

Analysis of Self Compassion and Self Esteem between Adolescents Engaged in Physical Exercise in the form of Gym with those having Sedentary Lifestyle

Meghna Basu Thakur and Namrata Joshi

ABSTRACT

The present study seeks to explore the difference in self-compassion and self-esteem in adolescents who are engaged in physical exercise through gymnasium and those who aren't involved in any such exercise related activities and are having sedentary lifestyle. The two scales consisted of Neff's Self Compassion Scale and Rosenberg's Self Esteem Scale. Results show that self-compassion was higher in the group involved in physical exercise through gym workout (Mean- 39.83) as compared to those who had sedentary lifestyle (Mean-36.86). Similar results were found for the other hypothesis of self-esteem. That is, the self-esteem was found to be higher (Mean= 23.76) in the group of participants who were involved in physical exercise through gym workout as compared to those who had reported having sedentary lifestyle (Mean = 18.16). Thus, the results found in this study do indicate that exercise and sedentary lifestyles are related to self-esteem and compassion.

Key words: Self-esteem, Self-compassion, Exercise, Gym, Adolescents

INTRODUCTION

Physical activity is defined as any bodily movement produced by skeletal muscles that result in energy expenditure. The energy expenditure can be measured in kilocalories. Physical activity in daily life can be categorized into occupational, sports, conditioning, household, or other activities. Exercise is a subset of physical activity that is planned, structured, and repetitive and has as a final or an intermediate objective the improvement or maintenance of physical fitness.

Exercise in Gym

The major motive of the physical workout in the form of gym was added as a variable in the study in order to have a concrete base of the exercise or physical activities that women are engaged in day to day basis. The sample included those women who have been working out in the gym for at least 6 months, with 30 minutes of workout each day for at least 5 days a week. It is expected that if the person has an enrolled membership in the gym there are greater likelihood of they being more involved with the similar kind of activities. Another vital reason to include those adolescents only who were actively involved in physical activities through gym was that there will be more uniformity in terms of the quality of the exercise regime that is followed. Having said this, adolescents who were involved in physical activities in the form of other forms of exercises like aerobics, yoga, zumba and so on were excluded from the study for the above mentioned reasons.

Sedentary Lifestyle

A sedentary lifestyle is a type of lifestyle with no or irregular physical activity. It also refers to a group of behaviors that occur whilst sitting or lying down while awake and typically require very low energy expenditure. Sedentary activities include sitting, reading, watching television, playing video games, and computer use for much of the day with little or no vigorous physical exercise.

Self Compassion

Self-compassion entails being warm and understanding toward ourselves when we suffer, fail, or feel inadequate, rather than ignoring our pain or flagellating ourselves with self-criticism. Self-compassionate people recognize that being imperfect, failing, and experiencing life difficulties is inevitable, so they tend to be gentle with themselves when confronted with painful experiences rather than getting angry when life falls short of set ideals.

Self Esteem

Self-esteem reflects a person's overall subjective emotional evaluation of his or her own worth. It is a judgment of oneself as well as an attitude toward the self. Self-esteem encompasses beliefs ("I am competent", "I am worthy") and emotions such as triumph, despair, pride, and shame. Smith and Mackie (2007) defined it as "The self-concept is what we think about the self; self-esteem is the positive or negative evaluations of the self, as in how we feel about it."

Adolescents

Adolescence describes the teenage years between 13 and 19 and can be considered the transitional stage from childhood to adulthood. The physiological changes that take place can lead to confusion, anxiety over bodily issues. The physical appearance is one of

the apparent reasons for the self-esteem in adolescents. Constant evaluation by peer groups, perception of the romantic partner's idea about the body can lead to a lot of pressure. Thus the external appearance tends to naturally increase in importance for sometime during a teen's journey toward adulthood.

Need for Study

With increase in awareness about health, healthy lifestyle, and anxiety about self - image, body, varied ailments, it is important to study various psychological factors related to exercise. The way these factors are related to the adolescent population where self-evaluation of body image, evaluation of self-image, it calls for the attention in how factors like self-esteem and compassion are affected through all this. Self- esteem and self-compassion has been closely related to exercises in the previous findings related to health, exercise and other related factors. Hence, there was in need to study the impact of exercise and sedentary lifestyle on self-esteem and compassion.

Review of Literature

Self-esteem is thought of as vital in helping to maintain performance levels, as well as keeping up the motivation to push that little bit harder in the gym or while running on the streets. Performing well in sport and exercising regularly is also thought as ways of boosting self-esteem (e.g. Fox, 2000). Other type of self-concept that is as adaptive in sport and exercise or more adaptive - Self-Compassion. It is emerging as a healthy conceptualization of the self (Neff, 2003a).

Unlike self-esteem, which is based on the degree to which we evaluate ourselves as competent in important areas of life (James, 1890), self-compassion is not contingent on self-evaluations, judgments, and comparisons to determine our self-worth (Coopersmith, 1967; Harter, 1999). Instead, self-compassion will remain constant through ever-changing life circumstances. In exercise it could be a drop in motivation, fatigue or physical pain.

Growing body of research suggests that self-compassion is strongly associated with psychological health. Higher levels of self-compassion have been associated with greater life satisfaction, emotional intelligence, social connectedness, learning goals, wisdom, personal initiative, curiosity, happiness, optimism, and positive affect, as well as less self-criticism, depression, anxiety, fear of failure, thought suppression, perfectionism, performance goals, and disordered eating behaviors (Neff, 2009).

Research has found that self-compassion and self-esteem are inter-correlated, ranging from 0.57–0.59 using the Rosenberg scale (Leary et al., 2007; Neff, 2003a; Neff et al., 2008). This moderate association makes sense given that self-compassion and self-esteem both represent positive self-attitudes. Also, people who lack self-compassion are likely to have lowered feelings of self-worth because they are so self-critical and

hard on themselves. In contrast, those with high levels of self-compassion are likely to have heightened feelings of self-worth because they are kinder and more accepting of themselves (Neff, 2003a). There is also research evidence to suggest that self-compassion offers mental health benefits that self-esteem does not.

METHODOLOGY

Objectives of Study

The primary goal was to study the adolescent population who tend to evaluate themselves more in terms of body image, ideal self-image, making them more prone to the negative self-evaluation. Hence, it is vital to study how there can be difference in the self-esteem and self-compassion within adolescents with and without any involvement to gym exercise.

HYPOTHESIS

There is a difference in the Self Esteem scores obtained from adolescents who are actively involved in physical exercise through gym workout and those who are having a sedentary lifestyle.

There is a difference in the Self Compassion scores obtained from adolescents who are actively involved in physical exercise through gym workout and those who are having a sedentary lifestyle.

The Independent Variable was presence and absence of physical exercise manipulated at two levels-adolescents who were involved in physical exercise and those who had sedentary lifestyle.

The physical exercise was defined as adolescents who were engaged in any form of physical exercise by working out in gym from at least last six months for at least 30 minutes per day and for at least 5 days week.

On the other hand sedentary lifestyle was defined as no involvement in any form of physical exercise with an intention to work out in physical form in daily routine.

DEPENDENT VARIABLE

The total score obtained on the following:

Neff's Self Compassion Scale.

Rosenberg's Self Esteem Scale.

Design

Random groups design with one Independent Variable having two levels. The two groups consisted of the adolescents in the age range of 14- 19 years. One group consisted

of those who were engaged in the physical exercise through involving themselves in gym workout (n= 30). While the other group was those who had sedentary lifestyle (n= 30).

Sample Description

The questionnaire was given to the adolescents who were in the age range of 14-19 years old. The sample consisted of adolescents who were engaged in physical exercise by going to gym from at least last six months for at least 30 minutes per day for at least 5 days week and those adolescents who had sedentary lifestyle, where there was no form of physical exercise in which they were involved. This was analyzed by asking open ended questions about their daily routine. After which, the participants filled up the given questionnaires.

Measures Used (tools)

Self-compassion was measured using the 26-item Self Compassion Scale (SCS; Neff, 2003a). Responses are made on a 5-point scale ranging from 1 (almost never) to 5 (almost always). In this study, the subscale scores weren't taken into account.

Global self-esteem was measured using the 10-item Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). Participants respond on a scale from 0 (strongly disagree) to 3 (strongly agree), with higher scores indicating higher self-esteem. Composite scores were created by summing the items after negative items were reverse coded.

Data Analysis

The data was analyzed using SPSS package. Descriptive statistics were derived from the sample responses. The collected data was also analyzed for the inferential statistics in the form of t-test for random groups design with one independent variable having two levels.

RESULTS

The two hypotheses of the self-esteem and self-compassion were compared in terms of sedentary lifestyle and physical exercise group of adolescents.

A total of 60 individuals participated in the research study. 30 participants were from the group where adolescents who reported being actively involved in physical exercise through workout in gym since last six months for at least 30 minutes per day for at least 5 days week. On the other hand 30 participants were adolescents who reported having sedentary lifestyle.

Table 1
Summary statistics for self-compassion and self-esteem of both the groups
(Physical Exercise Group and Sedentary lifestyle group)

	Groups	N	Mean	Std. Deviation	Std. Error Mean
Self_Esteem	Physical Exercise Group	30	39.8333	7.55250	1.37889
	Sedentary lifestyle group	30	36.8667	5.78782	1.05671
Self_Esteem	Physical Exercise Group	30	23.7667	4.03163	.73607
	Sedentary lifestyle group	30	18.1667	5.42080	.98970

Table 1 puts a light on the Summary statistics for self-compassion and self-esteem of both the groups (Physical Exercise Group and Sedentary lifestyle group). The mean obtained for the self-compassion in the physical exercise and sedentary lifestyle group was 39.83 and 36.86, with Standard Deviation 7.55 and 5.78 respectively. The obtained mean for the self-esteem in the physical exercise and sedentary lifestyle group was 23.77 and 18.16 respectively. Whereas, the corresponding Standard Deviation obtained was 4.03 and 5.42.

The obtained data was analyzed for inferential statistics in order to identify if there was any significant difference between the obtained mean scores from both the group with reference to both the research hypothesis. A t-test for random groups design with one Independent Variable having two levels was calculated.

Table 2
Inferential statistics table for self-compassion and self-esteem of both the groups
(Physical Exercise Group and Sedentary lifestyle group)

Independent Samples Test									
	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Self-Compassion	4.282	.043	1.708	58	.093	2.96667	1.73723	-.51078	6.44411
Self-Esteem	9.177	.004	4.540	58	.000	5.60000	1.23341	3.13106	8.06894

As seen in Table 2, Inferential statistics table for self-compassion and self-esteem of both the groups (Physical Exercise Group and Sedentary lifestyle group), the t-test value obtained for the self-compassion group was 1.708 was observed to be significant at 0.05 level, two tailed with df 58 . Thus, the obtained findings signify that the results are statistically significant. On the other hand the t-test value obtained for the variable self-esteem was found to be 4.54 significant at 0.0005 level, two tailed. Thus, the obtained findings signify that the results are statistically significant. That is, there is a significant difference observed between the means of the two groups.

The obtained results have thus gathered evidence in support for the research hypothesis 1 which states that - There is a difference in the Self Esteem scores obtained from adolescents who are actively involved in physical exercise through gym workout and those who are having a sedentary lifestyle.

Also to mention that similar results are obtained for the research hypothesis 2 which states that "There is a difference in the Self Compassion scores obtained from adolescents who are actively involved in physical exercise through gym workout and those who are having a sedentary lifestyle" can be accepted.

DISCUSSION

The primary goal was to study the adolescent population who tend to evaluate themselves more in terms of body image, ideal self-image, making them more prone to the negative self-evaluation. Hence, it is vital to study how there can be difference in the self-esteem and self-compassion within this population with and without any involvement to gym exercise. This study provides evidence that self-esteem and self-compassion is related to well-being in the exercise context.

Through the obtained results described in the previous section it is clear that both the hypothesis have got assembled support statistically. These results suggest much promise for the construct of self-esteem and self-compassion as a way to promote a healthy conceptualization of the self for adolescent exercisers. The finding that self-compassion and self-esteem was related to exercise related behaviors should not be surprising, given the links described earlier between the self-compassion and self-esteem literature.

Neff et al. (2005) suggested that because being self-compassionate promotes a greater sense of self-worth and less self-evaluation, feelings of self-worth are fostered that outlast situational difficulties.

Leary et al. (2007) showed that individuals high in self-compassion were less influenced by raters' evaluation of disclosure of personal information. This finding in this study suggests that adolescent exercisers who are self-compassionate might also

be less influenced by others' evaluations in group exercise settings.

Having stated all these, it is also crucial to talk about self-esteem and self-compassion in relation to each other as concepts. Leary and MacDonald (2003) spoke specifically to the differences between self-esteem and self-compassion by explaining that self-esteem is based on believing that the self is valued by others, while self-compassion is based on positive feelings to care for oneself.

Those groups of adolescents who reported having low self-esteem were those who weren't involved in any form of physical exercises. One of the possible reason to no involvement in physical activity might be due to the view that the task (physical exercise) is difficult which they may face challenging in mastering it. Thus, no involvement in physical can lead to low self-esteem or low self-esteem itself has led to no involvement in any form of physical exercises.

People who already have higher self-esteem for other reasons may be more motivated to exercise compared to those who have lower self-esteem. Notably, while some experiments have shown that the effect of exercise on self-esteem is positive (e.g., McAuley, Blissmer, Katula, Duncan, & Mihalko, 2000), and others have shown no effect (e.g., Walters & Martin, 2000)

From the evidence obtained in this study it is clear that physical activity can be an effective intervention to enhance self-esteem. However, not all physical activity interventions are effective and some may even be detrimental to self-esteem. Therefore it is important to consider the underlying mechanisms for how and why physical activity improves self-esteem. Further research is required to understand the role of exercise programme duration in the exercise and self-esteem relationship.

It can be tentatively stated that one way to increase an individual's self-esteem and self-compassion is through exercise. By increasing self-compassion and esteem of an individual, one would be more apt to engage in healthy behaviors such as effectively dealing with stress, managing their weight, complying with a healthy diet, cessation of smoking, and adhering to exercise.

For many people it is difficult to start a regular exercise program because of numerous factors such as perceived barriers, lack of support, or low self-efficacy, financial support, motivation, accessibility to gym, awareness about the importance of physical exercise. Before generalizing the results it is crucial to consider these factors that can hamper one's intention to go for exercise regime.

Limitations

This study fails to give an impression if the relationship between self-esteem and compassion towards exercise related behaviors is bidirectional or not. The generalizability of these

findings may be limited to areas with similar population demographics.

Further research is needed to compare the effect of varying exercise intensities and durations on both the constructs. Also more studies are necessary which examine the effects of different types of exercises, i.e. aerobic exercise vs. weight training, on self-esteem and self-compassion.

The potential for social desirability exists. The gender differences weren't covered in the study.

CONCLUSION

The study was conducted on adolescents who were engaged in physical exercise through gym and those who had sedentary lifestyle. The major focus was to study the impact of exercise related behaviors on the self-esteem and self-compassion. The obtained data states that both groups differed in their measured self-esteem and compassion. The self-esteem and compassion was higher in the group of adolescents who reported engaged in physical exercise through gym.

Implication of Research for Social Policy and Planning

In this era of exponential growth of the "metabolic syndrome" and obesity, lifestyle modifications could be a cost-effective way to improve health and quality of life. An essential component of lifestyle modification is exercise. This study focused on how exercise can be related to mental health in terms of the psychological factors like self-compassion and self-esteem. The results found in this study do indicate that exercise and sedentary lifestyles are related to self-esteem and compassion and they can essentially be considered as one of the proponent factors in increasing the self-esteem and self-compassion.

Researchers are still working out the details of that action: how much exercise is needed, what mechanisms are behind the boost exercise brings, and why — despite all the benefits of physical activity — it's so hard to go for that morning jog. But as evidence piles up, the exercise-mental health connection is becoming impossible to ignore.

In sport and exercise, self-esteem is thought of as vital in helping to maintain performance levels, as well as keeping up the motivation to push that little bit harder in the gym or while running on the soggy streets on a winter's morning. Performing well in sport and exercising regularly is also thought as ways of boosting self-esteem (e.g. Fox, 2000). Indeed, holding this assumption, as Mosewich et al., (2011) noted, there exists a body of research dedicated to identifying sport environments and instructional strategies to nurture positive self-esteem (Patterson, 1999; Weiss, 1993). There any other types of self-concept that are as adaptive in sport and exercise, or

possibly even more adaptive is Self-Compassion. Self-compassion is emerging in the literature as a healthy conceptualization of the self (Neff, 2003a).

Research on the link between self-compassion and age is mixed. While one study found that self-compassion had a small but significant association with age (Neff & Vonk, 2009), another study found that the self-compassion levels of college students were no higher than those of high-school students (Neff & McGeehee, 2010). Still, this issue needs to be explored further. It may be possible that people become more self-compassionate later in life, especially if they reach the stage of integrity proposed by Erikson (1968), which involves acceptance of the self.

Keeping all of the above mentioned things in mind, exercise should be made mandatory in hospital setups, health care units, and mental health centers. Having a regular exercise program, with the workshops and training sessions on self-efficacy, self-esteem and being compassionate towards self can help in providing a beneficial base to the wellbeing of the person.

REFERENCES

- Aspinwall, L. G., and Taylor, S. E. (1993). Effects of social comparison direction, threat, and self-esteem on affect, self-evaluation, and expected success. *Journal of Personality and Social Psychology*, 64, 708–722.
- Brown, Heather M. (2007). Academic guidance counseling; Health education
- Marrika Tigemann and Samantha Williamson. (2000). *The Effect of Exercise on Body Satisfaction and Self-Esteem as a Function of Gender and Age*. 43(1):119-127.
- McAuley E., Elavsky S., Motl RW, Konopack J.F., Hu L., Marquez D.X. (2005). Physical activity, self-efficacy and self-esteem: Longitudinal relationships in older adults. *Journals of Gerontology: Psychological Sciences*. 60(5):268–275
- Murat Iskender (2009). The Relationship between Self-Compassion, Selfefficacy, and Control Belief about Learning In Turkish University Students. *Social Behavior And Personality*, 37(5), 711-720. *Society for Personality Research (Inc.)*.
- Neff (2011). Self-Compassion, Self-Esteem, and Well-Being. *Social and Personality Psychology Compass*
- Neff, K. D. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2, 85–101. Neff, K. D. (2003b). *The development and validation of a scale to measure self-compassion*.
- Neff, K. D. (2004). Self and Identity, Self-compassion and psychological well-being. *Constructivism in the Human Sciences*, 9, 27–37.

ABOUT THE AUTHORS

Meghna Basu Thakur, *Assistant Professor* — HOD Psychology, R.D. National College, Off Linking Road, Bandra (W)-400050.

Namrata Joshi, *Assistant Professor* — (CHB), R.D. National College, Bandra (W).

Copyright of Journal of Psychosocial Research is the property of Prints Publications Pvt. Ltd. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.