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NEW DIRECTIONS IN OBESITY MANAGEMENT: THE EFFECTS OF FITNESS LITERACY PROGRAM ON CARDIOVASCULAR FITNESS AND SOCIAL PHYSICAL AND APPEARANCE ANXIETY AMONG INACTIVE OBESE WOMEN

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ABSTRACT

The present research aims to investigate the effects of fitness literacy program on cardiovascular fitness and social physique anxiety and social appearance anxiety among inactive obese women. The researcher used pre-experiment design (one group pretest-posttest design). The study was conducted for a period of 6 months on 50 inactive obese women with mean age (34.6±1.92) years, with mean BMI (35.2±3.3) Kg/m². All subjects enrolled in 60 minute fitness literacy program 4 days per week for 24 week and performed step test and questionnaires of social physical and appearance anxiety pre and post the experiment. Data analysis based on T-test shows significant difference at (α = 0.05) in cardiovascular fitness and social physical and appearance anxiety in inactive obese women after 24week of training program. The concluded that fitness literacy program is efficient in enhancing physical and psychological health. These results have a public health implications on an important global problem of women obesity.

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INTRODUCTION

Obesity is a complex condition, one with serious social and psychological dimensions, that affects virtually all age and socioeconomic groups and threatens to overwhelm both developed and developing countries. In 1995, there were an estimated 200 million obese adults worldwide and another 18 million under-five children classified as overweight. As of 2000, the number of obese adults has increased to over 300 million. In developing countries, it is estimated that over 115 million people suffer from obesity-related problems. Obesity poses a major risk for serious diseases, including diabetes mellitus, cardiovascular disease, hypertension and stroke, certain forms of cancer, mental illness and in extreme cases death (Obesity and Overweight 2011). Indirect effects are also concerning as individuals can become stigmatized, anxious or develop eating disorders. Its health consequences range from increased risk of premature death to serious chronic conditions that reduce the overall quality of life. A lack of physical activity is often mentioned as one of the major causes of the so-called global epidemic of overweight and obesity "globesity" physical inactivity and low cardio respiratory fitness are as important predictors of mortality as are being overweight and obese. The reality, however, is that a significant proportion of women are not getting enough physical activity to take advantage of its health and social benefits. Recent policies on sport and physical activity of many countries put a great emphasis on health. In these policies, physical activity is explicitly linked to a healthy lifestyle and seen as part of a solution to different health problems, such as obesity and cardiovascular diseases. In order to get a proper 'dose' of physical activity on a regular basis, stimulating sport participation is considered an important goal. Research is continuing to recognize both the physical and psychosocial benefits affiliated with partaking in regular activity as well as a possible intervention strategy to reduce the rates of overweight and obesity among our societies (McKean, 2013).

One way to address the challenge of physical inactivity is by teaching our society about the importance of being active at any age. How can physical activity be incorporated into society population programs in a way with that will encourage them to remain active throughout their lives. One concept that might change their paradigm is physical literacy. Physical literacy has become an important public health issue. Physical literacy is defined as "the motivation, confidence, physical competence, knowledge and understanding to maintain physical activity

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throughout the life course" and is used as a pedagogical model for PE in several countries (Whitehead, 2010, p. 5). One of the reasons to develop the concept of PL was the perception that the importance of movement development was being neglected, due to the emphasis on 'cognitive' capacities, such as literacy and numeracy (Higgs, 2010; Whitehead, 2010).

Women obesity is a complex disease with potentially detrimental consequences. Researchers has proven the negative physical and mental side effects of obesity ranging from high blood pressure, increased levels of cholesterol, hyperinsulinemia (Ebbing, Pawlak & Ludwig, 2002; Tremblay & Willms, 2003; Sothern, Loftin, Suskind, Udall, Blecker, 1999), depression, poor body image and low self-esteem (Strauss, 2000). These findings demonstrate an increasing need for more solutions to address this crisis. Regular physical activity has been shown to have both immediate and long lasting health benefits; early and continuous participation has shown to positively affect body composition, cardiovascular health and musculoskeletal development (Strong *et al*., 2005) as well as habitual activity levels (Nemet *et al*., 2005) and self efficacy and self concept (Sallis, Prochaska & Taylor, 2000).

Although physical literacy is being promoted as having the potential to positivity influence the obesity crisis, no research has been conducted regarding how or to what effect physical literacy will have on obese individuals. Given the lack of research connecting physical fitness literacy to obesity, it cannot be concluded that a link exists between said concepts.

Physical literacy concept

Clearly there has been a major shift in the understanding of the term 'literacy'-now being subject to much wider use. Whitehead (2001) (2007), defined a physically literate person:

- Moves with poise, economy and confidence in a wide variety of physically challenging situations.
- Perceptive in 'reading' all aspects of the physical environment, anticipating movement needs or possibilities and responding appropriately to these, with intelligence and imagination.
- Physical literacy can be described as the ability and motivation to capitalize on our movement potential to make a significant contribution to the quality of life.
- As humans we all exhibit this potential, however its specific expression will be particular to the culture in which we live and the movement capacities with which we are endowed.
- An individual who is physically literate moves with poise, economy and confidence in a wide variety of physically challenging situations.
- The individual is perceptive in 'reading' all aspects of the physical environment, anticipating movement needs or possibilities and responding appropriately to these, with intelligence and imagination.
- A physically literate individual has a well established sense of self as embodied in the world. This together with an articulate interaction with the environment engenders positive self esteem and self confidence.
- Sensitivity to and awareness of our embodied capacities leads to fluent self expression through non-verbal communication and to perceptive and empathetic interaction with others.
- In addition the individual has the ability to identify and articulate the essential qualities that influence the effectiveness of his/her own movement performance, and has an understanding of the principles of embodied health, with respect to basic aspects such as exercise, sleep and nutrition.

Mandigo and colleagues (2009) modified the definition, describing individuals who are physically literate to be those that "move with competence and confidence in a wide variety of physical activities in multiple environments that benefit the healthy development of the whole person." (p. 28). In 2010, Whitehead further modified her definition to include arguable more measureable criteria; she wrote that physical literacy was "the motivation, confidence, physical competence, knowledge and understanding that individuals develop in order to maintain physical activity at an appropriate level throughout their life." (p. 5). It could be argued that this definition begins to quantify physical literacy so that it can be assessed from a teaching perspective. Acquisition of physical literacy depends upon individuals developing the necessary tools and understanding to make appropriate decisions regarding physical activity, and learning to adapt physical activity to their surrounding environment. Unlike conventional sport skill acquisition, physical literacy allows individuals to apply their knowledge in various physical settings, broadening their horizons as to what constitutes activity. Further, knowledge acquisition is not only physical in nature, as social and psychological dimensions of physical development are also recognized.

Dimensions of Physical Literacy

Physical literacy is a rather new concept and has so far, to our knowledge, not been used as a theoretical tool for empirical research. According to Whitehead (2010) physical literacy can be depicted utilizing six dimensions, A. Motivation, B. Competence, C. Environment, D. Sense of the self, E. Expression and interaction with others and F. Knowledge and understanding. More specifically, A. motivation regards aspects of a desire to be active (A1), to persist with an activity (A2), to improve physical competence (A3) and to try new activities (A4). A fifth motivation attribute can be connected to the so-called damaged motivation (A5) connected to previous experiences. B. Competence can be associated with the movement vocabulary (Rolling, crawling, walking, grasping, lifting, waving and clapping (B1), movement capacities (Simple: such as balance, coordination and flexibility; combined: for example, poise (which requires balance and core stability) and agility (which combines flexibility, balance and coordination); complex: involving further combinations of capacities; for example, hand–eye coordination needing orientation in space, agility and dexterity. (B2), movement patterns (General patterns (e.g. striking); refined patterns (e.g. development of striking as batting) (B3) and particular activities (The final stage: contextually designed patterns that are called for in particular activity settings. (B4). **C**. Environment concern everyday movement settings (C1, C2) as well as structured physical activity milieus (C3, C4). Walking, window cleaning and climbing a tree signifies everyday activities, while forms of dance, skating etc. are matters of

structured physical activity. Within the theoretical framework of Whitehead both everyday movement settings and structured physical activities incorporate a "reading" and a "responding" dimension. Reading means that a person recognizes relevant practices, while responding signifies realization in terms of doing relevant practices. D. "sense of the self", a physical literate person understands that exercise should be more about enjoyment than about competition (D1), has positive previous experiences related to physical activity and exercise (D2), an effective involvement (D3) and participates as a person and not as an objectified body (D4). E. Expression and interaction deals with issues of affluent self-expression about and through physical activity (E1), while a physically literate person participates perceptive and is empathetic with others in physical movement settings (E2). Furthermore, the physically literate person is not only sensitive (E3) but also aware of other "embodied" persons in a reciprocal way (E4). F. knowledge and understanding is connected to the ability of identifying and articulating physical activity cultures and settings (F1), to identify and articulate their own engagement within cultures and settings (F2), to access a propositional knowledge (F3) with a corresponding involving language (F4) and a clear understanding of the benefits of physical movement towards qualities of life (F5). Propositional knowledge incorporates both a pre-reflective and a reflective phase (Whitehead, 2010).

Rationale and Purpose

While all can be physical literate, it is the case that, if at any stage of life, individuals lack or lose the motivation, confidence and physical competence to value physical activity and take steps to maintain activity, they can no longer be described as being physically literate, in other words they may become physically illiterate. Although literature exists acknowledging the importance of physical exercise for the healthy physical and psychosocial development (Ebbeling, Pawlak & Ludwig, 2002), a second body of research shows physical education classes are not achieving the minimal recommended guidelines (Higgins *et al*., 2009; Stone *et al*., 2012) and sufficient programming is not being provided (Darling-Hammond, 2000). Physical literacy is a concept recently introduced into fitness programs with the belief that it will work to raise the quality of physical fitness programs and combat obesity, by providing participants with the skills and confidence to become and remain active for life. There are two options in addressing obesity; treatment (medical procedures, strict dietary changes or excessive exercise) or prevention (target people before it becomes a problem) (Elfhag and Rossner 2010). The successfulness of both of these techniques is questionable and a gap in literature leads to debates between governments, health professionals and citizens as to the best way of addressing obesity. Fitness literacy is the new direction of treatment and prevention, a strategies for obesity management implemented to try and address obesity issues.

Physical literacy has gained considerable attention across the globe in recent years. Research from around the world is quickly deepening understanding of the vast potential that optimizing physical literacy can have in improving health and well-being and reducing health inequities. Clearly there has been a major shift in the understanding of the term 'physical literacy'-now being subject to much wider use. This study present an attempt to take physical literacy from theoretical perspective to practicably action, from conceptual frame work to practical frame work. The purpose of this study is to determine whether participants in physical literacy program produce any changes in cardiovascular fitness and social anxiety of inactive obese women.

MATERIALS AND METHOD

The researcher used the pre-experimental design, (one group pretest-posttest design) to investigate the effect of fitness literacy training program (FLTP) on cardiovascular fitness and social physique anxiety and social appearance anxiety. the research was carried out governorate of Basra, in a qualified fitness gym in Basra city.

Participants

Fifty obese women enrolled in this study were selected based on the following criteria sampling principles: samples of the current study 50 inactive obese women were randomly assigned. Inclusion criteria: (a) age 30-40 with mean age (34.6±1.92) years. (b) obese subjects BMI≤ 30 Kg/m² with mean BMI (35.2±3.3) Kg/m². (c) relatively in active (participating in less than 1 hour moderate intensity physical activity per week over the last 3 months). (d) do not engaged in dietary or weight loss program. (E) having regular menstrual cycles. Exclusion criteria: a) suffering from physical or psychological disease that may have precluded the performance of the requested training program. B) pregnant or smokers, gastrointestinal tract surgery, major illness (acute or chronic) and intake of any medication including any that would limit the ability to perform the necessary exercise or influence the interpretation of the results. After the intervention period, participants who failed to comply with 90% assistance to the training sessions were excluded from further analysis. All participants were given instruction sheet for Social physique anxiety questionnaire and appearance anxiety questionnaire. All these sheets translate in Arabic, in one packet for the participants to fill out and leave it with the researcher before the experiment and subsequently after the experiment as a post test. The dependent variables in this study were cardiovascular fitness and anxiety, and the independent variable was fitness literacy program.

Study design

This study used pre-experimental design, (one group pretest-posttest design). The intervention program lasted 22 weeks, and the assessment tests took place 1 week before (baseline) and after (post) the intervention. A written explanation of the experimental procedure and potential risk factors were given to experimental group. Participants completed baseline measurements before attending an initiation session at the fitness center where their exercise program was demonstrated by center staff.

Exercise Interventions: (FLTP)

The subjects were enrolled in 60 minutes of supervised physical training program session 4 days per week for 24 week, each training session lasting 60-min, and consist of a) 10-min warm-up (5-min jogging, 5-min stretching. b) 40-min main part continuing of 20-min aerobic exercise class, 20-min high intensity treadmill training workout (2 days/week), and 20-min aerobic exercise class workout, 20-min resistance exercise

training workout (2 days/week), using weight resistance machines. c) 10-min cool down and stretching. The experimental group followed supervised exercise program.

Instruments

Step test (Evaluating cardiovascular endurance)

Cardiovascular fitness were collected using a step test and monitoring participants' heart rate during and after the test. This test measured the maximal oxygen uptake (VO2max). oxygen uptake increases rapidly on starting exercise maximal oxygen uptake is achieved when the amount of oxygen uptake into the sells does not increase, despite a further increase in intensity of exercise.

Purpose:-To determine the state of trainees cardiovascular fitness and the recovery heart rate after exercise.

Equipment:-a bench with 30-40cm high from the ground level, a stop watch, and assistant.

Procedure:-The athlete warms up for 10 minutes, step up and down on a 30-40cm bench for 3 minutes at a rate of 24 steps per minute, one step consists of 4 beats i.e. "up with the left foot, up with the right foot, down with the left foot, down with the right foot." Stop at exactly 3 minutes and immediately sit in a chair. The active part of the test here is completed. Counting begins the pulse 5 seconds after the exercise ends.

Scoring:-The assistant records the athlete's heart rate for 30 seconds and multiply the result by two.

Social anxiety

In order to collect data that measured dimensions of social anxiety: Social physique anxiety questionnaire and Social appearance anxiety questionnaire.

Social Physique Anxiety Scale

The Social Physique Anxiety Scale (SPAS; Hart, Leary & Rejeski, 1989) is a 12-item measure of the degree to which individuals become anxious when others observe or evaluate their physiques. Items are rated on an agreement scale from *not at all characteristic of me* (1) to *extremely characteristic of me* (5), with higher scores indicating greater social physique anxiety. Within a sample of nonclinical college students, the SPAS has demonstrated high internal consistency (coefficient alpha = .90), adequate test-retest reliability over a two-week period (r = .82), and the convergent validity of SPAS scores has been supported by positive correlations with measures of social anxiety, public self-consciousness, and weight and body shape satisfaction (Motl & Conroy, 2000). Elkund and colleagues (1997) examined the skewness and kurtosis of SPAS items in exclusively male, exclusively female, and combined samples: results indicated that the SPAS is appropriate for use in both sexes. In the current study, the SPAS appeared to be an adequately reliable measure of social physique anxiety in women (coefficient alpha = .94).

Social Appearance Anxiety Scale

The Social Appearance Anxiety Scale (SAAS; Hart, Flora, Palyo, Fresco, Holle, & Heimberg, 2008) is a 16-item assessment of anxiety about being negatively evaluated by others because of one's overall appearance, including body shape. Items are rated on an agreement scale from *not at all* (1) to *extremely (5*). Research on the psychometric properties of the SAAS demonstrated high test-retest reliability, good internal consistency, good factor validity, incremental validity (e.g., it was a unique predictor of social anxiety above and beyond negative body image indicators), and divergent validity in samples of nonclinical college men and women (Hart *et al*., 2008; Levinson & Rodebaugh, 2011). Internal consistency reliability in the present study was for women (coefficient alpha = .93).

Statistical Analysis

In order to analysis the data different statistical method were used to make appropriate conclusions from the data. In the descriptive way statistics such as average, standard deviation, variance and frequency table were used. The independent t- test was used in inferential statistics. Data was analyzed statistically by SPSS software, Version 19. The significance level in all statistical analysis was set at p 0.05.

RESULTS

The main results are analyzed specially to answer the specific research objectives: 1. To determine whether participants in physical literacy program produce any changes in cardiovascular fitness of obese women. 2. To determine whether participants in physical literacy program produce any changes in social anxiety of obese women. t-test was used to determine the differences between pre-test and post-test in cardiovascular fitness and social anxiety after participating in fitness literacy program. Table 1 shows the results of the t-test for cardiovascular fitness in obese women. Cardiovascular fitness related to the body's ability to generate energy and deliver oxygen to working muscles. It is considered the most important component of physical fitness and it is one of the best indicators of overall health. Based on table 1 participants in physical fitness literacy program showed statically significant differences in resting pulse rate per minute (t= 12.15, p<0.05) from the post test (M=58.70), in comparison to their pre test (M=84.85). Participants also report statically significant differences in Pulse rate after minute (t= 10.53, p<0.05) from the post test (M=88.20), in comparison to their pre test (M=112.10), and the Performance ability per minute showed statically significant differences (t= 15.50, p<0.05) from the post test (M=63.50), in comparison to their pre test (M=37.50). Which means that there is a significant improve in cardiovascular fitness among obese women after participating in fitness literacy program.

Table 1 Mean and Stander Division Of Cardiovascular Fitness In Obese Women For Pre-Post Test

Step test	Pre-test		Post-test		T value
	X	SD	X	SD	
Resting pulse rate per minute	84.85	7.005	58.70	5.80	12.15
Pulse rate after minute	112.10	9.63	88.20	5.85	10.53
Performance ability per minute	37.50	4.76	63.50	6.57	15.50

*p < .05. **p < .01

t-test also was used to examine if there is any changes in social anxiety of obese women after participating in physical fitness literacy program. Table 2 shows the results of the t-test for social anxiety in obese women. Anxiety refers to concerns

about one's physique that manifest in social contexts (Hart, Leary, & Rejeski, 1989). Physique refers to one's body form or structure, including body fat, muscle tone, and general body proportions (Hart *et al*., 1989).While social physique anxiety describes concerns specific to one's body structure and composition, social appearance anxiety encompasses overall appearance evaluation. Appearance evaluations tend to be based on more than just physique or body composition (Cunningham, 1986). According to Hart *et al*. (2008), social appearance anxiety includes social physical anxiety. Therefore, it is important to measure social appearance anxiety as well as physique-related anxiety. Based on table 2 participants in physical fitness literacy program showed statically significant differences in social physique anxiety (t= 4.03, p<0.05) from the post test (M=2.74), in comparison to their pre test (M=2.97). Participants also report statically significant differences in social appearance anxiety (t= 4.26, p<0.05) from the post test (M=27.6), in comparison to their pre test (M=30.8). Which means that there is a significant decrease in social physique anxiety and social appearance anxiety.

Table 2 Mean and Stander Division of social anxiety in Obese Women for Pre-Post Test

Social anxiety	Pre-test		Post-test		T value
	X	SD	X	SD	
Social physique anxiety	2.97	0.35	2.74	0.40	4.03
Social appearance anxiety	30.8	8.96	27.6	9.76	4.26

*p < .05. **p < .01

DISCUSSION

According to statistics from the WHO (2006a), middle east countries have higher obesity rats in females than the European countries. There is a disproportionately low priority in governmental spending aimed at increasing awareness of the devastating heath care effects of obesity. Physical literacy has gained considerable attention across the globe in recent years. Research from around the world is quickly deepening understanding of the vast potential that optimizing physical literacy can have in improving health and well-being and reducing health inequities This study sought to explore the effects of fitness literacy program on cardiovascular fitness and anxiety among inactive obese women.

The present study found that physical fitness literacy program improve cardiovascular fitness and reduce social physique anxiety and social appearance anxiety in obese women. These finding is in agreement with the experimental evidences which showed that regular exercise reduce the risks of developing a variety of physical ailments as well as many life-threatening or debilitating diseases. For example, exercise has been shown to lower the odds of developing some forms of cancer, cardiovascular disease, osteoporosis, hypertension, diabetes, and obesity (e.g., Dubbert, 2002; Schaie, Leventhal, & Willis, 2002). Besides the many positive physical health benefits of exercise, research has also clearly suggested a positive association between exercise and psychological health and well-being (Plante & Rodin, 1990; Salmon, 2000). Exercise has been shown to improve many psychiatric problems such as depression, anxiety, and stress disorders (Nabetani & Tokunaga, 2001; Salmon, 2000). These and other findings lend support to the notion that there are many psychological benefits for those who are physically active. However, precisely why and how psychological benefits occur with exercise is less clear (Hansen, Stevens, & Coast, 2001). Many research works including Wuest, (1999); Orban and Ashton, (1984); Hadfield, (2000); Dick, (1997); Diamond, (2001) and Carbin, *et al*.., (2002), have shown that numerous health benefits have been ascribed to physical exercise. These are:- Regular physical activity can lower the risk of disability and death from heart disease, helps to strengthen the cardio-vascular system, maintain normal blood pressure, and decrease blood cholesterol, increase toleration of stress and maintain weight, it increases the energy level of the individual for work and play, leads to improved sleep, and strengthens the body, better enabling it to cope up with illness or accidents, increases the ability to withstand fatigue, improves concentration and alertness, improves posture and enhances body appearance, improves individual's mental health, reduce anxiety, help to alleviate depression, increases feeling of accomplishment work, increases productivity and decreases health cost etc.

This results may be explained by the fact that Physical literacy is associated with a healthy lifestyle that helps promote personal well-being, prevents disease, and through participation contributes to stronger, more cohesive and sustainable communities (Rink, Hall & Williams, 2010). This notion can be applied on fitness literacy, Physical fitness is a state rather than a behavior. It is a multidimensional indicator of several functional capacities such as cardiovascular endurance, muscular strength or mobility, which in varying degrees are a result of genetics and stage in the life span, as well as physical activity levels (Ministry of Health of NewZeland, 2003). Carbin, *et al*.., (2000) explained that Physical fitness is a multidimensional state of well-being, which consists of health-related physical fitness component, that are associated with good health, and skill-related physical fitness components, which are more associated with performance than good health. All of this confirmed the fact that fitness literacy is an essential component in physical literacy.

Whitehead (2007) identifies physical literacy as the motivation, confidence, physical competence, understanding and knowledge to maintain physical activity at an individually appropriate level, throughout life. She states that ''physical literacy requires a holistic engagement that encompasses physical capacities that are embedded in perception, experience, memory, anticipation and decision making'' (Whitehead, 2001 p.4).

Along with this definition, Whitehead has developed a set of seven characteristics used to establish physical literacy, characteristics range from an ability to use our movement to make a contribution to our quality of life to an understanding of the principles of embodied health, such as exercise and nutrition. In particular, the fifth characteristic describes an established sense of self as embodied in the world which engenders self esteem and self confidence. Accordingly, the sixth characteristic states that t Similar to Whitehead's (2001; 2007) concept of embodiment as a significant aspect of confident interaction between self and society, physical fitness literacy provides an approach to understanding and providing practical experiences from a holistic perspective. his sensitivity to our embodied state leads to fluent self-expression and to empathetic interaction with others.

It is widely accepted that physical activity is a vital component of a healthy lifestyle that helps promote personal well-being, prevents disease, and through participation contributes to stronger, more cohesive and sustainable communities (Rink, Hall & Williams, 2010). A physically active population is a healthier population, improving the productivity of the work force and increasing economic output. Sport and physical activity also provide one of the most cost effective forms of preventive medicine, with the potential to cut health-care costs dramatically. Even though involving in some forms of exercise, no matter how little or how much, is fine, it will be better if it is carried out in a correct manner. Physical activity is an essential component of any strategy that aims to seriously address the problems of sedentary living and obesity UN, (2003) and WHO, (2003a). According to WHO, (2006a) active living contributes to individual physical and mental health but also to social cohesion and community well-being opportunities for being physically active is not limited to sports and organized recreation. They exist everywhere, where people live and work, in neighborhoods and in educational and health establishments. The benefits of physical activity appear to extend to all segments of the population. For example, even seniors and those with disabilities and chronic disease conditions benefit from physical activity, which improves their mobility and physical, mental, and social functioning (Butler *et al*.., 1998 in Transportation Research Board, 2005). Carter, (2005) explained that an inactive person generates 32% greater direct annual medical costs than an active one. Sport has been shown to reduce the risk of premature death by 37%, reduce incidence of chronic heart disease in middle-aged men by 50%, reduce the chance of developing type II diabetes by between 33-50%, and provide increased protection against 20 chronic diseases or conditions. Physical inactivity is a state of relatively complete physical rest, which does not provide sufficient stimulus for human organs to maintain their normal structures, functions and regulations (WHO, 2006a).

Tripp, Piletic and Babcock, (2003) described that Physical activity provides meaningful movement experiences and health-related fitness for all individuals in order that they may have the opportunity to acquire the motor skills, strategies, and physical stamina necessary for a life time of rich leisure, recreation, and sport experiences to enhance physical fitness and wellness.

CONCLUSION

This research is seeking to highlights on the implications of physical literacy in physical fitness. It is an endeavor to clarification the role of fitness literacy in guiding the practice of promoting purposeful physical pursuits across the life course. The most important effort is to persuade our society about the capacity of fitness literacy in reducing the risk of chronic diseases, helping people specially women to make informed choices, to realize the importance of responsibility of their physical and psychological wellbeing. Fitness literacy should be considered as a part of the strategies in combating women obesity problem.

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