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NEGATIVE ASSOCIATION WITH SELF-RATED  
FITNESS**

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# Perceived Exertion of Physical Activity: Negative Association with Self-Rated Fitness

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**Abstract – In epidemiological reviews data on physical action is frequently acquired without anyone else's input report surveys, evaluating the kind of exercises played out, irrefutably the metabolic request (metabolic counterparts), and the length and recurrence of the exercises. As medical advantages from physical action are coupled to the relative power of the physical exertion, we needed to relate saw effort to self-detailed wellness. Point: To utilize a survey for acquiring data on saw effort of physical action in a populace test and to assess whether saw effort is related with self-announced wellness. Strategies: A sum of 42 particular physical exercises were incorporated into an apparent effort survey that was sent via mail to 2,543 haphazardly chose men and ladies in the vicinity of 19 and 60 years old. The members were solicited to rate exercises by degree from saw effort on a 11-point box-scale. General straight relapse investigations were attempted with seen effort of the particular physical exercises as result factors and age and self-appraised wellness as determinants. Comes about: The reaction rate was 61.7% (n=1,568) and 54.3% of the respondents were ladies. In men and ladies both, the apparent effort of 40 out of 42 particular physical exercises of low, direct, and high supreme power was adversely connected with self-evaluated wellness level. Conclusion: Perceived effort is fundamentally connected with self-evaluated wellness level in both sexual orientations after conformity for age. Self-evaluated wellness level appears to decide view of effort in recreation time, occupation, family unit, and transportation exercises, regardless of whether of low, direct, or high total power.**

**Keywords: Rating of Perceived Exertion (RPE); Limits of Agreement Analysis; Exercise Testing; Pearson Correlation Coefficients; Intraclass Correlation Coefficient**

## 1. INTRODUCTION:-

The advantages of consistent physical action (PA) for physiological and mental wellbeing are all around recorded (Biddle *et. al.*, 2004). In any case, in spite of the all-around plugged advantages of PA, numerous people from created nations don't participate in PA adequate for medical advantages. For instance, the 2008 overview of Queenslanders, Australia (Queensland Health, 2008). demonstrated that 53% of the grown-up populace matured 18–75 years did not report PA levels adequate for medical advantages, with their middle sitting time being 4.7 hours for every day. Besides, around one in four grown-ups (27.7%) were stationary for a normal of seven hours or all the more each day of the week (Queensland Health, 2008). In 2003, deficient PA was the third biggest single determinant of weight of malady in Queensland, related with 6.2% of the weight for guys and 6.8% for females (Queensland Health, 2003). Such discoveries are resounded in other high-wage nations, for example, the UK and the USA. The Health Survey for England (Craig, 2008) announced that in 2006, just 40% of men and 28% of ladies met the American College of Sports Medicine (ACSM) rules for PA

(American College of Sports Medicine, 2000). 30 minutes of in any event direct force action on most days of the week). Moreover, in 2007, more than half of American grown-ups did not accomplish the ACSM target level of PA for medical advantages. In addition, very nearly 25% revealed no relaxation time PA (Department of Health and Human Services, 2010). Inadequate PA and related negative wellbeing results are specific attentiveness toward females, who at all ages are accounted for to be less physically dynamic than guys (Talbot *et. al.*, 2000). Ladies who practice 3–4 hours for each week are around 60% more averse to be large contrasted with the individuals who don't practice (Hajian-Tilaki, Heidari, 2007). Assist, the advantages of activity are available to most of the populace, with reports proposing that levels of PA that are achievable by "common" individuals are preventive for coronary illness (Sofi *et. al.*, 2008). Understanding why people don't take an interest in adequate PA is unpredictable and multifaceted-enveloping individual, interpersonal, ecological, and arrangement determinants. Inquire about which propels our comprehension of any of these components can possibly better advise PA advancement intercessions and consequently bolster

positive general wellbeing results, both physiological and mental. To date, the long haul achievement of techniques to build PA in grown-up ladies has been lacking, and so as to create viable wellbeing methodologies, it is important to additionally examine ladies' thought processes in PA and the difficulties they confront in endeavoring to be dynamic (Zunft *et al.*, 1999). Inside this specific circumstance, the apparent advantages and boundaries to exercise are imperative go betweens of PA conduct change (Nahas, Goldfine, 2003). Investigation of variables that impact ladies' support in PA has proposed that ladies who saw more advantages from exercise and less obstructions to exercise were commonly more dynamic than the individuals who revealed high saw hindrances and low saw benefits (Vaughn, 2009). These discoveries are predictable with the hypothetical structure received by the present examination, the wellbeing conviction show (HBM) (Janz, 1984). HBM, a subjective behaviorist hypothesis, fights that an individual's status to participate in preventive wellbeing conduct is a component of their apparent risk related with that conduct, e.g., physical dormancy, and an appraisal of the relative costs (obstructions, troubles or impeding variables) and advantages related with the selection of that particular preventive wellbeing conduct. The HBM's unique four develops contained: saw defenselessness, saw seriousness, saw benefits, and saw hindrances. This recommends the probability that an individual will participate in a wellbeing conduct (e.g., PA) depends to a great extent on their apparent size of the obstructions against being physically dynamic, and their apparent advantages to being physically dynamic. In spite of the fact that the writing has announced seen hindrances to be enter in anticipating wellbeing conduct (Janz, 1984) El Ansari and Phillips' later research has recommended the issue to be more perplexing, embroiling the proportion of saw obstructions to saw benefits as being more prescient of conduct (El Ansari, Phillips, 2004). It needs likewise be considered, nonetheless, that psycho-social elements, for example, self-adequacy; statistic components, for example, age; identity and associate weight; and different elements, for example, learning additionally assume essential parts in engagement and adherence to PA conduct change intercessions (Rosenstock *et al.*, 1988) With particular reference to boundaries, in spite of a current survey of around 50 investigations of wellbeing conduct change where seen obstructions were the absolute most effective indicator of wellbeing conduct (Janz, 1984), such hindrances to practice have not been analyzed in detail (Randsdell *et al.*, 2004). What's more, the predetermined number of studies that analyzed females' apparent advantages and boundaries to practice have frequently not considered how distinctive formative points of reference and particular conditions at various phases of ladies' lives effect on both their enthusiasm to exercise and capacity to be physically dynamic (King *et al.*, 2000). (El Ansari, Lovell, 2009). Moreover, a normal for some created nations is the generally high rates of the crowded who select for

advanced education: e.g., in the USA amid 2000 more than 14.5 million understudies were enlisted in schools and colleges, with more than 56% being ladies (Leslie, *et al.*, 2001). In any case, of the constrained research that concentrated on college females, Irwin's (Irwin, *et al.*, 2004) audit nitty gritty a scope of past reviews showing that exclusive in the vicinity of 28% and half of female college understudies occupied with adequate PA, contrasted with in the vicinity of 40% and 68% of male understudies. College understudies not just speak to a particular under-explored populace that in light of Irwin's discoveries would profit by expanded PA levels, yet college training settings likewise give "significant settings" of hidden chances to impact PA practices of youthful grown-ups (Leslie, *et al.*, 2001). (p. 116). This is critical given late discoveries that right around one fourth of all understudies beginning college put on a lot of weight amid their first semester, a reality that backings the need of powerful systems to help these youthful grown-ups beginning college keep up a solid body weight (Wengreen, Moncur, 2009). Encouraging and sustaining PA at college seems to have a comparative part in forming deep rooted PA conduct as does tutoring (Armstrong, McManus, 1994) with PA designs potentially staying stable for up to five years post-graduation (Sparling, Snow, 2002). Henceforth the advantages of spurring college understudies to be dynamic are twofold: (1) for direct PA conduct results that are related with general medical advantages; and, (2) for longer term results. Viable PA advancement projects and mediations require a confirmation base of female understudies' mentalities toward exercise as far as saw advantages and boundaries. In any case, just few reviews have analyzed female college understudies' mentalities towards exercise (Gyurcsik, *et al.*, 2006) Of the little research that considered female college understudies (e.g., (Leslie, *et al.*, 2001. Irwin, *et al.*, 2004. Wengreen, Moncur, 2009. Armstrong, McManus, 1994. Sparling, Snow, 2002. Gyurcsik, *et al.*, 2006), non-practicing populaces have not been analyzed. Such a crevice in information identified with the apparent advantages and hindrances to practice for female understudies, particularly the individuals who don't accomplish suggested PA levels, frustrates the advancement of effective populace particular PA techniques focusing on such females. The review portrayed in this paper addresses this hole.

## 2. REVIEW OF LITRATURE:

Satisfactory PA has a basic bearing on prosperity and personal satisfaction . College settings introduce key chances to advance PA conduct in youthful grown-up populaces e.g., female understudies. Be that as it may, there is absence of data with respect to states of mind toward exercise of female college understudies who don't accomplish PA adequate for medical advantages. This confines the plan of successful and particular PA advancement programs. The present review analyzed the apparent exercise advantage

and boundary powers of non-practicing female college understudies in the UK. Regarding the principal objective, the example's general levels of saw advantages or hindrances to practice by and large showed that members either "concurred" or practically 'firmly concurred' with the vast majority of the advantages things, while just being nonpartisan or, best case scenario moving toward concurrence with huge numbers of the boundaries things. This recommended our example of college understudies saw more elevated amounts of advantages from exercise than hindrances to work out, and in reality their apparent advantage/boundary proportion was 1.33. For the advantages, members concurred the slightest with 'practicing expands my acknowledgment by others', while concurring the most with 'practicing builds my level of physical wellness'. For the obstructions, members concurred the most with 'spots for me to exercise are too far away', 'practice tires me', intently took after by 'exercise is diligent work for me'; on the other hand, the most grounded contradiction was with the boundaries 'practice takes excessively time from family connections', 'my relatives don't urge me to exercise', and 'I am excessively humiliated, making it impossible to work out'. As respects the second goal of this review, regardless of every one of our members being delegated 'non-working out' utilizing ASCM rules, their apparent advantages were essentially more noteworthy than the apparent obstructions to work out. This is steady with past proposals that apparent boundaries could be more persuasive on conduct than saw benefits (Nahas, Goldfine, 2003). In connection to our third target, for these non-practicing female college understudies, the most grounded saw advantage from practicing was physical execution. This was trailed by mental viewpoint and preventive wellbeing while life upgrade and social communication advantages were strikingly lower. The finding that physical execution (incorporating numerous wellbeing viewpoints e.g., wellness, stamina, muscle tone, and physical appearance) was the most noteworthy seen advantage from exercise, may not astonish as the significance of such qualities for females are persistently stressed by an extensive variety of media channels. Essentially, the rating of mental standpoint as the second most elevated advantage from practicing is in support of Biddle and Bailey who found that females were especially energetic about the upgrades in mental prosperity that came about because of activity. It was likewise promising that our example communicated a solid discernment that activity provides positive preventive medical advantages. Our finding that female college understudies knew that activity can help their long haul wellbeing is imperative in connection to the wellbeing conviction display (Janz, 1984) all things considered discernments could go about as forerunners to behavioral change. It is likewise consoling that current UK arrangement orders (e.g., two Government white

papers: Choosing wellbeing: Making more advantageous decisions simpler, and Choosing movement: A physical activity arrange, and also promoting and school-based training programs seem to have been effective in alarming youthful grown-up females to the imperative medical advantages related with PA. In any case, despite the fact that this example seemed, by all accounts, to be mindful of and in addition, esteemed the advantages of working out, the way that the females in this review were latent recommended they were still not reacting emphatically, or were yet to react to such wellbeing instruction messages and data. Our examples' discernment that there were generally less advantages from practicing related with life improvement and social communication variables is conversely with some prior writing, yet still conceivable. Traditionally, past research and inspiration hypothesis (e.g., intellectual assessment hypothesis) have proposed that social issues could be key intentions in the proceeded with cooperation in exercise programs. Be that as it may, our example speaks to a particular populace (college understudies), frequently unique to those taking an interest in past exercise conduct and inspiration ponders. Consequently the moderately less advantages from practicing related with life upgrade and social collaboration variables may be clarified by that college understudies for the most part experience various chances to meet individuals, mingle, blend and connect – these are every one of the an indispensable piece of college life and school understanding for these youthful grown-ups. These bounteous socialization openings could have maybe "undermined" the apparent significance of the social advantages that could gather from exercise. As far as the fourth target, non-practicing female college understudies felt that family debilitation was minimal boundary to work out. This finding may be normal, as 91% of the example was single. It was additionally reassuring to find that activity milieu was not considered to exhibit an important obstruction to work out. This positive discovering appears differently in relation to King et al's. recommendation that youthful grown-up females think that it's hard to practice because of restricted access to offices. Moreover, these outcomes challenge the conventional perspectives that females see practicing circumstances humiliating or threatening (Gyurcsik, et. al., 2006). Be that as it may, our discoveries may be particular to college understudies who are normally sure about their social settings and with generally open (and frequently for nothing out of pocket) access to exercise offices and PA openings. Time consumption was thought to be to a greater degree an obstruction than both family debilitation and exercise milieu, albeit fundamentally not as much as physical effort. The constrained impression of time consumption as a hindrance to exercise is sure as it reflects potential time to work out. The members' observations that the accessibility of time was

appraised "unbiased" as a hindrance to exercise may reflect viable time administration abilities of these females, conceivably created through college training or perhaps very much booked college practice classes. In spite of the fact that our discoveries proposed that time supposedly was impartial as a hindrance, time was still seen to be a bigger boundary than the activity milieu. This is in concurrence with Gyurcsik et al. who analyzed the obstructions to PA in 198 Canadian understudies (Gyurcsik, *et. al.*, 2006). Gyurcsik found that 52% of their college understudies referred to social solicitations amid exercise time to be an obstruction to PA and 74% referred to their workload too high to take into account PA; both these angles speak to time use hindrances to some degree. Gyurcsik likewise found that activity milieu issues were for the most part referred to by less understudies, with just 3% referred to absence of cash as a boundary, albeit 62% referred to transport as an obstruction (Gyurcsik, *et. al.*, 2006). Physical effort was essentially the biggest seen obstruction to work out. Our example's recognition that the significant hindrance to exercise was that PA is exhausting and diligent work is of extraordinary concern. An endless loop could be started: as understudies lose (relapse) in their physical wellness condition, they could see that consequent PA will normally be considerably harder. This thus strengthens physical effort as an obstruction to exercise accordingly diminishing their movement and thusly their physical wellness condition. The impression of physical effort as the real obstruction to exercise may likewise mirror a social or social marvel. As indicated by Ajzen and Madden (hypothesis of arranged conduct), states of mind are influenced by social standards, which then impact aims and thus conduct. In the event that the social standard is not to be physically dynamic and not to appreciate the physical concomitance of being physically dynamic (e.g., expanded heart rate, expanded sweating, sentiments of being actuated), then an individual's disposition towards PA may turn out to be more negative, with the thump on impact of diminished exercise expectation and eventually conduct. In the light of companion weight, and current patterns and social settings of understudies, colleges (and schools) that don't adequately extend positive pictures about the medical advantages of physical effort may rather get to be distinctly powerful conditions for the proliferation of negative points of view towards physical effort. As to the fifth target, a significant number of the obstruction subscales were essentially and adversely connected with individual advantage subscales. The obstruction of activity milieu was contrarily connected with all the advantage sub-scales, albeit physical effort was just connected with social communication. The interrelation of a few, yet not of all the hindrance and advantage subscales exhibited the many-sided quality of the way of these variables. Moreover, these linkages indicate how mediations concentrating on various boundaries could likewise have a potential constructive outcome on related saw benefits, e.g., the linkage between exercise milieu and

social association. These interconnections may likewise propose backhanded roads to impact saw boundaries through arranged administration of females' apparent advantages to PA. The review has restrictions. Discoveries of cross sectional reviews are affiliations and don't construe causality. The specimen involved 200 female understudies speaking to a limited age run, in this manner alert should be practiced when endeavoring to sum up to different settings or populaces. In any case, the information were gathered by means of irregular choice at two colleges, on three unique events, accordingly expanding the possibility to sum up of our discoveries to comparative populaces. As the information gathered is self-detailed, it was basic to limit respondent weight, so by keeping

### 3. PERCEIVED EXERTION (BORG RATING OF PERCEIVED EXERTION SCALE):

The Borg Rating of Perceived Exertion (RPE) is a method for measuring physical action power level. Seen effort is the means by which hard you sense that your body is working. It depends on the physical sensations a man encounters amid physical action, including expanded heart rate, expanded breath or breathing rate, expanded sweating, and muscle weariness. Despite the fact that this is a subjective measure, a man's effort rating may give a genuinely decent gauge of the real heart rate amid physical activity\* (Borg, 1998).

Experts for the most part concur that apparent effort appraisals between 12 to 14 on the Borg Scale recommend that physical action is being performed at a direct level of force. Amid action, utilize the Borg Scale to allocate numbers to how you feel (see guidelines beneath). Self-checking how hard your body is functioning can help you alter the power of the action by accelerating or backing off your developments.

Through experience of observing how your body feels, it will get to be distinctly less demanding to know when to conform your force. For instance, a walker who needs to participate in direct force movement would go for a Borg Scale level of "to some degree hard" (Vaughn, 2009. Janz, 1984. El Ansari, Phillips, 2004). In the event that he depicts his muscle weakness and breathing as "light" (9 on the Borg Scale) he would need to expand his force. Then again, in the event that he felt his effort was "greatly hard" (19 on the Borg Scale) he would need to back off his developments to accomplish the direct force extend.

\*A high connection exists between a man's apparent effort rating times 10 and the genuine heart rate amid physical action; so a man's effort rating may give a genuinely decent gauge of the real heart rate amid movement (Borg, 1998). For instance, if a man's appraising of seen effort (RPE) is 12, then  $12 \times 10 = 120$ ; so the heart rate ought to be roughly 120 thumps

for every moment. Take note of that this figuring is just an estimation of heart rate, and the real heart rate can fluctuate a considerable amount contingent upon age and physical condition. The Borg Rating of Perceived Exertion is additionally the favored strategy to survey force among those people who take drugs that influence heart rate or heartbeat.

#### **4. NEGATIVE ASSOCIATION WITH SELF-RATED FITNESS**

Self-evaluated wellbeing (SRH), a straightforward question requesting that people rate their wellbeing as a rule, has reliably been found to anticipate mortality, dreariness, and other wellbeing results. This is not astounding in itself, as SRH is related with numerous markers of physical and emotional wellness (see meta-examination by Pinquart, for example, utilitarian capacity, despondency, and ceaseless torment, and also with social hazard elements, for example, financial status (e.g. wage incongruities), socioeconomics (age and sexual orientation), work stress and initiative. The additionally interesting finding is that in many reviews that have analyzed this, SRH remained a noteworthy indicator of future wellbeing results even in the wake of controlling for some applicable covariates that incorporate known hazard elements for weakness.

The single thing SRH measure has shown great reproducibility, unwavering quality, and solid simultaneous and discriminant scale execution with a set up more nitty gritty subjective wellbeing status measure. Its legitimacy has been reliably bolstered by several reviews detailing its relationship with doctor appraisals and other wellbeing measures and its forecast of future mortality and dismalness. Additionally bolster for its part as an integrative assessment of one's wellbeing and not a transient evaluation originates from studies demonstrating that it is not touchy to mind-set enlistments or late intense sicknesses, and, while it has been observed to be related with measures of identity, its relationship with target therapeutic weight stay even in the wake of controlling for identity. Moreover, a 22-year follow up of the General Social Survey demonstrated an expanding prescient legitimacy of self-evaluated wellbeing on of mortality.

One of the clarifications proposed for this autonomous relationship of SRH with mortality and dreariness is that SRH is more comprehensive than the covariates normally utilized as a part of studies and as a solitary thing, gives an ideal incorporation of many sorts of data, including outer (e.g. analyze) and inward data (e.g. real sensations). Subsequently, SRH may reflect ailments at pre-clinical stages and all the more precisely mirror the aggregate impacts of comorbidity. This clarification is upheld by discoveries demonstrating that SRH is firmly connected with

tiredness, decreases in planned step and strolling speed, and that force communicates with useful ability to anticipate changes in SRH. In addition, the "substantial center" of SRH has been found to incorporate sentiments of weakness, absence of vitality, and reduced movement.

In accordance with these self-reports, SRH has been observed to be related with an extensive variety of biomarkers, including incendiary markers, even in the wake of controlling for an assortment of wellbeing and psychosocial measures. The relationship of SRH with mortality is like (Irwin, 2004). or even better than that of a board of biomarkers. In aggregate, while the relationship of SRH with future wellbeing lessens with expanding modification, it is normally not disposed of, recommending that SRH is an indicator of mortality in light of the fact that SRH mirrors the condition of the human life form and is probably going to be construct in any event to some degree in light of interceptive procedures.

A conceivable yet so far uninvestigated component that could interface the different wellsprings of data that sustain into SRH is autonomic sensory system (ANS) movement. One generally utilized measure of ANS movement is the beat-to-thump varieties in the cardiovascular mood as ordered by heart rate changeability (HRV). HRV might be more than only a record of solid heart work and may in certainty fill in as an effortlessly measured yield of the cerebrum's integrative framework for versatile control. Like SRH, HRV has been freely connected with bleakness and mortality from an extensive variety of scatters including metabolic disorder (MetS), poor quality aggravation, weariness, work stretch, and cardiovascular sickness. Therefore, HRV, as SRH, might be a more comprehensive list of wellbeing and might be a more integrative measure of outside and inside wellbeing related data. In total, HRV is by all accounts a promising physiological connect of SRH yet shockingly, in light of a deliberate writing seek in Medline (by means of PubMed) and PsychInfo (first April 2014), the connection amongst SRH and HRV has not been researched.

Consequently, the accompanying examination planned to research (1) the relationship between a single-item measure of worldwide SRH and HRV in an extensive example of working grown-ups; and (2) the relative quality of relationship between worldwide SRH and HRV versus other much of the time utilized biomarkers including fiery markers. It is speculated that SRH would be related with ANS action as filed by HRV and that this affiliation would be more articulated in contrast with other habitually utilized yet less comprehensive biomarkers.

**CONCLUSION:**

Seen effort is fundamentally connected with self-evaluated wellness level in both sexual orientations after alteration for age. Self-appraised wellness level appears to decide view of effort in recreation time, occupation, family, and transportation exercises, regardless of whether of low, direct, or high supreme power.

**REFERENCES:**

- American College of Sports Medicine (2000). ACSM's Guidelines for Exercise Testing and Prescription, 6th ed.; Lippincott, Williams, Wilkins: Baltimore, MD, USA.
- Armstrong, N.; McManus, A. (1994). Children's fitness and physical activity: A challenge for physical education. *Br. J. Phys. Educ.*, 25, pp. 20-26.
- Biddle, S.J.H.; Gorely, T.; Stensel, D.J. (2004). Health-enhancing physical activity and sedentary behaviour in children and adolescents. *J. Sports Sci.*, 22, pp. 679-701.
- Craig, R.J.M. (2008). Health Survey for England 2006; The Information Centre: Leeds, UK, 2008.
- Department of Health and Human Services (2010). Centers for Disease Control and Prevention U.S. Physical Activity Statistics. Available online: <http://apps.nccd.cdc.gov/PASurveillance/StateSumResultV.asp> (accessed on 23 November 2009). *Int. J. Environ. Res. Public Health*, p. 7797.
- El Ansari, W.; Lovell, G. (2009). Barriers to exercise in younger and older non-exercising adult women: A cross sectional study in London, United Kingdom. *Int. J. Environ. Res. Public Health*, 6, pp. 1443-1455.
- El Ansari, W.; Phillips, C.J. (2004). The Costs and benefits of participants in community partnerships. A paradox? *Health Promot. Pract.*, 5, pp. 35-48.
- Gyurcsik, N.C.; Spink, K.S.; Bray, S.R.; Chad, K.; Kwan, M. (2006). An ecologically based examination of barriers to physical activity in students from grade seven through first-year university. *J. Adolesc. Health* 2006, 38, pp. 704-711.
- Hajian-Tilaki, K.O.; Heidari, B. (2007). Prevalence of obesity, central obesity and the associated factors in urban population aged 20-70 years, in the north of Iran: a population-based study and regression approach. *Obes. Rev.*, 8, pp. 3-10.
- Irwin, J.D. (2004). Prevalence of university students' sufficient physical activity: A systematic review. *Percept. Mot. Skills*, 98, pp. 927-943.
- Janz, N.K. (1984). Becker, M.H. The health belief model: A decade later. *Health Educ. Quart.*, 11, pp. 1-47.
- King, A.C.; Castro, C.; Wilcox, S.; Eyster, A.A.; Sallis, J.F.; Brownson, R.S. (2000). Personal and environmental factors associated with physical inactivity among different racial-ethnic groups of US middle-aged and older-aged women. *Health Psychol.* 19, pp. 354-364.
- Leslie, E.; Sparling, P.B.; Owen, N. (2001). University campus and the promotion of physical activity in young adults: Lessons from research in Australia and the USA. *Health Educ.*, 101, pp. 116-125.
- Nahas, M.V.; Goldfine, B. (2003). Determinants of physical activity in adolescents and young adults: The basis for high school and college physical education to promote active lifestyles. *Phys. Educator*, 60, pp. 42-57.
- Queensland Health (2003). Risk Factor Impact on the Burden of Disease and Injury in Queensland, 2003; Queensland Health: Brisbane, Australia, 2008.
- Queensland Health (2008). The Health of Queenslanders: Prevention of Chronic Disease 2008. Second Report of the Chief Health Officer Queensland; Queensland Health: Brisbane, Australia.
- Randsdell, L.B.; Detling, N.; Hildebrand, K.; Lau, P., Moyer-Mileur, L.; Shultz, B. (2004). Can physical activity interventions change perceived exercise benefits and barriers? *Am. J. Health Stud.*, 19, pp. 195-204.
- Rosenstock, I.M.; Stretcher, V.J.; Becker, M. (1988). Social learning theory and the health belief model. *Health Ed. Quart.*, 15, pp. 175-183.
- Sofi, F.; Capalbo, A.; Cesari, F.; Abbate, R.; Gensini, G.F. (2008). Physical activity during leisure time and primary prevention of coronary heart disease: an updated meta-analysis of cohort studies. *Eur. J. Cardiovasc. Prev. Rehabil.*, 15, pp. 247-257.
- Sparling, P.B.; Snow, T.K. (2002). Physical activity patterns in recent college alumni. *Res. Q. Exerc. Sport*, 73, pp. 200-205.
- Talbot, L.A.; Metter, E.J.; Fleg, J.L. (2000). Leisure time physical activities and their relationship to cardiorespiratory fitness in healthy men

and women 18–95 years old. *Med. Sci. Sports Exerc.*, 32, pp.417-425.

Vaughn, S. (2009). Factors influencing the participation of middle-aged and older Latin-American women in physical activity: a stroke-prevention behaviour. *Rehabil. Nurs.*, 34, pp. 17-23.

Wengreen, H.J.; Moncur, C. (2009). Change in diet, physical activity, and body weight among young-adults during the transition from high school to college. *Nutr. J.*, 22, pp. 8-32.

Zunft, H.F.; Friebe, D.; Seppelt, B.; Widhalm, K.; Remaut de Winter, A.M.; Vaz de Almeida, M.D.; Kearney, J.M.; Gibney, M. (1999). Perceived benefits and barriers to physical activity in a nationally representative sample in the European Union. *Public Health Nutr.*, 2, pp. 153-160.

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