

MOTIVATIONS AND PERCEIVED CONSTRAINTS TOWARD PEOPLE'S PARTICIPATION IN PHYSICAL ACTIVITIES AND SPORTS: A REVIEW OF QUALITATIVE STUDIES

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ABSTRACT. This paper aimed to review the most recent qualitative studies which are measured the people's motivations and perceived constraints toward participation in sporting activities. The focusing groups include children, teenagers, adults, older adults, students and people with obesity. Several databases were used to find the relevant studies. It is found that people are more motivated by intrinsic motivations than extrinsic one. Also, various intrapersonal, interpersonal and structural constraints affect their participation to sporting activities. In conclusion it is stated that different social and cultural characteristics are affect people toward participation in sports. Therefore, planning the sport programs based on people's dominant motivations and perceived constraints in sports might improve their participation in regular activities.

Key words: Physical activity, motivation, barrier, qualitative approach, regular activity.

Introduction

Physical activity in general associated with several physical and mental benefits and it affects the people's functional ability and their quality of life (Powell & Pratt, 1996). People who lead to have an active life are lead to live longer and less lead to provide serious diseases (Batty & Lee, 2004; Batty & Thune, 2000). In general, many different problems are associated with sedentary life style; obesity, hypertension, diabetes, back pain, poor joint mobility and psychosocial problems are some of the common problems (Kiess et al., 2001). In these years, sedentary life style is a major challenge of public health in the developed societies and is recognized as a global epidemic (Chief Medical Officer, 2004). Within the United States, the rate of childhood obesity is expected to reach

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40% in the next two decades (Kopelman, 2000) and the Type 2 diabetes is expected to affect 300 million people worldwide within the same time (Allender et al., 2006). In England, the number of physically inactive people (less than one occasion of 30-min activity per week) was increasing and that this trend was consistent for both genders and across all age groups (Petersen et al., 2004). Also it is reported that interest and participation in physical education gradually declines with increasing the people's age (Van Wersch et al., 1992; Papaioannou, 1997). Therefore, study on the motivational factors encouraged people to participation in physical activities on one hand, and constraints reducing or removing people's participation in regular activities are important. Qualitative research is an appropriate approach for finding why people do or do not participate in sporting activities. In this paper researchers planed to review the qualitative studies which are considered the encouraging and constraint factors influence people's participation in sporting activities.

Materials and Methods

The method of this study was review of the qualitative studies. The researchers planed to consider the most recent studies which are focused on the encouraging factors motivated various groups of people toward participation in physical activities as well as constraints reducing or removing people's engagement in regular activities.

Research papers were sourced in four ways. For the first part, a wide range of electronic databases were used to find the relevant articles, including Sport Discus, ISI Science, ProQuest, PubMed, Elsevier, Citation Index, and ISI Social Science Citation Index.

In the second step, relevant references from published literature were followed up and included where they met inclusion criteria.

Third, additional 'gray' literature not identified in electronic searches was sourced through individuals who were likely to have knowledge in this area, including librarians and researchers active in the field. This third step ensures inclusion of papers which may not be submitted to peer review journals including reports for government bodies.

In fourth step researchers focused to the relevant references from published literature. Search terms included; *regular activity, sports, physical activity, physical education, qualitative approach, exercise, motivation, barriers, and constraints*.

The related articles were entered into the next steps of the review. These steps include:

- The aim of the study. The aim of the research must explore the participants' experiences in sports and reasons for participation or nonparticipation.
- The method of study must be including the qualitative approach.

Selected articles were independently reviewed. Results were compared and discrepancies discussed. Data were extracted using a review schema developed by the research team. In most cases, the original author's own words were used in an attempt to convey the intended meaning and to allow for more realistic comparison between studies.

Results

Generally, most of participants had appropriate knowledge about the physical and mental benefits associated with physical activities. However, this is not the main reason they participate in sports. Other factors such as weight management, enjoyment, social interaction and support were more common reasons for people being physically active. Considering to this issue, results of various researches are reported based on participants' different age groups.

Children

Results indicated that children are more enjoying to participate in physical activities which are not force them to compete and win. Also, they encourage experimenting various activities. MacPhail et al. (2003) reported children are more encourage engaging in sports when many different types of physical sport opportunities are available for them. On the other hand, some factors such as support and enjoyment from parents were also crucial (Mulvihill et al., 2000). Parents have an effective role for providing sport opportunities for children to be physically active. Bostock (2001) found that mothers with young children discouraged their children from playing in environments perceived as unsafe.

Teenagers

Teenagers are more encouraged participating in physical activities for improving their fitness, body abilities, and reducing the body size and body weight. Many studies indicated that pressure to conform based on popular ideals of beauty is as an important reason for young girls being physically active (Cockburn & Clarke, 2002). Improved fitness, developing new social networks, learning new skills, and improving self-esteem are some of the most motivations encourage very active young girls for participating in sports (Flintoff & Scraton, 2001). Also, having support from family and significant others at 'key' transitional phases (such as changing schools) is essential to maintaining participation (Coakley & White, 1992). Those who continued participating through these transitional periods recalled the importance of positive influences at school in becoming and staying physically active.

Adults

Several studies considered the adults' motivation in sports (Robertson, 2003). Generally speaking, it is indicated that adults in different cultural and social levels (e.g. South Asian and Black communities, runners, gays, disabled groups, etc.) are mostly participate in physical activity and sports for improving a sense of achievement, increasing the skill, and to spend 'luxury time' on themselves away from daily responsibilities (Crone-Grant & Smith, 1999).

Studies in GP exercise referral schemes found that the medical reasons are great motivators for adults' participation in sports (Singh, 1997). Other benefits reported by referral scheme participants were the social support network created and the general health benefits of being active (Crone-Grant & Smith, 1998). Among disabled men, exercises provide an opportunity to positively reinterpret their role following a disabling injury (Robertson, 2003). For this group, displaying and confirming their status as active and competitive is beneficial. Participants in this study described the support network offered by participation as the real value of physical activity and sport. In particular, meeting other disabled men and sharing similar experiences is a key motivator. The building of skills and confidence is another motivator for disabled men for participating in sports (Allender et al., 2006; Arthur & Finch, 1999).

The enjoyment and social networks offered by adults who are the races competitors. Joggers were more motivated by the health benefits of running and the increased status afforded to them by non-exercisers who saw them as fit and healthy. Sport and physical activity are clearly important motivators for many different groups of people aged between 18 and 50 years. The reasons for participation can, however, differ subtly between people within a single group. For example, Smith (1998) interviewed members of a running club and found a distinction between 'runners' and 'joggers'. Runners were elite members of the club and were motivated by intense competition and winning. Conversely, joggers did not consider themselves competitive in races but aimed to better their own previous best time. Joggers were more motivated by the health benefits of running and the increased status afforded to them by non-exercisers who saw them as fit and healthy (Allender et al., 2006).

Elderly

Several studies indicated that older adults highly participate to physical activities and sports for improving the physical and mental health as well as environmental factors (Hardcastle & Taylor, 2001). These adults reported they participate in physical activities in order to reduce the effects of aging as well as being fit and able to play with grandchildren (Finch, 1997). While, Stathi et al. (2003) argued that encouraging the older people for participating in exercise

appears to be maintained through enjoyment and strong social networks. On the other hand, Cooper and Thomas' (2002) reported that having traditional expectations and improving social communication are some factors influence on maintaining older people's participation in regular activities.

Students

Hassandra et al. (2003) in the study tried to find the factors associated with students' intrinsic motivation in physical education. They interviewed with sixteen PE students. Analyses of interview transcripts revealed that factors associated with intrinsic motivation for participating in physical education are both social-environmental and individual differences. Individual differences in perceived competence, perceived autonomy, physical appearance, and goal orientation influenced students' intrinsic motivation. Social and environmental factors included lesson content, the physical education teacher, classmates, and school athletic facilities, as well as physical activity behaviors of the family and family encouragement, participation in out-of-school athletic activities, media, cultural values and social preconceptions. Mirsafian et al. (2013b) also indicated that Iranian students are mostly motivated by having fun and experiencing joy, having physical and mental health, having a fit body, and improving self esteem, preventing of diseases and being with friends, respectively. Also they reported that there is a considerable difference between students regarding demographic, social and educational characteristics.

Constraints toward Participation in Physical Activities and Sports

In contrast to motivational factors encouraging people for participating in physical activities, constraints have reducing or removing effects on people's participation in sports. Lack of time, lack of knowledge, overcrowding, long distance to activity areas, family problems, and lack of money and companion are indicated as the most significant recreational constraints in many studies (Kara & Demirci, 2010; Maher & Thompson, 1997; Samdahl & Jekubovich, 1997; Smith, 1995; Wilkinson, 1995). Also, fear of assault, lack of facility, gender, race, high entrance fee, lack of care and broken equipments are other factors affecting people's preferences and participation in sporting activities (Payne et al., 2002; Shores et al., 2007; Walker & Virden, 2005).

In considering the qualitative studies Coakley and White (1992) reported that negative experiences during PE classes at school are the strongest factor discouraging young girls' participation in sports. For many females, impressing males and other peers is found more important than other benefits of physical activities. While many females want to be physically active, a tension existed between wishing to appear feminine and attractive and the sweaty muscular

image attached to active women (Cockburn & Clarke, 2002). Orme (1991) reported that females are bored by the traditional sports offered in PE courses. Also, females are disappointed with the lack of variety in PE and would rather play sports other than football, rugby and hockey (Mulvihill et al., 2000). Being unable to demonstrate competency of a skill to peers in class also made students uncomfortable with PE. (Flintoff & Scraton, 2001). Also, Mirsafian et al. (2013a) indicated that Iranian female university students experience various social, cultural, intrapersonal and structural constraints toward participating in sports.

Adults

Crone-Grant (1998) in his study indicated that lack of partner or friend to participate with, poor body image, lack of coordinating to gyms' culture, anxiety and lack of confidence about entering unfamiliar settings (sport clubs) were the main constraints that adults perceive toward participating in sports. Participants in that study reported that lack of proper "role models" and also lack of realistic exercise leaders would be more effective in encouraging participation (Crone-Grant, 1998). The lack of realistic role models was also mentioned by members of the South Asian and Black community (Rai & Finch, 1997). This group did not see physical activities as a black or Asian pursuit, but rather as white, middle-class, male domain. The authors argue that there were few opportunities or facilities available to this group. Self-perception is incredibly important in motivating people to participate in all types of physical activity. The stigma attached to being socially disadvantaged was shown to decrease exercise among low-income women in the Midlands (Bostock, 2001). They reported that participants in their study did not want others to see them walking due to the social stigma attached with not owning a car (Allender et al., 2006).

Elderly

This group of people also reported that lack of realistic role models in community is the main constraints toward participation of them in physical activities (Finch, 1997). Also, Porter (2002) found that older people were anxious about returning to sports and identified cost and time constraints as the main problems. On the other hand, most of them were unsure about the sufficient amount of physical activities that they need in their ages (Finch, 1997).

People with Obesity

Most of researchers stated that in general, over weight and bad body position are two main barriers for people with obesity (Wiklund et al., 2010). These people reported that appearing in public is uncomfortable for them and they do not have a good feeling to participate with others in sports. Also, they

cannot find appropriate activities proper for their levels and there is not any activities programmed for them. Most of activities are programmed for normal people. Also, participating in sports with other persons is difficult to them because they do not have enough fitness compare to normal people. In some cases exercising alone is the only option for them. Furthermore, their expectations from others are reducing their activities (Wiklund et al., 2010).

Discussion

Motivation and Sporting Activities

Motivation is known as an essential factor for starting and continuing regular activities. Intrinsic motivation remains an important construct, reflecting the natural human propensity to learn and assimilate. However, extrinsic motivation is argued to vary considerably in its relative autonomy and thus can either reflect external control or true self-regulation. The most basic distinction is between intrinsic motivation, which refers to doing something because it is inherently interesting or enjoyable, and extrinsic motivation, which refers to doing something because it leads to a separable outcome. Over three decades of research has shown that the quality of experience and performance can be very different when one is behaving for intrinsic versus extrinsic reasons.

In this paper researchers aimed to review the qualitative studies which are considered to motivational and constraint factors affect people toward participation in physical activities and sports. It is indicated that people in different ages are motivated by intrinsic and extrinsic motivational factors. Children and teenagers are mostly motivated by intrinsic motivations. They prefer to participate in sports for having fun and joy or challenge entailed rather than because of external prods, pressures, or rewards.

Youth, for instance university students, as well as adults and older people are more motivated by intrinsic motivations however the extrinsic motivations also have an effect on their participation in sporting activities. Handicapped persons are more affect by extrinsic motivations.

In order to improve the people's motivation toward participating in sporting activities various activities could be planned. Parents play a key role for improving the children's participation in recreational sport activities. Parents should inform about the benefits of sports for children. They should realize that sporting activities do not make any problems for their children. Also, children's sport programs should be programmed as an enjoyable environment (e.g. including music, dance, etc.). Moreover, encouraging parents for participating with their children to sports could be an effective factor for making the intrinsic motivations for children because parents could provide a perfect "role model" for them.

On the other hand, providing sporting programs with the aim of stimulating the extrinsic motivations for youth and adults is important. For instance, planning the grouping sport activities for improving the sense of belongingness to sport teams or groups might be influence for improving their participation to sports.

Sporting activities provide the special environment for handicapped persons. Participation in sports makes an opportunity for them to leave the sedentary life style. Also, they have a chance to have interaction with other handicapped, play together and share their ideas and problems. Indeed, participation in sport is a special factor for improving the physical, social and moral aspects of handicapped persons. Therefore, planning and organizing the grouping sport activities for handicapped people might be effective for increasing their intrinsic and mostly extrinsic motivations to sports.

Generally speaking, sport programs should be organized based on people's dominant motivations to sports. Sporting environments can facilitate or forestall people's intrinsic motivation by supporting versus thwarting the needs for autonomy. Also, support for improving the sense of competence to people in participating in sports is important. Moreover, the groundwork for facilitating internalization is providing a sense of belongingness and connectedness to the persons, sport group, or culture disseminating a goal, or a sense of *relatedness*.

Constraints and Physical Activities

Constraints refer to subsets of causes for non commitment to a specific behavioral pattern (Jackson, 1988). Crawford and Godbey (1987) laid the foundations for the classic theoretical model of research into constraints, categorizing them into 3 groups: intrapersonal, interpersonal, and structural.

Intrapersonal constraints refer to an individual's psychological state and attitude, which prevail in interacting with preferred activity rather than interfere with preference and participation (Crawford, Jackson & Godbey, 1991). Antecedent constraints belong to this group; they preexist in the individual, before s/he is faced with the possibility of participating in physical activities. Antecedent constraints are intrapersonal factors of sociocultural content in the sense of stereotypes, which often restrict or exclude participation (Henderson, 1993).

Interpersonal constraints result from interpersonal interactions or relations among persons who participate in an activity (Crawford, Jackson & Godbey, 1991). An example of an interpersonal constraint is a person's dependence on their "important others" (family members, partners, friends).

Structural constraints are also known as interference factors; these are parameters that interfere with preference/intention for participation and actual participation. Examples of structural constraints are the lack of financial resources, lack of time or lack of appropriate facilities/services/programs.

Results of reviewed studies indicated that various groups of people experience different constraints. Teenagers and youth experience intrapersonal constraints more than structural barriers. Intrapersonal and mostly interpersonal constraints are more perceived by adults regarding participation in sports. Also, mature females reported that intrapersonal and structural constraints mostly reducing or removing their participation. Older people mostly affected by structural constraints whereas people with obesity problem perceive intrapersonal, interpersonal and structural constraints.

In general, attitude to sports grows at the first decade of people's life and develops almost at the second decade of life. Therefore, planning in order to creating and improving the positive attitude to young people regarding sporting activities is very important. As mentioned, intrapersonal constraints and psychological problems are the most barriers young people experienced.

Interpersonal constraints (social aspects of sporting activities) are the most factors reducing or removing the adults' participation in sports. In other words, lack of partner, lack of friend or somebody to participate and communicate with in sports reduces the adults' engagement in regular activities. Therefore, attention to their needs and interests could be affect their participation in sports.

Old beliefs, old and traditions, and negative attitudes to women sport are still remained in developing countries. Women's duties as a wife and mother in one hand, and lack of opportunities for participating in sports on the other hand, reducing or even removing their engagement in physical activities. People with obesity also experienced all types of constraints. In other words, due to their body position, they have the negative attitude to sports and exercise. Also, they have no partner to participate with and moreover, the sport activities are not appropriate for them. In this regards, sport responsible should take more attention to these people and provide specific sport opportunities for them (e.g. water games) in order to changing their attitude to sports, connecting them to other persons with same problem, and help them for changing the sedentary lifestyle.

Generally speaking, people in different societies experience different level of barriers. Because, various factors (e.g. cultural, social, economic, religion, etc.) affect the level of constraints people experienced toward participating in sports. Therefore, study the constraint factors, and also people's motivations, to sports based on people's cultures and nations are important.

Conclusion

This study planned to find the factors affect people's participation in sporting activities. Several studies are reviewed and results are classified based on the participants' ages. It is indicated that people are more motivated by intrinsic than extrinsic motivations. Also, various groups of people experience

different constraints toward participation in sports. In this regards, sport responsible and sport managers should have higher knowledge about the motivations encouraged people to participation in sports. Also, they should inform about the barriers experienced by people in different age groups and organize the sport programs based on their needs and interests. It would be a valuable step to reduce the constraints toward people's participation and help to improve their engagement in sporting activities.

REFERENCES

- 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(6), 826-835.
- Allender, S., Peto, V. & Scarborough, P. (2006). *Coronary Heart Disease Statistics*. London: British.
- Arthur, S. & Finch, H. (1999). *Physical Activity in Our Lives. Qualitative Research among Disabled People*. London: Health Education Authority.
- Batty, D. & Lee, I.M. (2004). Physical Activity and Coronary Heart Disease. *British Medical Journal*, 328, 1089-90.
- Batty, D. & Thune, I. (2000). Does Physical Activity Prevent Cancer? *British Medical Journal*, 321, 1424-5.
- Bostock, L. (2001). Pathways of Disadvantage? Walking as a Mode of Transport among Low Income Mothers. *Health and Social Care in the Community*, 9, 11-8.
- Chief Medical Officer. (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*. London: Department of Health.
- Coakley, J. & White, A. (1992). Making Decisions: Gender and Sport Participation among British Adolescents. *Sociology of Sport*, 9, 20-35.
- Cockburn, C. & Clarke, G. (2002). Everybody's Looking At You: Girls Negotiating the Femininity Deficit They Incur in Physical Education. *Women's Studies International Forum*, 25, 651-65.
- Cooper, L. & Thomas, H. (2002). Growing Old Gracefully: Social Dance in the Third Age. *Ageing Society Journal*, 22, 689-708.
- Crawford, D. & Godbey, G. (1987). Re-Conceptualizing Barriers to Family Leisure. *Leisure Sciences*, 9, 119-127.
- Crawford, D.W., Jackson, E.L. & Godbey, G. (1991). A Hierarchical Model of Leisure Constraints. *Leisure Sciences*, 13, 309-320.
- Crone-Grant, D.M. & Smith, R.A. (1998). Exercise Adherence: A Qualitative Perspective. *Journal of Sports Sciences*, 16, 75.

- Crone-Grant, D.M. & Smith, R.A. (1999). Broadening Horizons: A Qualitative Inquiry on the Experience of Patients on an Exercise Prescription Scheme. *Journal of Sports Sciences*, 17, 12.
- Flintoff, A. & Scraton, S. (2001). Stepping into Active Leisure? Young Women's Perceptions of Active Lifestyles and their Experiences of School Physical Education. *Sport, Education and Society*, 6, 5-21.
- Finch, H. (1997). *Physical Activity 'At Our Age': Qualitative Research among People over the Age of 50*. London: Health Education Authority.
- Hardcastle, S. & Taylor, A. (2001). Looking For More than Weight Loss and Fitness Gain: Psychosocial Dimensions among Older Women in a Primary-Care Exercise-Referral Program. *Journal of Ageing in Physical Activity*, 9, 313-28.
- Hassandra, M., Goudas, M. & Chroni, S. (2003). Examining Factors Associated With Intrinsic Motivation In Physical Education: A Qualitative Approach. *Psychology of Sport and Exercise*, 4, 211-223.
- Henderson, K. (1993). A Feminist Analysis of Selected Professional Recreation Literature about Girls/ Women from 1907 - 1990. *Journal of Leisure Research*, 25(2), 165-181.
- Jackson, E. (1988). Leisure Constraints: A Survey of Past Research. *Leisure Sciences*, 10, 203-215.
- Kara, F. & Demirci, A. (2010). An Assessment of Outdoor Recreational Behaviors and Preferences of the Residents in Istanbul. *Scientific Research and Essay*, 5(1), 093-104.
- Kiess, W., Galler, A., Reich, A. (2001). Clinical Aspects of Obesity in Childhood and Adolescence. *Obesity Reviews*, 2, 29-36.
- Kopelman, P.G. (2000). Obesity as a Medical Problem. *Nature*, 404, 635-43.
- MacPhail, A., Gorley, T. & Kirk, D. (2003). Young People's Socialization into Sport: A Case Study of an Athletic Club. *Sport, Education and Society*, 8, 251-67.
- Maher, F.A. & Thompson, M.K.T. (1997). Learning in the Dark: How Assumptions of Whiteness Shape Classroom Knowledge. *Harvard Education Review*, 67, 321-349.
- Mirsafian, H., Doczi, T. & Mohamadinejad, A. (2013a). Attitude of Iranian Female University Students to Sports and Exercise. *Iranian Studies*. In Press.
- Mirsafian, H., Mohamadinejad, A., Homaie, R. & Hédi, C. (2013b) Motivation of Iranian University Students for Participation in Sporting Activities. *Physical Culture and Sport Studies and Research*. In Press.
- Mulvihill, C., Rivers, K. & Aggleton, P. (2000). *Physical Activity at Our Time: Qualitative Research among Young People Aged 5 to 15 Years and Parents*. London: Health Education Authority.
- Orme, J. (1991). Adolescent Girls and Exercise: Too Much of a Struggle? *Education for Health*, 9, 76-80.
- Papaioannou, A. (1997). Perceptions of Motivational Climate, Perceived Competence, and Motivation of Students of Varying Age and Sport Experience. *Perceptual and Motor Skills*, 85, 419-430.

- Petersen, S., Peto, V. & Rayner, M. (2004). *Coronary Heart Disease Statistics*. London: British Heart Foundation.
- Porter, S. (2002). *Physical Activity: An Exploration of the Issues and Attitudes of Parents of pre Fives*. London: Scott Porter Research and Marketing.
- Powell, K.E. & Pratt M. (1996). Physical Activity and Health. *British Medical Journal*, 7, 313-126.
- Rai, D. & Finch, H. (1997). *Physical Activity 'From Our Point of View'*. London: Health Education Authority.
- Robertson, S. (2003). If I Let a Goal In, I'll Get Beat Up: Contradictions in Masculinity, Sport and Health. *Health Educational Research*, 18, 706-16.
- Samdahl, D. & Christensen, H. (1985). Environmental Cues and Vandalism: An Exploratory Study of Picnic Table Carving, Environment and Behavior, 174, 445-458.
- Singh, S. (1997). Why Are GP Exercise Schemes So Successful (For Those Who Attend)? Results from a pilot study. *Journal of Management in Medicine*, 11, 233-7.
- Smith, B.E. (1995). Crossing the Great Divides: Race, Class, and Gender in Southern Women Organizing, 1979-1991. *Gender and Society*, 9, 680-696.
- Smith, S.L. (1998). Athletes, Runners, and Joggers: Participant-Group Dynamics in a Sport of "Individuals". *Sociology of Sport Journal*, 15, 174-92.
- Stathi, A., McKenna, J. & Fox, K. (2003). The Experiences of Older People Participating in Exercise Referral Schemes. *Journal of the Royal Society of Health*, 124, 18-23.
- Van Wersch, A., Trew, K. & Turner, I. (1992). Post-Primary School Pupils' Interest in Physical Education: Age and Gender Differences. *British Journal of Educational Psychology*, 62, 56-72.
- Walker, G.J. & Virden, R.J. (2005). Constraints on Outdoor Recreation. In E.L. Jackson (Ed.), *Constraints to leisure* (pp. 201-219). State College PA: Venture Publishing.
- Wiklund, M., Olsén, M.F. & Willén, C. (2010). Physical Activity as Viewed by Adults with Severe Obesity, Awaiting Gastric Bypass Surgery. *Physiotherapy Research International*, 16, 179-186.
- Wilkinson, D.Y. (1995). Gender and Society Inequality: The Prevailing Significance of Race. *Daedalus*, 24, 167-178.