد وقت كثير ؟؟؟
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سلطان: نعم

خالد: رياض ما رأيك؟

رياض: التلفزيون والإنترنت يأخدون الوقت , حيث تبدا و لا تستطيع الوقوف

خالد : تقصد أنك تبقى مستمتعا بالتلفزين فلا تنهض منه

رياض : نعم

خالد : طالما قلت أنه يأخد وقت كثير دعنا نبداء بك , هل ياخد منك الكثير من الوقت ؟؟

رياض: نعم

خالد: هل تحب الأفلام أو المسلاسلات أو برامج الأطفال

رياص" الأفلام

خالد, طالما الأفلام, هل تضع دفي يدي لفلم أو تنظر أن يأتي فلم على التلفزيون ؟؟

رياض: عادي أي فلم موجود على التلفزيون

خالد :: تمام ,,, الأن لدينا نشاط بدني , ونشاط غير بدني ,, هذا النشاط البدني ككرة القدم ,, السباحة أي شيء ولديك نشاط أخر غير بدني ,, تلفزيون, أفلام إكس بوكس ,, لايستيشن ,, تلفون ,, إنترنت ,, كمبيتر ,,,,, مالذي يجعلك تتجه للنشاط الدي لا يوجد به جهد بدني ,, وتترك الأخر ,, لماذا , ما السبب؟؟؟

سلطان : لو عندك أصدقاء ,, 3 أو 4 , كل هولاء الأربعة إتجه هنا , وأنت الواحيد إتجهت هناك ,,, أين سنتجه ؟؟؟

خالد : تقصد تطر أن تتجه معهم

سلطان: بالإيماء .. نعم

عبدالله: الأسهل, الأسهل أنك تلعب <u>يعنى حتى الطقس لا يسمح</u> بأن تخرج فإنه من السهل أن تدخل اللعبة وتلعب وتكون أصدقاء وتتلكم بالميكروفون والتواصل يكون أسهل أو بالإنترنت والفيس بوك, يعني أكثر الأحيان العب البلايستيشن لانه سهل ولا يأخد جهد كثير

خالد: ما رأيك سلطان ,, عذرا سلمان ؟ ما السبب الذي يجعلك تمارس نشاط لا يوجد به جهد بدني وتترك النشاط الذي به جهد بدني

سلمان العب البلايستيشن

خالد: لماذا ؟؟ تلعب البلايستيشن بدل من أن تلعب كرة ؟؟ في أققات ما

### سلمان: أحيانا الطقس لا يكون جميل

خالد: تظطر أن تمارس نشاط لا يوجد به جهد بدنى ؟

سلمان / نعم ( إيماءة )

خالد : رياض ما قولك أنت ؟ مالسبب الذي يجعلك أحيانا تترك النشاط البدني وتتجه لنشاط غير بدني

رياض : <mark>مثلا أكون العب مع أصدقائي , وعندما يذهبون للعب بالإكس بوكس أو شيء من هذا القبيل لا يمكن أن أبقي</mark> بمفردي وأذهب معهم

خالد تقصد كما فعل أصدقائك تفعل أنت ؟ تلعب إكسبوكس , أو تشاهد التلفزيون أو تقوم بأي شيء

رياض: نعم

عبدالله: أيضا أكثر الناس لديهم إكس بوكس والمتقدمين في الثكنولوجي, يشترون الألعاب الجدد ويتشافسون كل واحد يشتري أفضل من لاأخر, والأخر يشتري ألعاب أكثر ليتفوق على الاخر في المعدل من حيث المستوى

خالد: تقصد أنك تتحصل على مستويات أفضل من غيرك؟

عبدالله: نعم , فمثلا هناك بعض الألعاب المرتبطة بالقتال وغيره ,, يعني ههههههههه عندما تقتل الكثير من الناس كل ذلك يجل ,, كذلك أفضل لاعب في المسابقات , <mark>وما إلى ذلك وهناك مسابقات عالمية</mark> وتحاول أن تربح

خالد: على مستوى العالم؟

سلطان , عبدالله: نعم على مستوى العالم

سلطان : قبل شوي , قبل ما أتي معك كنت ألعب على الإكس بوكس مع حوال 100 مليون شخص حول العالم على لعبة واحدة ,, هذا فقط على واحدة ,, هذا فقط على الإكس بوكس هذا ليس على الوي ,, والبي إس بي , والبلايستيشن وغيرها , هذا فقط على الإكسبوكس 100 مليون على لعبة وحدة وفي نفس الوقت36:58

خالد: 100 مليون ؟؟؟

سلطان 100 مليون على لعبة واحدة . وهناك أكثر من

خالد: وهذه فيها تنافس

سلطان . عبدالله : نعم كمسابقة

خالد : بمعنى كل واحد يحاول أن يحسن من مستوى , ومن تم <mark>يصنف فى معدل</mark> معين,,,, من وجهة نظركم , هل هذا مفيد لكم بدنيا أم أنه غير مفيد ؟

رياض: ليس مفيد

عبدالله: بدنيا لا لكن هناك بعض الألعاب تجعلك تفكر بطريقة أحسن , حيث أن بعض الألعاب تتطلب منك أن تفكر كيف تعمل ,,,,,,,, مثلا في الأي فون هناك لعبة إسمها ( الأندبندنت ) وهي عليك أن تترك أشياء وتضعها فوق بعضها ولكن بأقل عدد ,, بالتالي من الضروري أن تفكر لو هناك خشبة هنا أين يمكنك أن تظربها ,, من الأعلى حتى لا تفلت أو الثانية لو تظربها من تحت يمكن أن تلفت وأشياء من هذا النوع تجعلك أذكى

سلطان: أول ما ظهر الأن وهو شيء جديد أن الإكس بوكس فيه كنكت وهذا فيه رياضة, تتحرك وتقف.

خالد: هل جربتها أنت؟

سلطان: نعم جربتها

عبدالله: هناك شيء يشبه الكاميرا وترى مكانك مثلا لتلعب الكرة تكون واقف و تحرك رجلك كأنك تحدد الكرة, وهذا في الإكس بوكس.

سلطان : أو مثلا رياضة تودى هكذا أو هكذا (يشير لحركة بجسمه)

# خالد " عندما تستعملها تشعر أنك تنشط بدنيا.

سلطان: نعم , , خاصة في الوي

عبدالله: الوي مختص بأشياء مثل هذه وهو به شيء كالعين, وفيه حساس حركة ( motion sincere ) في اليد فمثلا لو تلعب تنس فإنك تمسك السنسر كأنه مضرب وتحركه في اللعبة وعندما تضرب بهذا الوضع يحدث نفس الشيء في اللعبة فلهذا يجعلك تتحرك أو تجرى, تقفل تنزل,

خالد هل جربتوها أنتم ؟

رياض سلطان عبدالله سلمان نعم جريناها

عبدالله / هناك أيضا ملاكمة حيث تمسكه هكذا ومن تم يشبه وتمسك في اليد الثانية وتمارس الملاكمة , أي تتلاكم أنت وأحد دون أن تلمسا بعض سواء أون لاين أو في اللعبة نفسها .

خالد: هل هناك مجال في أن تلعب الوي أون لاين ؟؟

سلطان: أجل, خاصة حتى الكونيكت, حتى البلايستيشن فيه, نوع يسمى ( بلايستيشن موف )

عبدالله: ( بلايستيشن موف )

خالد: هل كلكم جربتم كل هذه الألعاب, هل جربتها أنت أيضا سلمان؟

سلمان: نعم

خالد: وهل جربتها أنت رياض؟

ر پاض نعم

خالد: هل تشعر بأنك تبذل جهد بدني عندما تمارسها؟

سلمان سلطان عبدالله: نعم نعم

عبدالله: ولكن ليس كما تتحرك أنت فعليا.

سلطان : هذه مناسبة للجو البارد أو الطقس غير جميل في الخارج يمكن أن تمارسها.

عبدالله: لكن معدل الوقت في استعمال الوي أكثر مما أنت تتجه لرياضة عادية لأنك باللعب بالوي, هم يصممون الألعاب بطريقة تحعك ترغب في أن تلعب أكثر في القضي وقت أطول في اللعبة مما أنت تذهب بنفسك للعب. كذلك ليس من الضروري أن يكون أصدقائك بالقرب منك لتلعب حيث يمكنك أن تلعب بمفردك , أو أن كان أصدقاءك معك يمكنك أن تلعب معهم.

خالد: تقصد هناك مجال, هكذا أو كهذا؟؟

عبدالله : نعم ,, خاصمة الأن وفي هذا الوقت الطقس ليس جميل عند الخروج ولا يمكن أن تخرج أن تلعب كرة أو غيرها فتستطيع أن تلعب بالبلايستيشن أو الكونكت أو شيء كهذا .

خالد : ( مشيرا إلى رياض ) مارأيك أنت في كل هذه الألعاب , الوي , الكنكت , الباليستيشن ؟؟

رياض: صحيا أفضل, إذ ليست كما تجلس وتلعب الإكس بوكس العادي وألعابه, بينما الكونيكت يمكن أن تتحرك به والا تبقى جالسا تستطيع الحركة. خالد: جميل ,,, هل تشعر بأن الجهد الذي تبدله مع الوي أو الإكس بوكس كنكت أو غيرها من الألعاب التي بها حركة تبذل جهد عالى وجيد أم أنها مجرد حركة بسيطة فقط.

سلطان : الأن هناك لعبة جديدة سننزل في فبراير في الكنكت تستعمل فيها الأوزان التي ترفع ( weight lifting )

خالد: رفع الأثقال

سلطان : نعم ,,, تشتريها ومثلا تضع رقم 4 , أو 5 أثقل , 6 أثقل وهكذا وكانها ضوروري من إستخدام الكوابل ليست وايرلس ,, لا يمكن أن تكون ويرلس ,,

خاللد: سوف يأتي يوم وتصنع (ضحك جماعي)

سلطان : هذه أخر لعبة وهي الممتازة يمكنك أن تكون مع شخص أخر اون لاين والجهاز يخبرك بأنك تحصل على نقاط , 500 مثلا في الدقيقة وأنت تحاول أن تفوز عليه واللي يفوز يتحل على نقطة وتجد نفسك تعيد تعيد ولا تتوقف , وكل شيء فيها

خالد : إذن من مميزاتها أنها تحفزك إلى ممارسة النشاط؟ هل هناك أي شخص يود إضافة أي نقطة لهذه الجزاية

خالد: الأن سأعطيكم 3 مصطلحات, وكل مصطلح أو كل حملة, أو كل كلمة من هذه المصطلحات اخبرني أنت مالذي تعنيه لك ,, نبداء معك أنت سلطان, أنها في الواقع أربع كلمات وليست عندما نقول ( الحالة البدنية ) ما الذي تمثله لك هذه الكلمة أو هذا المصطلح هل هي مهمة, غير مهمة, والحالة البدنية لجسمك \

سلطان: تقصد صحة الجسم

خالد: الحالة العامة لجسمك ما تقول عنها ما وجهة نظرك بها .

سلطان: يعني هذه الحالة لا تأتي بمفردها الأن, لازم أنت تقوم برياضة لأجل أن تحثل عليها

خالد: لأجل أن تكون حالتك البدنية كويسة

شلطان: تكون أحسن

خالد: عبدالله مارأيك

عبدالله: لم أفهم السؤال جيدا

خالد : أنت سلمان ما الذي تعنيه لك هذه االكلمة . عندما نقول الحالة البدنية مالذي تمثله لك حالة جسمك

سلمان: بإيماء, لم أفهم السوال,

رياض: بمعنى أن تجعل جسمك فبالحالة التي تكون عليها أي <mark>لا تكون أكثر من الوزن الذي من الفروض ان تكون عليه</mark>

خالد: لو قلنا التخصص الرياضي , مالذي يعنيه لك عندما نتحدث عن مسئلة التخصص في رياضة ما ,,, في نوع معين من الرياضة مالذي يعنيه لك , إلى أي مدى مفيد , مهم , ليس مهم , ما قولك ؟

سلطان: التخصص الرياضي أي أنك تعرف ما الذي تقوم به في الرياضة

خالد: أو تتخصص في رياضة معينة ..

سلطان , رياضة معينة كالكرة مثلا ؟

خالد: مثلا, الكرة أو غيرها, كرة القدم فقط, أو السباحة فقط أو كرة يد فقط ما الذي يعنيه لك هذا الكلام التخصص في نوع من النشاط الرياضي

سلطان, مثلا,

خالد: هل هو مهم أو ليس مهم , مفيد أم أنه غير مفيد , هل فيه ميزات و لا توجد به ميزات \

سلطان . نعم هو مفيد . فمثلا إذا كنت تلعب كرة قدم فقط وأنت لا تعرف أي شيء

خالد : أقصد لو أنك تتخصص في رياضة ما ولا تهتم بالرياضات الأخرى ,, يعني تتخصص في كرة القدم فقط ولا تهتم بالرياضات الأخرى مثلا السياحة ليس دائما

رياض: يعني تتخصص في هذه الرياضة تتعلم أشياء

رياض: لأنه مثلا الملاكمة تتعلق بقوة اليد والسرعة ليس كل شيء لكن أن تنوع حل لأنه حيث في كل رياضة تتطلب أن تحرك جسمك بطريقة مختلفة أي تقوم بترييض كل العضلات بطريقة مختلفة مثلا الملاكمة العضلات الخاصة باليد والصدر أكثر شيء والأرجل لكن الكرة ,, الرجلين أكثر شيء لأنك تجري أكثر الوقت.

خالد: تمام, مالذي كنت تقوله رياض فيما يخص التخصص أي أنك تتخصص في لعبة ما هل هذا مفيد أم غير مفيد جيد أو غير جيد أو غير مهم أو غير مهم إيجابي أو سلبي مثلا؟؟

رياض : ليس مفيد لأنك عندما تلعب الكرة لزم تحتاج أثناء ممارسة الرياضة أن تجري كثير لزم تمارسة العاب القوى والقفز وتقوي جسمك

خالد: مارأيك سلمان هل ترى بأنه مفيد وجيد ومهم أم ترى أنه غير مفيد وغير مهم انك تتخصص في رياضة معينة, كأن تتخصص في السباحة ولا تهتم بالرياضات الأخرى أو تتخصص في السباحة ولا تهتم بالرياضات الأانية أو تمارس كرة اليد ولا تهتم بارياضات الأخرى ما رأيك أنت أيهما أفضل أن تتخصص أو أن لا تتخصص

سلمان ,,, ( تعبير أيمائي بلا أجابة )

خالد: هل هناك أي أحد يريد إضافة أي شيء لهذه النقطة ؟؟

خالد: الجاذبية الجسمية , أن جسمك يكون جذاب ,, هل تعتبرها شيء مهم لك أم ,,,, أي أن جسمك سيكون جذاب لا أعرف مفهوم الجاذبية بالنسبة لكم

رياض : ( يحاول شرح السؤال) هل تحب الشكل العام لجسمك

خالد: هل ترى بأنها شيء مهم وجميل أم لا

سلطان : يعنى ليس ,,,,, ي<mark>عنى 50%</mark>

خالد: 50% أهميتها

سلطان : لو ما عندك عضلات ,, ما عندك شيء ,,,

عبدالله , ليست مهم لأن الشخص لو أنه صار جذاب مثلا ليس من الضروري أن يكون ذلك بالجسم ,,,يمكن بذكائك وبطريقة تفكيرك وبطريقة مختلفة عن الآخرين فستكون فريد من نوعك ومميز وليس من الضروري أن تكون كما جميع

الناس, الجاذبية ليست ضرورية يعني أن تمتلك عضلات قوية وشيئ كهذا, يعني لو مثلا ,,, لو مثلا شخص قوي ولكن لا يعرؤف شيء يعني غبي يفكر فقط بالعضلات وأشياء كهذه, وشخص أخر ذكي كل شيء حيد

خالد ,,,ما المانع أن الذكى يكون عنده جسم جذاب

عبدالله , الايوجد مانع من أن تكون ذكى و جذاب , تستطيع عمل ذلك لو أردت ولكن ,,,

خالد . تقصد تبقى غير مهمة

عبدالله , <mark>نعم ليست مهمة الجاذبية الجسمية ,,</mark> أهم شي أن تكون ذكي وصحتك بحالة جيد<mark>ة</mark>

خالد: سلمان ما رأيك أنت

سلمان: لم أفهم

خالد: بمعنى عندما يكون الإنسان جسمه البدني ذو عضلات مفتولة وليس سمين وليس نحيف جدا جسمه رياضي, هل ترى أن هذا شيء مهم أنه ليس بضروري, مثلا سلطان قال 50% مهم عبدالله قال أنه ليس مهم بناتا, شيء إنت كان موجود أوكي وإن لم يكون مقوجودا أوكي سيان ليست مهمة ,, مالذي تراه أنت ,,, هل ترى بأنه من المهم أن يكون جسمك رياضي

عبدالله ,, هل من المهم أن تكون جذاب ,,

سلطان: ذو عضلات (یشرح),

خالد: هل ترى بأن هذه مهمة أو غير مهمة

ریاض : <mark>مهم</mark>

خالد: أن يكون جسمك جميل ,, ما قولك أنت رياض

رياض: نص نص

خالد: ليست مهمة كثير تعنى ؟؟؟

رياض: نعم

خالد: كم نسبة مئوية تعطيها

رياض: 3<mark>0%</mark>

خالد: 30% أهمية الجاذبية الجسمية

خالد الكلمة الأخرى التي نود معرفة ما تعنيه لك هي ( القوة ) القوة البدنية الى أي مدى تشعر أنها مهمة هل هي مهمة كثيرا أم لا ,, ما لذي تعنيه لك هذه الكلمة ما أهميتها القوة البدنية

سلطان: <mark>مهمة</mark>

خالد: أن تكون قويا بدنيا

سلطان: مهمة في كل الرياضات مثلا في كرة السلة لازم تكون قوي لو تكون ضعيف,

عبدالله: الشخص يحتاج القوة تقريبا في كل شيء يعنى لو أنك قوي تستطيع المشي كثيرا تستطيع أن تتحرك, بيما ما لو أنك ضعيبف أسياء كثيرا لا تستطيع عملها , مثلا لو أنك تعمل في مكان يستوجب رفع صناديق أو تمشي كثيرا فستتعب كثيرا لكن لو أنك قوي أكثر الأشياء ستكون سهلة.

خالد: ما رأيك أنت سلمان, هل القوة البدنية مهمة أو غير مهمة,

سلمان: مهمة

خالد, تقصد أنها مهمة .... كثيرا

سلطان: لماذا

خالد: نعم لماذا ترى بأنها مهمة فيما تفيدك

سلطان: لو أنت قوي,,,,,, ليش مثلا

سلمان, لأنك إن لم تكون قويا, وتريد أن تضرب الكرة سوف لن تصل إلى مسافات بعيدة, وبينما لو أنك قوي يمكن ان تضريها لمسافة بعيدة

خالد: ما رأيك أنت , هل القوة البدنية مهمة ... غير مهمة ؟؟

رياض: <mark>مهمة</mark>

خالد: مهمة,,, كثير أم ؟؟

رياض<mark>: مهمة كثير</mark>

خالد: مهمة كثيرا لماذا كما قال سلطان مفاجئة القوة البدنية تساعدك على اللعب بقوة كما في الكرة ,,, أو نحتاجها في الملاكمة لأجل أن الملاكمة الأجل الملاكمة الأجل أن الملاكمة الأجل الملاكمة الأجل الملاكمة الأجل الملاكمة الم

خالد: وفي الحياة العامة, إلا نستفيد من القوة.

رياض: بلا يعني لو ت<mark>رغب أن ترفع أشياء من غرفة إلى غرفة</mark>

خالد : الأن نعود للنشاط البدني في المدارس ما نوع النشاط البدني الذي تمارسونه في المدارس

سلطان: مثلاً يعني في ه كرة القدم كرة السلة التنس

رياض: البينج بونج

سلطان عذرا لم أسمع جيدا

رياض البينغ بونغ

خالد: كرة الطالوة

سلطان: أيضا الرجبي

رياض: الكريكت والبسبول \

خالد: هل كل هذه الألعاب موجودة في المدرسة

رياض, سلطان, نعم كل شي, وبيعض المدارس

خالد: عبدالله ماذا لديكم في المدرسة

عبدالله عندنا كرة اليد , السباحة كرة المضرب الريشة ,, السباحة , لا يوجد لدينا مسبح لكن في بعض الأحيان يأخدوننا إلى المسبح ,, أيضا يوجد الأدوات الخاصة بالجم ( صالة الرياضة ) , أيضا جهاز التجديف أيضا هناك الأثقال

خالد : كل هذا موجود في المدرسة

عبدالله: نعم, أيضا يوجد الملاكمة, مثل الدمية ومجس بمعنى يعطي كم قولة اللكمة, ة وهناك مدربين يساعدون لأجلا أن تتحسن وفيه كرة الطالولة والتنس تقريبا كل شيء

خالد: سلمان ماذا لديكم هناك

سلمان : عندنا كريكت , رغبي كرة قدم , كرة سلة , كرة يد , سباحة .

خالد وأنت رياض

رياض : عندنا الكثير مثل كرة السلة , كرة المضرب , كرة اليد وأشاياء كثيرة مثلها

خالد: هل تمارسون كل هذه الألعاب, هل جربتم الرغبي, الكريكت وغيرها

# سلطان نعم و كل فصل

عبدالله: أول ما بتداء المدرسة وفي أول أسبوع كل مدة تقوم بعمل رياضة مخصصة لأجل أن تتعلم ثم بعد بعض الأسابيع تنتقل إلى رياضة مختلفة مثلا, قبل أن أطلع كنا في الأسبوع مرتين, حصتين رياضة, في الحصة الأولى نعمل كرة يد, هذا يوم الأثنين ثم في الجمعة نمارسة كرة السلة لكي نتعلم لعبتين في وقت واحد ,,,,,,,,,,,,,,, بعدها نعمل رياضتين مختلفتين و هكذا

خالد:م ما هي أحسن رياضة يحب أن يمارسها كل واحد منكم أفضل رياضة تحبها أنت

سلطان , رياض ( في وقت واحد ) <mark>كرة القدم</mark>

عبدالله , <mark>سباحة</mark>

سلمان , كرة القدم

خالد لماذا كرة القدم لسلطان

سلطان : لأني ولدت معها , لأني مع عمي عندما كنتا في الإمارات ,,, كل يوم كرة كل يوم ,

خالد: فأصبحت ,,,,, وأنت عبدالله لماذا تحب السباحة وليس غيرها

عبدالله يعني لا تستطع أن تتعور بها كثيرا ,,,

خالد: كيف لم أفهم

عبدالله يعنى في كرة القدم ,,,,,,,

خالد: تتعور ن تقصد الإصابات

عبدالله نعم , كذلك سهلة و جيدة للجسم , وتريض كل العضلات يعني تعطينا أيضا أشياء كثيرة

خالد: تمام, لماذا كرة القدم سلمان,

سلمان لأنني <mark>عندما كنت صغير كنت ألعب كرة قدم , يعني عندما كان عمري 4-5 كنت ألعب كرة قدم فحبيت كرة القدم</mark>

خالد: حبيتها ... و أنت رياض

رياض: <mark>تسلية</mark>

خالد: مسلية, وممتعة,

رياض .: نعم مسلية أيضا فيها الجري كثير

خالد: الأن على وشك أن ننهي, أن شاء الله, هل فيكم أي شخص يمارس أي نشاط بدني مع الأسرة ككل مثلا, مع والدك ,, مع أمك ,,, مع أمك ,, مع أمك ,,, مع أمك ,, مع أخواتك , أي تمارسون أي نشاط في نوع من النشاط البدني كأسرة واحدة معا

سلطان , الجم , والسباحة

خالد / هل تذهب مع والدك , و أخواتك

سلطان : كل العائلة

عبدالله ;: العائلة عندما تشتري الوي لأنها أصلا للعائلة , لأنك أكثر الأحيان لا تستطيع الخروج مع العائلة لانك لا تستطيع أن تختلط مع الناس كثيرون لكن لو أنك والدك وأمك وهناك أناس كثيرون لكن لو أنك في البيت وتشتري الوي , يمكنك أن تلعب أنت والعائلة كاملة ليس من الضروري أن يكون أحد تعرفونه , فكلكم اتعرفون بعض وتستطيع أن تلعب أي شيء معا , كالملاكمة ودون إصابة وتمارس رياضات كثيرة دون إصابة كذلك مع العائلة وليس من الضروري الخروج لمكان مختص وما إلى ذلك وتستطيع تعلم كل شيء من اللعبة

سلطان : كما أنها ليست فقط للتسلية صدقا صدقا أنها جهد جهد , عندما تنتهى تعرق

الباحث: هذا مع الوي

المشارك 1: نعم, مع الوي, الكنكت خاصة خاصة الوي

الباحث: تبذل جهد لدرجة أنك تتعرق,

المشارك 1 نعم

المشارك 2 كذلك تجلس وقت طويل تلعبها و لا تأخد منك ,,, أو بعض الحياء تأخد منك جهد كثير في بعض الألعاب لأنها خاصة عندما تكون مع العائلة لا ت,,,,,,,

الباحث: تقثد لا تمل

المشارك 2 : لا لا أقصد لا تشعر بالخجل وستبذل أقصى ما نستطيع لانه لا يوجد أحد سيضحك عليك , وحتى ولو ضحك عليك فإنه عادي من عائلتك الجميع يمرح , وكذلك يبذلون جهد

تقصد هذا مع الوى

المشارك 2, نعم

الباحث مار أئيك أنت ( بالإشارة إلى سلمان )

المشارك 4, نفس الشيء

الباحث : تؤيدهم ؟؟

المشارك 4 نعم

الباحث: مرأيك أنت يا رياض ,, هل تمارس أي نشاط بدنى عائلى كأسرة؟؟

المشارك 4 : <mark>المشي</mark>

البحث: المشي؟

رياض نعم

الباحث: أنت وزعائلتك مثلا ؟

المشارك 4 / نعم بعض الأحيان نخرج مشى للدكاكين لشراء حاجات

البحث: تسوق تقصد

المشارك 3 : نعم

المشارك : نعم

الباحث: تعتبرونه أفضل, حتة ولو في وجود سيارة ؟

المشارك 3 :نعم

الباحث هل أنت لديكم سيارة في البيت

المشارك 3: لا

الباحث: حتى ولو متاحة فرصة الباص هل تفضلون المشى مثلا

المشارك 3: نعم

الباحث: تقصد هل تستطيعون ترك الباص وتذهبون مشيا

المشارك 3نعم

الباحث تمام

الباحث شكرا

الحمد شه

## تحليل المقابلة والدراسة الثانية (أولاد)

- النشاط البدني كثقافة عامة.
- أن أعرفه أنه كيف أنك تأكل أكل صحي
- 👃 هو الرياضة والحركة والمشي يعني الشخص يتحرك و يمشي
- المريقة الجلوس كذلك موعد النوم و والصحو مالذي يقوم به الشخص صباحا عليه المناط
  - 🗼 🔒 الرياضة
  - 👃 أفهم ما الذي تعنيه ولكن لا أستطيع التعبير
    - إلى أي مدى تعتبر نفسك نشط
  - 🚣 في الوقت الحالي لا أمارس أي نشاط بدني لأني مصاب لا أستطيع اللعب
- 👃 لأنى حوالي ثلاثة أشهر لا رياضة لا ألعب لا كرة ولا رياضة كل الوقت إلا على البلايستشن
- 🚣 🔒 كل أحد كرة قدم كل أحد تدريب وكنت أذهب للجم وأمارس السباحة أذكر كل أربعاء وسبت
- 👃 أعتبر نفسي نشط (,, لأنني أمشي كل يوم) (ولكن المشكلة أنه لو الجو برد أضطر لركوب الباص )
  - أمى وأبى يريداننا أن نركز في در استنا ولا يسمحان لنا باللعب
    - 👃 في عطلة نهاية الأسبوع نذهب للمدرسة العربية
      - 👃 أذهب إلى السباحة خمسة مرات في الأسبوع
        - 🚣 أذهب إلى الجم مع أبي وأخي
        - 👃 العب الكرة كل يزوم مع أصدقائي
    - المشارك 1 .. ماذا عن المدرسة .. هل تقومون بأى نشاط:
      - 👃 في المدرسة كل يوم أو يومين
  - 4 لو الجو جميل نلعب كثير ا. ولكن لو الجو ليس جميل لا نلعب كثير ا
    - 👃 حصة الرياضة دائما ألعب كرة مع أصدقائي
- لله .. كنت أمارس السباحة ولكني توقف , بسبب مشكلة المواصلات, أي انك تسخن داخل المبنى ولكن عند خروجك يكون المجن المينى ولكن عند خروجك يكون الجو بارد إلى السيارة وبجنب الباب يعتبر الأمر عادى
  - لا غير نشط لأن الجو غير جميل في الخارج لل
- لله نعم أنا نشط بدنيا لأنني أتحرك كثيرا وألعب كرة وأمارس رياضات في المدرسة , أحيانا أعود إلى البت من المدرية مشى حوالى 2 ميل
  - نوع النشاط البدني الذي يمارس في المدرسة
    - 👃 سباحة <sub>..,,,</sub> كرة يد <mark>فقط جمعة وخميس</mark>

# فما هو الفرق من حيث معدلات النشاط البدني الخاصة بك بين هنا في بريطانيا وبين هناك؟؟؟

- لله عندما تكون فى البلاد العربية الأب والأم لا يخافون عليك كثيرا ويشعرون بأمان أكثر (لكن هنا في بربيطانيا نحن في غربة يخافون عليك وأكثر الأحيان لا يتركونك تخرج)
  - 👃 أرغب الذهاب إلى مكان أو أمارس رياضة يجب أن يوصلني أحد إخواني الكبار
    - 👃 خشية أن تحصل لي المشاكل
    - 👃 ولكن عندما كنا في اليمن و كنا تقريبا نلعب كل يوم ونخرج لأي مكان.
      - ♣ وتشعر بالأمان تعرف الناس جميعا والجيران
        - 👍 وأصدقائي هم جيراني

- 🚚 هناك كنت أقل نشاطا لأنه لا توجد إمكانيات مثل التي هنا فلا يوجد جم ولا حوض سباحة
- in my country I don't do too much physical activity during sport education lesson like what I do here

#### خالد: لو قارنا المدارس هنا والمدارس هناك؟

- الله المنا المناف المسلم الميون مرة من المناك 🕹
- الاستراحة هناك ما بين 10 إلى 20 دقيقة أما هنا فهى نصف ساعة
  - 👃 في النشاط البدني هناك متأخرين عن هنا
- 👃 مدرسين الرياضة هناك أصلا من مصر أو من اليمن أو من الإمارات و هم متخلفين لا يعرفون شيء
  - 📥 مثلا في المدارس العربية تبداء الساعة 6 أو 7 صباحا
- ا لا أستطيع الكلام عن المدارس في اليمن لأني عندما كنت في اليمن كان عمري حوالي 5 سنوات و لا زلت في الروضة الروضة
  - 4

## من حيث المعدات وزمن حصة الرياضة

- هذا أفضل من حيث المعدات وزمن الحصة
- 🚣 يوفرون شخص مختص في كل مجال فهناك مدرب كرة وأخر للسباحة وكل في مجاله
  - 🛨 كل الأشياء المطلوبة متوفرة
  - المنا الروضة كما أختى الصغيرة الساعة 9 أو 12
  - خالد: ما هو نوع النشاط الذي تمارسه والذي يجعلك تشعر بأنك نشط بدنيا؟
    - الجم ( صالة التمارين الرياضة ) لا تحتاج أن تفكر كثير
      - <del>4</del> كرة القدم
      - (يمكن أن تلعب كرة القدم في أي وقت )
      - تكون قادرا على ممارستها وتريحني )
    - ﴿ (يمكن أن تساعد في الجري أو شيء ما في الرياضة الخاصة)
      - (أنه ليس من الصعب الحصول على كرة والعب بها)
        - 🕨 (تبقى على لياقة بدنية جيدة)
- لو أريد أن أشتغل مدرب أكون متدرب كثيرا وعندما أكون متدرب كثيرا فإنه من السهل إجتياز الإختبارات لأخد شهائد عالية)
- (عندما تكون قائد فيرق في الكرة , فإن ذلك مستقبلا يمنحك الثقة بالنفس للتكلم مع الناس وتتعامل مع أناس لا تعرفهم)
  - 👢 لأنى أحبه
  - 丰 تکون <u>قوی</u>
    - 🚽 سهلة

# خالد: ما هي الأساسب التي تمنعك منك من أن تكون نشط؟؟ لماذا؟؟

- 👃 : لا أنا يختلف وضعي , حيث أني لدي ألأم في رجلي
- الخوف من والدى ( الأب والام ) لانهم يخافون على (لابد أن يكون معي أخ أكبر مني) (لأنهم أكثر الأحيان يخافون من المشاكل )
  - 🛨 مثلا هنا يحبون (show off ) الإستعراض
  - فيحبون القيام بالمشاكل ليكون مميزين

- (إذا قمت بشيء أفضل منهم فإنهم سيسعون لتخريبها من باب الحسد ) (يحاول أن يعرقاني ( يكسرني ) أثناء اللعب أو شيء من هذا القبيل ) (لكن في المدرسة لو قمت بعمل الأمر عادي حيث هناك أساتذة )
  - 👃 ولكن إذا ذهبت مع أصحابك و لا يوجد مع )
    - الإدمان على الألعاب الإلكترونية
      - 🔾 الاكس يوكس
      - الأجهزة الإلكترونية
        - كلالبالايستيشن
  - أنا أحب مشاهدة التلفزيون بالأخص الأفلام وأجلس لوقت طويل أتفرج
  - 🚣 أنا أتصفح الإنترنت كثيرا فهي مفيدة جدا لي و أجلس لوقت طويل على الكومبيوتر
    - تصفح الإنترنت
      - الأيفون >

# أنا أحب ألعاب الفيديو كثيرا ولا أشعر بوقتي كيف يمر وأنا ألعب لا الإستقاض متأخر يجعلك تشعر بأنك متعب

# خالد: عادة ما هو نوع التسلية التي تقضون فيها أوقاتكم ولا يوجد بها أي نشاط بدني ؟

- 🚣 بلايستيشن
- اون **لاين** وملابين وبلابين أشخاص في العالم على الإكس بوكس اون لاين الم
  - 🚣 کمپیوتر
  - البالك بيري و الأيفون
  - 👃 نعم تأخد و قت فكل مرة تقرر أن تتوقف يشدك

## خالد: مالذي يجعلك تتجه للنشاط الدي لا يوجد به جهد بدني .. وتترك الأخر .. لماذا .. ما السبب؟؟؟

- ♣ لو عندك أصدقاء , 3 أو 4 , كل هولاء الأربعة إتجه هنا , وأنت الواحيد إتجهت هناك , , أين ستتجه ؟؟؟ (مثلا أكون العب مع أصدقائي , وعندما يذهبون للعب بالإكس بوكس أو شيء من هذا القبيل لا يمكن أن أبقي بمفردي وأذهب معهم)
  - 4 سهل جدا أن تمارس أي نوع من النشاط ولا تبذلك أي جهد بدني ولا تشعر بالتعب
    - 👃 يعنى حتى الطقس لا يسمح
- 💠 والتواصل يكون أسهل أو بالإنترنت والفيس بوك وما إلى ذلك وهناك مسابقات عالمية وتحاول أن تربح (ومن تم يصنف في معدل معين) (عندما ألعب على الانترنت ان يدفعني للبقاء مدة أطول دون أي نشاط بدني)
  - پشترون الألعاب الجدد ويتنافسون
  - أحب أن ألعب البلايستيشن ما يجعلني أقضى جل مقتى في اللعب

When I play on the Internet that drives me to stay longer without any physical activity

لأنه هناك تنافس قوى مع أشخاص آخرين حول العالم على نفس اللعبة وهناك تصنيف عالمي للاعبين أبقي ألعب لوقت طويل

Because there is a strong competition with other people around the world on the same game online and there is a global rating of the players that's makes me playing for a long time

الباحث: من وجهة نظركم. هل هذا مفيد لكم بدنيا أم أنه غير مفيد ؟

- 👃 الألعاب تجعلك تفكر بطريقة أحسن
- 🚣 الإكس بوكس فيه كنكت وهذا فيه رياضة تتحرك وتقف
- خاصة في الوي (أيضا ملاكمة حيث تمسكه هكذا ومن تم يشبه وتمسك في اليد الثانية وتمارس الملاكمة وأي تتلاكم أنت وأحد دون أن تلمسا بعض)
  - 👃 ( بلايستيشن موف )
  - 👃 هذه مناسبة للجو البارد أو الطقس غير جميل في الخارج يمكن أن تمارسها.
- معدل الوقت في استعمال الوي أكثر مما أنت تتجه لرياضة عادية لأنك باللعب بالوي وهم يصممون الألعاب بطريقة تحعك ترغب في أن تلعب أكثر
  - 🚣 كذلك ليس من الضروري أن يكون أصدقائك بالقرب منك لتلعب حيث يمكنك أن تلعب بمفردك
    - 👢 كان أصدقاءك معك يمكنك أن <mark>تلعب معهم.</mark>
      - 4
      - 🖊 ولكن ليس كما تتحرك أنت فعليا.

الباحث: هل تشعر بأن الجهد الذي تبدله مع الوي أو الإكس بوكس كنكت أو غيرها من الألعاب التي بها حركة تبذل جهد عالى وجيد أم أنها مجرد حركة بسيطة فقط.

خالد :كلمة من هذه المصطلحات اخبرني أنت مالذي تعنيه لك,,, عندما نقول ( الحالة البدنية ) ما الذي تمثله لك هذه الكلمة أو هذا المصطلح,,

## الحالة البدنية لجسمك ؟

- 👃 يعني هذه الحالة لا تأتي بمفردها الأن . لازم أنت تقوم برياضة لأجل أن تحصل عليها
  - 👃 لم أفهم السؤال جيدا
  - 👃 لا تكون أكثر من الوزن الذي من الفروض ان تكون عليه

#### التخصص الرياضي؟

- 👃 أي أنك تعرف ما الذي تقوم به في الرياضة
- ليس مفيد لأنك عندما تلعب الكرة لزم تحتاج أثناء ممارسة الرياضة أن تجري كثير لزم تمارسة العاب القوى والقفز وتقوى جسمك
  - 👃 لا توجد لدى إجابة
  - 👍 لم أفهم السؤال جيدا

# الجاذبية الجسمية؟

- 4 مهمة بنسبة يعنى 50%
- 👍 لو ما عندك عضلات .. ما عندك شيء ...
- له ليست مهم لأن الشخص لو أنه صار جذاب مثلا ليس من الضروري أن يكون ذلك بالجسم ,,,يمكن بذكائك وبطريقة تفكيرك وبطريقة مختلفة عن الآخرين فستكون فريد من نوعك ومميز (أهم شي أن تكون ذكي وصحتك بحالة جيدة)
  - 🚣 👯 لو مثلا شخص قوي ولكن لا يعرؤف شيء يعني غبي يفكر فقط بالعضلات وأشياء
    - 👃 لايوجد مانع من أن تكون ذكى و جذاب نستطيع عمل ذلك لو أردت
      - 🛨 لم أفهم
      - 👍 مهمة و لكن ليس كثيرا أي أعطيها نسبة 30%

# القوة البدنية؟

- + مهمة.
- 👃 مهمة في كل الرياضات مثلا في كرة السلة.
- الشخص يحتاج القوة تقريبا في كل شيء.
- ◄ أنك ضعيبف أشياء كثيرا لا تستطيع عملها.
  - 👍 مهمة.... كثيرا.
- 👃 لو أنك قوي يمكن إن تضرب الكرة لمسافة بعيدة.
- بحتاجها لو ترغب أن ترفع أشياء من غرفة إلى غرفة.

خالد:م ما هي أحسن رياضة يحب أن يمارسها كل واحد منكم أفضل رياضة تحبها أنت.

- <del>4</del> كرة القدم
- لأني مع عمي عندما كنتا في الإمارات,,, كل يوم كرة كل يوم.
- يعني عندما كان عمري 4-5 كنت ألعب كرة قدم فحبيت كرة القدم.
  - 🚣 سباحة
  - لأنك لا تتعرض للإصابة وأنت تمارس السباحة.
    - لأنها جيدة للجسم ومفيدة.
      - لأنها سهلة المزاولة.

خالد / هل تمارسون أي نشاط بدني كأسرة هل تذهب مع والدك , و أخواتك

- 👃 كل العائلة
- ♣ أكثر الأحيان لا نستطيع الخروج مع العائلة لأننا لا نستطيع أن تختلط مع الناس في للسباحة
  - 👃 لكن لو أنك في البيت وتشتري الوي. يمكنك أن تلعب أنت والعائلة كاملة
    - 🔾 وتمارس رياضات كثيرة دون إصابة
  - 🔾 كذلك مع العائلة وليس من الضروري الخروج لمكان مختص
  - ليست فقط التسلية صدقا صدقا أنها جهد جهد عندما تنتهي تعرق
- ح لا تشعر بالخجل وستبذل أقصى ما تستطيع لانه لا يوجد أحد سيضحك عليك ,, وحتى ولو
  - ضحك عليك فإنه عادي من عائلتك الجميع يمرح <sub>.</sub> وكذلك يبذلون جهد
  - 👃 نعم بعض الأحيان نخرج مشى للدكاكين لشراء حاجات حتى ولو متاحة فرصة الباص هل تفضلون المشى
    - 👃 نذهب للجم كلنا مع بعض أبي وأمي وأخوتي

#### **Focus Group Interview translated into English (BOYS)**

- ➤ Terminology & Knowledge of Physical activity (TKPA)
- 1- It is the sport n= 5 {doing any type of sport}
- 2- The Healthy Eating  $n=1\{How do you eat healthy food\}$
- 3- It is the body movement n=3 {Physical activity is the sport and movement and walking I mean that when the person is moving and walking}
- 4- Lifestyle n= 1 {The Way to sit and to sleep and also what does a person do since morning}
- 5- Unable to express n= 2 {I understand you what you mean but I can't express that by speaking}
- ➤ Physical Activity & Sedentary Behaviour (PASB)

## 1- Physical Activity & Sedentary Behaviour (PASB)

- ♣ Walking rather than public transportation n=1{I consider myself active because I walk everyday but the problem is that if weather cooled I have to use the bus}
- ightharpoonup Doing a type of sport n=7
- ♣ Going to the Gym n=2 {I'm going to the Gym with my father and my brother}
- ♣ Going to swim n=1 {I'm going to the swimming pool five times a week, and play football during weekends}
- ♣ Play football in weekends n=5 {I play football every Saturday and Sunday}

# 2- Unsatisfied with my physical activity level n=4

♣ Videogameing n=3 {I do not play sport or football all the time just use playstation, Xbox}

- ♣ Focus on study n=2 {Mom and Dad want us to focus on our study and do not allow us to play}
- ♣ The Arabic school n=2 {on weekends we go to the Arabic school}

## 3- The Arabic school n=2 {on weekends we go to the Arabic school}

- ♣ I was more active in my country n=3 {because my parents are afraid of problems with other English boys and youths; they are prevent me from going out and playing with them}
- ♣ I was less active in my country n=9 {in my country I don't do too much
  physical activity during sport education lesson like what I do here}

## > Barriers to PA (BPA)

- 1- Videogames n=7 {When I play online that leads me to stay longer time without doing any physical activity}
- 2- Health conditions n=1 {I have an injury in my leg that prevents me to do any type of physical activity till after three months}
- 3- Injury n=1 {I have an injury in my leg which unable me to do any type of physical activity}
- 4- The weather n=4 {When the weather is bad I cannot get out doing any type of physical activity or playing football particularly in weekends}
- 5- Parents n=6{I am afraid of my parents because they prevent me to play out}
  - ♣ Jealousy n=4{If I do anything better than them they will do a problem as a
    jealousy}

♣ Show off n=2 Youths like the show off, so they doing problems to be distinctive}

## **➤** Motivations for sedentary behaviour (MSB)

- 1- Social networking n=4 {Communicate via Facebook and Twitter easier than get out and meet friends and allows to meet a lot of friends at the same time, that's makes me stay for a long time on the computer without doing any physical activity}
- 2- I like this type of activity n=3 {I like to use the computer (videogame, iPhone) which leads me stay on it for too long time}
- 3- Easy option n=4 {It's very easy to do any type of activity does not need any physical effort and does not makes me tired}
- 4- Peers n=3 { When my friends go to play X-Box or something like that cannot be stay by alone, so, I go to play any video games}
- 5- Addiction to electronic games and the TV n=9 { I like video games a lot and I do not feel the time going and I cannot prevent myself to play}

### > Family factors (FF)

- 1- Positive parents' role model / active family n=8
  - ♣ Positive family factor n=1{we go to the Gym together as a family my father, my mother, me, my brother and my sister, and there is a swimming pool at the same place}
  - ♣ Positive Culture n=2{we sometimes go together as a family to the park and do some exercise, (just play together at the park)}

- Walking n= 2{Sometimes we get out walking as a family for shopping or to the city centre even if the bus is available}
- ♣ Effort {it is not just for fun it is honestly an effort, when you finish you will
  find yourself sweated}
- ♣ All family {you can play with the family so, you do not need to get out to any place to do physical activity as a family}
- ♣ All family {you can play with the family so, you do not need to get out to any place to do physical activity as a family}
- ♣ No embarrassment {will not be shy and will do the maximum effort as you can because there is no anyone will laugh at you}
- 2- Not active as a family n=4{we don't get out as a whole family to the swimming pool or to do a type of physical activity}