

## Why they do not Exercise Regularly?

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### Abstract

**Purpose:** Analysis current goals at the gyms would answer some of the questions about the (un)continuation of physical activity (PA) and point out factors that have less attention in care and health program. This article examines women's exercise space in order to answer an important question: 'Why most women have problems with regular PA and cannot permanently benefit from a long-term regular exercise program?' This was a qualitative study. **Method:** Data collection was carried out through attendance at women's gyms and registration of symbols and symptoms and analyzed by thematic analysis (Broun & Clark, 2006). **Results:** Results showed that there were two main themes for women to participate in the PA which can be defined in terms of goals. Objectives called fear of obesity and overweight; and the goals of trying to be healthy and health management. However, the categories related to these two theme overlap but they are different in nature and make fundamental changes in women's PA performance. By examining the persistence of women's participation in PA this hypothesis is raised; i.e., women's long-term goals and regular attendance in PA is related to goals created by the health management goals and personal responsibility about their own health behaviors while irregular attendance activity is related to priorities and goals created by the fear of obesity atmosphere. **Conclusions:** The preliminary evidence of the presence of women in the practice confirms this claim but additional studies are needed to confirm this.

**Keywords:** Regular Exercise, Goals, Obesity, Overweight, Health Care

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## INTRODUCTION

Functional, continued, and standard physical activities (PA) can increase the health level. As the positive effects of PA on improving the quality of life are clear to everyone, these activities should be considered as part of health programs for people from all ages and cohorts and their management should be carefully figured out. In parallel to the changes in their social activities in Iran in recent years, the presence of women in gyms and sports halls and parks has considerably increased. This increase in PA has been accompanied by 1) an awareness of the advantages of PA, attention to one's health, and prevention from diseases (physical purpose), 2) satisfaction of social needs (social purposes), and 3) acquisition of self-confidence and fight against aging and depression (mental purposes). One of the most important concerns in discussions on women's health is related to the continuity of their PA so that their motivation for participating in exercise sessions (at least two or three sessions per week) is continued. Thus, it is of paramount importance that women's goals and priorities for PA be examined so that the obstacles to these activities can be identified and removed. The significance of this line of research is rooted in the fact that, despite abundant medical advices about the importance of PA, we witness women taking crash exercise courses, which are usually damaging to their health, accompanied by hard diet plans with short-term goals. The body's ideals do not necessarily lead to the acceptance and maintenance of an active lifestyle. Many young women leave their way to exercise, although they do have good information about the benefits of PA (Pfister, With-Nielsen and Lennis, 2017) and despite of public health messaging and PA policies (Schwartz, Rhodes, Bredin, Oh, & Warburton, 2019). In other words, the question often asked is 'Why most women have problems with regular PA and cannot permanently benefit from a long-term regular exercise program.?' Perhaps, the answer to this question can be found by examining the motivational forces driving women to undertake exercise and PA. A large body of research has been conducted to understand the motivation for exercise, exercise intention, and exercise orientation based upon such theories and models as Self Determination Theory, Health Belief Model, Transtheoretical Model of Health, Causality Orientation Theory, and models of attributional styles,

among others. In their Self Determination Theory, Deci and Ryan (2002) contend that a person's motivation, behavior, and experience in a particular context are a function of his/her social and internal motives that have grown as a result of interactions within social settings. In a similar fashion, in models of attributional styles, the levels of a person's motivation and success are explained by his/her perceptions of the causes of success and failure. These perceptions have significant consequences for the person's actual success and failure (Deci & Ryan, 2002). Glanz and Rimer's (1997) Health Belief Model posits that the probability of a person taking part in a recommended sanitary act depends on his/her own personal perceptions. Thus, changes in these personal perceptions increase the probability that people would act upon recommended sanitary behavior. The four main components of Health Belief Model include perceived sensitivity, perceived severity, advantages, and perceived obstacles. Similarly, in Prochaska and DiClemente's (1983) meta-theoretical model, following healthy behaviors and maintaining one's health comprise two separate notions. This model emphasizes changes in healthy behaviors through a dynamic process in which new behaviors are reinforced at several different stages. In other words, this dynamic process would provide people with different options to develop new behaviors during the stages of behavior change (Prochaska & DiClemente, 1983).

To find an answer to the question posed in this paper, identification of the obstacles to participation of women in PAs would be particularly helpful. It is needless to say that all women do not have equal opportunities for PA. For example, women with lower income would be probably limited in financial resources needed to take part in programs of PA. In addition, due to transportation costs, these women may have limited access to recreational supplies. On the other hand, women are generally employed in unstable low-income jobs which are poor in athletic supplies. There exist more local athletic supplies in neighborhoods where people with higher income levels live and thus, in these neighborhoods, women and girls are provided with more options for PA. The security of the neighborhood is another factor that influences women's and girls' PAs. These reasons mean that we need particular strategies to make sure that women have fair access to resources for PA. Thompson et al. (2002) point to family responsibilities and lack of time

as some obstacles to women's PAs. Some women may experience cultural, social, and economic drawbacks and their physical environment as hindering their PA. Following the reports claiming an increase in the rate of obesity in western countries, weight discrimination is considered as an important aspect of social injustice with the consequences of less opportunity for job, education, and marital relationships. These consequences have influential effects on women's economic opportunities as it has been long accepted that there is a negative correlation between women's weight and their social status (Fikkan & Rothblum, 2012). Naghdi, Belali & Imani (2012) contend that variables like socioeconomic status, cultural assets, schemata for women's sport, personal preferences, social support, perceived beneficence, and family attitudes are significantly related to women's participation in PAs. Sex- and gender-based analyses, SGBA, point to a wide number of reasons for women not taking part in PAs with reference to four major issues; 1) sex issue (women's biological characteristics that are distinct from those of men, the proportion of fat to muscle, etc.), 2) gender issue (socially-defined roles, attitudes, relationships, behaviors, and relative power), 3) diversity issue (diversity in culture, nationality, gender, age, and abilities that would influence values, beliefs, and behaviors, and 4) equity issue (unjust inequalities within and across population cohorts that would result in differences in their health status (Statistics Canada, 2007/2008)

Also, the question posed in this paper can be addressed from the perspective of women's goals from the participating in exercise. Usually, women encounter many social messages and media that present them with information about well-being and promotion of responsibility for one's health. When they show up in athletic contexts, women particularly encounter messages, symbols, and talks related to PAs and fitness and the collection of these types of information would provide them with a particular discourse which increases woman's awareness of their own physical status. In a similar fashion, the present study is set to examine goals influencing well-being and fitness of women attending gyms and sport places. Goal setting is particularly relevant to PA promotion at the individual level (Swann et al., 2020). In today's society, there exists abundant cultural emphasis on beauty and physical fitness and social norms value women's attractiveness. Thus, health and beauty,

which are usually discussed under body management, introduce themselves as new dimensions of women's sport. In the recent decades, physical fitness has been considered as the criterion for measuring women's beauty; social norms point to slimness and physical fitness as presenting a favorable picture of body (Naghdi, Belali & Imani, 2012). More interestingly, physical fitness is deemed indicative of good citizenship as good citizens always listen to the alarm of physical unfitness and are therefore ready to spend money to ensure the beauty of their body. In this direction, body panic reinforces the growing demands for this type of consumer capitalism. The belief that weight gain points to health poverty is generally accepted in western societies. As a result, weight related stigma would have negative effects on people's private and social lives and, unfortunately, women would experience these negative effects more than men (Fikkan & Rothblum, 2012; Puhl & Heuer, 2009). Thus, obesity and weight gain would constitute unpleasant criteria for judgment about one's body. Now, the question is 'do women consider their own social and economic conditions as the obstacle to their continued presence in PAs and the cause of their weight gain or do they see the reasons rooted in their own behaviors?'. The answer to this question is of paramount importance because women's differing attitudes would have influential effects on their behavioral reflexes and probably on the continuity of their exercise behaviors. In this paper, the researchers intend to examine the goals associated with the responsibility of women to ensure their own health and follow healthy behaviors through PAs. The Healthism is a new term for explaining different ideological structures related to health and medicine. The term 'Healthism' was first introduced by the political economist Robert Crawford as a concept encompassing a large number of diverse protocols required for healthy life. The concept is intended to examine the origins of health at an individual level to claim that health can be ensured through effort and discipline in order to regulate the size and shape of the body (Kirk & Colquhoun, 1989). Consequently, Rose (1993) described the term and defined it as a "public objectives for the good health and good order of the social body with the desire of individuals for health and well-being". The results of Rysst's (2010) study indicated that Norwegian women and men were influenced by the Healthism and by the dominant viewpoints of the ideal body and how to

achieve it, viewpoints which were usually issued by the media. Jeng, Yang, Chang & Tsao (2004) explained the women first began exercise regularly experienced 'Exercise Selection' with subcategories of 'Self-Evaluation', 'Seeking and Fitting', 'Comparing' and 'Health Becoming' with the subcategories of 'Releasing Health Crisis', 'Regaining Flowering Life', and 'Self Fulfilling'. There are differences between participants with distinct types of goals on PA participation. Considering the importance of the regular exercise, analysis goals in relation to the PAs of women attending gyms and sport places would help find an answer to the question posed in this paper.

## **METHOD**

### **Participants**

As everyday conversations and behaviors include the most data about women's PA lives, the content of women's PA conversations in the gym and aerobics hall in the Sports Complex of SalmanFasi in Damghan, Iran, were analyzed.

### **Data collection and analysis**

Data were collected using observation methods and analyzed by thematic analysis (Broun & Clark, 2006). The researcher attended the gym and aerobics hall for a season (Winter 2015) as a participant and, through regular presence in these two sports facilities, tried to scrutinize the content of the women's conversations and record the meaningful clues. To do so, the researcher adopted a passive role in the process of data collection. The process of data analysis was conducted through coding words, phrases, or sentences related to the main theme of "personal responsibility". More specifically, the coding process was undertaken with respect to the issues of self-care, particular rituals, behaviors, and speeches related to health and PAs, restricted or expanded (i.e., temporary or permanent) PAs, avoidance from weight gain, emphasis on eating habits, and emphasis on/repetition of words, phrases, and sentences. Once a large number of clues were recorded, analyzed, and condensed, the relationship among them were extracted through the process of coding. In addition, the extent to which the women attended the gym and aerobics hall during the season was determined with the manager of the sports complex counting the number of sessions each of

the women attended. The women were informed that the data on their presence in the sessions had been collected.

## **RESULTS**

Based on the analysis of their everyday conversations, it was clear that women made use of PAs as a tool to achieve their physical, mental, and social goals. In this study, these three classes of goals were extracted by examining the participants' everyday conversations through counting the sentences in them. Some of the most important patterns related to each of these physical, mental, and social goals are listed below which indicate the participants' attitudes towards PAs and their intention to do these activities:

Issues related to social goals; creating opportunities for communication with others, proving one's effort to others, describing physical conditions, showing the outcomes of PAs to the coach and peers, showing the good results of diets and PAs to others and recommending the diets and PAs to them, approaching the ideal physical status as accepted by the society, accompanying children and friends, receiving encouragement and respect from others, and showing a feeling of responsibility to oneself.

Issues related to physical goals; weight loss, slimness and thinness, attractiveness, and 'looking good'.

Issues related to mental goals: elimination of fears and worries such as fear of weight gain despite having ideal weight, fear of losing friends or the husband due to body deformities and overweight, fear of being labeled as irresponsible by others, self-blame for eating, compensation for unpleasant feelings of overeating though exercise, obsessive exercise behaviors (i.e., over-exercise), feelings of life changes, and restart.

The following sentences represent this idea:

- “My conditions were good and, under those conditions, I was motivated to come to the gym. As the conditions were gone, I left the gym”
- “I've succeeded to lose six kilos [of weight]. I'm done with exercise”
- “I am back to square number one. I've left the gym a month ago, and my stomach has gone bloated again”.

- “If you are ashamed of your physique, you have no other choice but come to the gym”
- “She officially asked me to come to the gym as she saw that all my clothes were too tight to wear”
- “Buying new cloths are a challenge to me. I cannot find cloths of appropriate size”
- “I feel short of breath. Even one step seems a lot to me. I’ve come to the gym to let myself breathe better and have a better shape”.
- “I was just eating during the three holidays and so, became fat. When you stay at home, you would probably overeat. If somebody knew how hard it is to burn body fat, they would probably eat less”
- “I like to come to the gym. During the past several weeks, I came to have a good body shape. After Eide Norouz, I will certainly continue my exercises”
- “if there were someone who could accompany me, I would come to the gym more”

The classification of women’s goals is given to the two main themes ‘health management’ and the ‘fear of obesity’ and major difference in the nature of the goals between them. Consistent with Rysst’s (2010) finding that there is a relationship between ideals for a healthy body and those for a beautiful body, it is argued that physical, mental, and social goals are included in both the ‘Health management’ and the ‘fear of obesity’. However, based on their everyday conversations, it would be concluded that the women’s physical, mental, and social goals for PAs were resulted from a fear of obesity. Responsibility for the beauty or shape of the body was prioritized over responsibility for health status and the women followed their PAs in order to overcome body deformity, obesity, and overweight. Thus, based on the results of the present study, it is argued that, though the ideals for a healthy body and the ideals for a beautiful body both lead to performing useful PAs, there would be some differences between these two types of ideals in the continuity of PAs and in the duration of the goals set. Though women may have paid the cost of attending the gym, many of them would abandon the gym in this season, either temporarily or permanently (21 of the 57 women abandoned the gym and returned after two to three sessions and 11 of



them abandoned the gym permanently). Though the women demonstrated abundant perseverance and persistence in PAs in the early sessions, some of them, who returned to the gym, referred to their husbands' jobs, their children's issues, sickness, fatigue, and employment as the important reasons for their irregular participation in PAs. In fact, they tried to alleviate their unpleasant feelings for their abandonment or interruption of exercise by means of these justifications. According to the findings of the present study, the majority of the women freely talked about their physical issues based on a series of presuppositions. The topics of their conversations and behaviors were classified to these sub-themes.

- a) Avoidance from eating in order to stop weight gain or loss, diets, punishment of conscience related to eating, self-blame after eating, compensation for overeating by means of sport, exercising in order to comfort one's unpleasant feelings when eating;
- b) Looking good: looking slim, attractive, and thin, weight loss, local thinness, getting rid of others' judgments about laziness and obesity, a reaction to others' mocking about their physical appearance, arousing friends' surprise about their own physical changes, looking good in dresses and in rituals, a more beautiful face and more sexual attractiveness.
- c) Formation of pleasant feelings in oneself: feelings of relaxation and euphoria, health and prevention from sickness, boosting one's voice and breath, delay in fatigue and readiness for daily activities;
- d) Unpleasant feelings for abandoning exercise: abandoning regular exercise once temporary results are achieved, abandoning PAs due to their other concerns, feelings of guilt for irregular presence in the gym and failure in achieving the intended results, etc.

## **DISCUSSION**

Goal-setting is a widely used and accepted strategy for promoting PA (Swan et al., 2020). It is one of the most frequently used components of behavioural interventions aimed at health-behaviour change (Michie, West, Sheals, & Godinho, 2018). A review of PA interventions and behaviour change techniques for healthy inactive adults found that goal-setting was the most frequently used strategy (Howlett, Trivedi, Troop, & Chater, 2019). Some findings of the present study are consistent with the findings of a number of other studies. For example, AriaPouran and

Shirzadi (2012) found that perfectionism, importance of body, and worries would result in eating disorders in women's PAs. The researchers also claimed that nervous anorexia, nervous overeating, and other eating disorders were more observed in women engaging in unprofessional PAs like aerobics and physical readiness because these women are worried about their body and physical appearance and thus, they might compare themselves with those women who had fitter body and appearance. Such comparison would drive women to follow exercise and PAs. Roy (2008) pointed to the superiority of a specific picture of body over other types of body which are usually backgrounded. Pfister et al (2017) argue about how the young women perceived and use current messages about body ideals and healthy and active lifestyles. Roy (2008) contended that this superiority was propagandized by media and he conducted an examination of magazines on men's and women's fitness, fear of obesity (fat), gender, sanitation and fitness sales. Segar et al (2007) classified American middle-aged women's goals for attending PAs into five groups; 1) a feeling of being good, 2) weight loss, 3) health and treatment advantages, 4) stress reduction, and 5) maintaining one's weight. They also found that the participation of middle-aged women with the goals of weight loss and health and treatment advantages were significantly less than the participation of those with the goals of feeling good and decreasing stress and anxiety. The researchers indicated that PAs might not be practical for middle-aged women who would attend these activities with the purpose of weight loss or with the inclination to expand their physically active life span. In return, those delivering health care and health experts were suggested to facilitate more regular participation of women in PAs as a strategy which would promote women's life quality (Statistics Canada, 2011).

The concept of responsibility, as a key principle in the health management discourse, is prominently represented in magazines on women's health. Using discursive acts, these magazines try to educate women on the importance of responsibility for their own health and on the consequences that women's passivity and false behaviors with respect to this responsibility have for their health. In these magazines, personal experiences are narrated as either inspiration or warning to other women and women are encouraged to take care of their health through

specific techniques that would direct their personal behaviors and responsibilities (Roy, 2008). Fusco (2006) and Lupton (1995) contend that the healthism and responsibility discourses represented in women's magazines would be probably accepted, negotiated, or defied to different extents by other people (Lupton, 1995; Fusco, 2006; Roy, 2008). Rich and Evans (2005) described healthism and obesity as two associated discourses in that personalization of responsibility for health (shape and size of the body) would determine an individual's laziness or obsession with respect to the issues of weight and overweight (Rich & Evans, 2005). In contrast to the results of the present study, Rich and Evans (2005) argued that the public discourse on the 'obesity crisis' would be justified within the healthism discourse. The researchers contrasting the dominance of the obesity discourse in public health contend that idealization of the slim body and an individualistic conception of health can help people prevent from diseases by having them continue their effort, will, and resolution (Kirk & Colquhoun, 1989). Dworkin and Wachs (2009) claim that capital markets support criticisms of the personal responsibility for health and the failure in having "fitness" instead of questioning the effects of social structures on a person's body. Thus, rather than presenting broad solutions encompassing a wide range of choices for ensuing health and fitness, the health management discourse tries to promote health and fitness as a personal undertaking (Dworkin & Wachs, 2009). 99 percent of American adults considered health as one of their most important priorities. Three of their most important priorities reported by the informants were: good health, good family life, and a proper picture of oneself in others' eyes (Corbin & Lindsey, 1997).

## **CONCLUSIONS**

It seems that behaviors and actions investigating is a useful way for understanding individuals' short- and long-term motives as, in this study, the actors and speakers of health management goals showed more devoted behaviors with respect to continuing the exercise sessions. While the speakers and actors of fear of obesity goals showed no real interest and reason in continuing the sessions once they achieved their desired goals with respect to weight and appearance. In addition, the speakers of the latter goals saw more obstacles to continuing their exercise sessions. Considering short-term exercise behaviors of this

group of speakers, stimuli such as fear of not looking good and fear of obesity labels constitute temporary stimuli which are usually damaging and destructive. The goals in the obesity goals pose individuals to short-term and consumer attitudes towards PAs. In this article, it was tried to present women's PAs space based on the priority of their goals for attending gyms because clues related to these goals, and whether they have been achieved, constitute one of the most significant and occurring aspects of women's everyday conversations and behaviors in gyms. In both the Health management goals and the fear of obesity goals, what are consumed are PAs and both category of goals denote common trends for PAs including physical, mental, and social goals. Certainly, women's goals would influence their (ir)regular participation in PAs.

In this study, based on the women's irregular participation in the gym and aerobics hall and analysis of their conversations and behaviors in these contexts, it was clear that the fear of obesity dominated the contexts and this atmosphere would continue to have effects on the women continuing their exercise behaviors. However, the most significant finding of the present study is the proposition that what determines one's long-term goals and regular participation in PAs is related to the goals and needs for personal responsibility set by fear of obesity. Short-term and damaging plans, with early returns expected, originate from priorities and goals defined by the fear of obesity goals. Thus, it is of paramount significance that studies be conducted in the future to examine the validity of this proposition. Cross-validating the findings of this study against the social aspects predicted by the Self Determination Theory, the Causality Orientation Theory, and other theories and models was beyond the scope of the study. However, it goes without saying that the dominant discourses in sport contexts would have influential effects on the direction of women's social goals and the extent they are willing to continue their PAs. Though gyms are affordable and accessible and PAs would save some medical cost for the family, it is obsolete to encourage women to undertake PAs based on a common set of advices. PAs programs should be officially and organizationally planned so that the programs would encompass different goals at different levels. Based on the hypothesis of the present study, it is claimed that encouraging women in exercise through the stimuli of

weight loss and increase in feminine attractiveness may be a good idea for them to start exercise, as these motives can act as powerful motives, but they would not probably have influential effects on their willingness to continue the exercise. As there is a diversity of life levels, livelihood conditions, women's attitudes towards exercise, and their perceptions of body and its value in the material and spiritual life, it is required that women's PA be studied more professional to be able to disentangle the complex network of women's motives for PAs. The conclusion of this study is that a wide range of key variables should be taken into account if we aim to help women maintain or increase their participation in PAs. It is recommended that, besides accounting for differences in women's capacities, assets, and financial ability, future plans for women's PAs be designed and developed based on the dominant themes on women's PAs.

## REFERENCES

- Ariapooran, S., Shirzadi, M. (2012). Relationships of perfectionism, body esteems and worry with symptoms of eating disorders in athlete women, *Scientific Journal of Kurdistan University of Medical Sciences*, **17**(4), 68-77.
- Braun, Virginia & Clarke, Victoria. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, **3**, 77-101
- Corbin, C. B., Lindsey, R. (1997). *Concepts of Physical Fitness, with Laboratories*, Brown & Benchmark Publishers.
- Deci, E., & Ryan, R. (2002). *Handbook of Self-Determination Research*. Rochester, NY: University of Rochester Press.
- Dworkin, S. L., & Wachs, F. L. (2009). *Body Panic: Gender, Health, and the Selling of Fitness*, New York University Press.
- Fikkan, J. I., & Rothblum, E. D. (2012). Is fat a feminist issue? Exploring the gendered nature of weight bias, *Sex Roles*, **66**, 575-592.
- Fusco, C. (2006). Inscribing healthification: governance, risk, surveillance and the subjects and spaces of fitness and health. *Health and Place*, **12**(1), 65-78.
- Glanz, F. L., & Rimer, B. (1997). *Health behavior and health education: Theory, research and practice* (2nd ed., pp. 60-84). San Francisco: Jossey-Bass.
- Howlett, N., Trivedi, D., Troop, N. A., & Chater, A. M. (2019). Are PA interventions for healthy inactive adults effective in promoting behaviour change and maintenance, and which behaviour change techniques are effective? A systematic review and meta-analysis. *Translational Behavioral Medicine*, **9**, 147-157.

- Jeng, C., Yang, S., Chang, P., & Tsao. (2004). Menopausal women: perceiving continuous power through the experience of regular exercise. *Journal of Clinical Nursing*, 13, 447–454
- Kirk, D., & Colquhoun, D. (1989). Healthism and physical education, *British Journal of Sociology of Education*, 10, 417- 434.
- Leea, J., & Macdonald, D. (2010). ‘Are they just checking our obesity or what?’ The healthism discourse and rural young women, *Sport, Education and Society*, 15(2), 203-219.
- Lupton, D. (1995). *The Imperative of Health: Public Health and the Regulated Body*, London: Sage
- MacLeod, K.E., Gee, G.C; Crawford, P., & Wang, M.C. (2008). Neighbourhood environment as a predictor of television watching among girls, *Journal of Epidemiology and Community Health*, 62(4), 288-292.
- Michie, S., West, R., Sheals, K., & Godinho, C. A. (2018). Evaluating the effectiveness of behavior change techniques in health-related behavior: A scoping review of methods used. *Translational Behavioral Medicine*, 8, 212–224.
- Naghdi, A., Balali, E., Imani, P. (2012). A Study on Socio- Cultural Barriers of Women's Participation in Sports Case study: 20-40 year-old female athletes and non-athletes in Hamedan province, *Women in Development and Politics*, 9(1), pp. 147-163
- Pfister, G., With-Nielsen, N., & Lenneis, V. (2017). Health discourses, slimness ideals, and attitudes to PAs Perspectives of young women in Denmark. *German Journal of Exercise and Sport Research*, 47(1), 15-24.
- Prochaska, J., & DiClemente, C. (1983). Stages and processes of self-change of smoking: Toward an integrative model of change, *Journal of Consulting and Clinical Psychology*, 51(3), pp. 390-395.
- Puhl, R. M. & Heuer, C. A. (2009). The stigma of obesity: A review and Update, *Obesity*, 17, pp. 941-964.
- Rich, E. & Evans, J. (2005). ‘Fat ethics’: the obesity discourse and body politics, *Social Theory & Health*, 3, 341-358.
- Rose, N. (1999). *Powers of freedom: reframing political thought*, Cambridge: Cambridge University Press.
- Roy, C. S. (2008). Taking charge of your health’: discourses of responsibility in English-Canadian women’s magazines, *Sociology of Health & Illness*, 30(3), 463-477.
- Rysst, M. (2010). Healthism" and looking good: Body ideals and body practices in Norway, *Scand J Public Health*, 38(5), 71-80.

- Schwartz, J., Rhodes, R., Bredin, S. S., Oh, P., & Warburton, D. E. (2019). Effectiveness of approaches to increase physical activity behavior to prevent chronic disease in adults: A brief commentary. *Journal of Clinical Medicine*, 8(3), 295.
- Segar, M. L., Eccles J. S., Richardson, C. R. (2007). Type of PA goal influences participation in healthy middle women, *Women's Health*, 18, 281–291
- Statistics Canada. (2011). *Health Trends. Statistics Canada Catalogue No. 82-213-XWE. Ottawa*. Released October 25, 2011.
- Statistics Canada. 2007/2008. *Canadian Community Health Survey (CCHS) (master file)*, Statistics Canada. Using remote access program of Health Division, Statistics Canada (distributor).
- Swann, C., Rosenbaum, S., Lawrence, A., Vella, A. S., McEwan, D., & Ekkekakis, P (2020): Updating goal-setting theory in PA promotion: a critical conceptual review, *Health Psychology Review*, 1-14.
- Thompson, J.L., Allen, P., Cunningham-Sabo, L., Yazzie, D.A., Curtis, M., & Davis, S.M. (2002). Environmental, policy, and cultural factors related to PA in sedentary American Indian women, *Women Health*, 36(2), 59-74.