

The Relationship among Self-Compassion and Mental Health and Physical Attitude and self-esteem in Female Students of Azad University of Dareshahr City

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Abstract

The aim of this study is to examine the relationship among self-compassion and mental health and physical attitude and self-esteem in female students of Azad University of Dareshahr city to develop a structural model. The population consisted of female students of Dareshahr city. A sample of 280 students was selected using mono-step cluster sampling. The data collected through public health measures, self-compassion, the questionnaire of multidimensional relations between self and body and Rozenberg self-esteem questionnaire. The results show that provided model based on self-esteem and physical attitude as mediators of the relationship between self-compassion and mental health enjoys a suitable good fitness. Self-compassion has direct significant effect on mental health ($p: 0.03$). Also the effect of self-compassion on self-esteem ($p: 0.01$), the effect of self-compassion on physical attitude ($p: 0.03$) and the effect of self-esteem on physical attitude are significant.

Keywords: Self- Compassion, Mental Health, Self-Esteem, Physical Attitude, Structural Model.

1. Introduction

The concept of self-compassion has been created from the interaction between the eastern philosophical thought, especially Buddhism and Western psychology. This concept is little-known in Western psychology but exists more in researches considering concept of self and attitude to self [1,2]. Self-compassion is defined as a three-component structure, including kindness with self against self-judgments, human commonalities against isolation, and mindfulness against excessive replication [3,4].

The combination of these three components is the characteristic of a man who has compassion. Kindness with self is self-understanding instead of judgment and accepting shortcomings and incompetence of self. Human commonality also means accepting that all humans have violated and are involved in unhealthy behaviors. Mindfulness leads to balanced and clear awareness of the

present moment and ignoring the painful aspects is an experience [5].

Increasing of self-compassion predicts mental health improving over the time [2]. According to the concept people who hold high, Self-compassion, accept their failures that are due to themselves and believe that all human beings can mistake and have errors [3]. So people who have more self-compassion exercise more mental health than those with less self-compassion. Mental health is a state of well-being in which the individual knows his abilities, and can cope with the psychological pressures of normal life. Kneading self-compassion is also trying to distance itself from the experience of pain and suffering. So self-compassion is doing to promote mental health. In addition, self-compassion is positively associated with life satisfaction [4], Progress and internal motivation [6] and is

negatively associated with self-criticism, anxiety and depression [3,4,7-10].

Researches show that self-compassion may be associated with physical concerns. The difference between proposed unreal criteria and reality, results in negative physical attitude. Purzinsky and Cash [11] believe that to get information, ideas, feelings about body and physical experience is called attitude of the body, and has a multi-dimensional structure that contains two parts: independent, perceptual (estimate body size) and Reviews (understanding and feeling of the body).

Much research supports the idea that self-compassion is related to women's physical attitude. Having self-compassion views may include positive assessment to the body. Specifically, women who have a positive attitude by accepting their body instead of accepting their defects have self-compassion,

Accept their bodies despite their apparent defect and have a positive attitude towards their bodies and reject unrealistic ideals [12]. Self-compassion predicts self-value that is less dependent on external comparisons [5]. In addition, the application of the principles of self-compassion is used in Intervention programs to improve women's physical approach, to raise one's awareness and acceptance in this regard that any people is not perfect [13]. Adams and Larry [14] in experimental research showed that an increase in self-compassion reduced tillage concerns after eating high calorie. Because they are less judgmental and even when they are far away from their aspirations, accept it. Recent research has shown that self-compassion has a negative correlation with social anxiety of women who regularly exercise [15]. Mosewich *et al* [16], also showed that there is a negative relationship between self-compassion and self-evaluation. In addition, Dijkstra, & Barelds [17], showed that mindfulness (one of the aspects of self-compassion) is positively associated with body satisfaction among women.

There are many variables that psychologically have relationship with physical attitude of body and body mass index. Among these variables there are: self-concept, self-esteem, mental health, especially anxiety and depression. In addition, impaired physical attitude can lead to problems such as anorexia, mental bulimia, balanced weight change, sleep disturbance, lack of energy, self-blame and guilty feeling without any reason which are symptoms of mental health problems [18]. This disorder increases when community stresses on fitness and weight loss [19]. This emphasis on fitness by community causes low self-esteem and self-concept [20]. So we can say body shape and physical attitude is one of the main aspects of mental health and People who have good clear and stable self-concept and physical attitude enjoy better psychological health [21]. The range of physical attitudes and concerns about it have spread as far as it has been

become the obsession of many people, especially young people and a lot of daily time and cost is paid for changes in body appearance [22]. Cafri & Thompson [23] in their study concluded that women in their assessment of the physical attitude like to be thinner and in the face like to gain a good evaluation. So women are busy in the field of body image.

Physical attitude can interfere with the formation of disorders such as eating disorders [24], or the background of bad physical shape disorder [25], depression [26], social phobia, social relations [27,28]. Physical attitude disorders in addition to the effects on clinically disorders, affect people's psychological well-being. Self-esteem is the most significant impact of dissatisfaction of physical attitude in terms of psychological. In this regard, several studies have shown that there is a reverse relationship between self-esteem and body dissatisfaction [29].

Self-esteem is an overall self-assessment relating to general dissatisfaction or satisfaction considering appearance (body or face), especially in women the lower the self-esteem causes lower satisfaction considering appearance [28, 30,31]. In contrast, women who have high self-esteem tend to positively evaluate their bodies [32-35].

Self-esteem has advantages that include Happiness [36], creativity, vitality and gratified [37]. Despite such benefits, higher self-esteem is associated with negative consequences, including distortions in self-awareness and aggressiveness [37,38], because self-esteem depends on the standards and comparison with others [5].

Self-esteem is a measure a person understands the evaluation of other people about him/herself [14]. If others evaluate them with the low value characteristics, self-esteem will be reducing. Adjust to the cultural standards of appearance, may be impossible for many women because these standards are an obstacle to self-esteem and Scholars like Neff [4] suggest having attitude to ourselves based on qualitative differences.

Self-compassion is doing in terms of self-esteem. People who have high self-esteem are mere compassion. In fact, the correlation coefficient between self-compassion and self-esteem is about 56% -68% [7].

But they have differences. Self-esteem is associated with narcissistic but self-compassion is related to self-value. Self-esteem is a reaction to negative events (improving your view of the negative events), But self-compassion is mediating the effects of negative events [8]. In other words, decreases the effects negative events on the individual. In addition, self-esteem reflects and self-survival but self-compassion reflects self-reception (same). Given that physical attitudes and concerns of women is one of the major preoccupations and Causes the formation of disorders, and may also affect the mental health and no model has been made in relation to these variables, this

study intends to provide a model according to the research. The purpose of this study was to identify and measure effects of self-compassion on self-esteem, physical attitude and mental health. Also this study tested the effects of mental health and self-esteem on physical attitude and the effects of self-esteem on mental health. Accordingly, the main question is whether the data obtained from the sample with the structural model (model based on the mediating role of self-esteem and physical attitude in relation between self-compassion and mental health have fitness or not?

As well as the following hypothesis arises:

- Self-compassion has a direct impact on physical attitude in students.
- Self-compassion has a direct impact on self-esteem in students.
- Self-compassion has a direct impact on mental health in students.
- Physical attitude has a direct impact on mental health in students.
- Self-esteem has a direct impact on physical attitude in students.
- Self-compassion has an indirect impact on physical health on mental health in students.
- Self-compassion has an indirect impact on self-esteem on physical health in students.

2. Research Method

This research is an applied research and according to the data collection is descriptive (non-experimental correlation) and is structural equation modeling. Structural equation modeling is a method of strong general multivariate regression from multivariate analysis. Rather, the development of a general linear model which allows researchers to simultaneously test a set of equations to affect species. The population consisted of female students of Azad University of Dareshahr city. 320 questionnaires distributed among students and 280 students completed questionnaires and returned them to the researcher. The Sample was selected using mono-step cluster sampling. This means that in proportion to the number of samples, some classes from different disciplines were selected randomly and questionnaires were distributed. In order to collect data four questionnaires were used as follows:

2.1 Multi-dimensional relations of Self-body

The questionnaire used to assess a person's body image. It is a self-rating scale with 46 questions that was made by Cash, Winsted and Janda in 1986 and 1987. This means has six sub-stations as follows: Appearance Evaluation, Appearance Orientation, Fitness Evaluation, Fitness Orientation, Obsession with Overweight or Mental Weight, Body Areas Satisfaction.

The questionnaire will be asked people to rate their agreement with each question in a scale of five options. Scoring is based on the Likert scale of 1 to 5. The scale scores are in the range of 46-230. Barahmand[39], reliability (Cronbach's alpha) earned the subscales of

appearance assessment 0.87, The importance of appearance 0.87, the satisfaction of the areas of the body 0.90, Preoccupation with overweight 0.31 and perceived weight division 0.58. The validity of the questionnaire through meaningful relationships with mental- Social performance indicators (anxiety, depression and eating disorders) has been proven [40]. In this study, Cronbach's alpha was 75/0.

2.2 Mental Health

In this study, the General Health Questionnaire (GHQ) Goldberg (1979), was used to assess mental health. The questionnaire was pencil- paper type and consists of 28 scales being summary of the 90 questions questionnaire. This questionnaire has four subscales, anxiety, social dysfunction and depression, the questions have four options with a score from 0 to 3 [41], the correlation coefficient between subscales is total score between 72% and 87%. Sharifi also calculated the reliability coefficient by correlating the scores of depression and anxiety (ANQ). Reliability coefficients were calculated respectively, $p < 0.004$ and $r: 0.20$ and $p = 0.0001$ and $r: 0.25$, respectively (Quoted from reminders). Chong and Spurs reported the reliability coefficient of the total questionnaire 0.55 and reliability coefficients of subscales from 0.42 to 0.47 [42]. In Iran calculated by Taghavi [41], and the reliability coefficient was reported calculated using re-poll, split-half and Cronbach's alpha, respectively 0.70, 0.93, 0.90. In this study, Cronbach's alpha obtained 0.81.

2.3 Self- Compassion

This is a self-report scale of 26 questions that was built in 2003 by Neff. This scale has six subscales [3] and responses are in a range of 5 Likert options from 1, almost never to 5 almost always. The scale measures dipole component in the form of 6 sub-scales of self- kindness, self-judgment, mindfulness, increasing Replication, human communal and isolation [4]. Validity convergent studies [43] and Neff [4] discriminant validity, have demonstrated internal consistency and appropriate test-retest reliability of this scale. In Iranian studies convergent and divergent validity of self-compassion were calculated scale through the implementation of Self-Esteem Scale and Beck Anxiety and Depression Inventory results were statistically significant ($P < 0.01$). The internal consistency was calculated by Cronbach's alpha coefficient and was confirmed with a correlation coefficient of 0.70. Significant correlation coefficient (0.89) between the two times of test over a distance of 10 days indicates scale reliability [44]. In this study, Cronbach's alpha was 83/0.

2.4 Rosenberg self-esteem questionnaire

A scale of ten questions that measure total self-esteem. The results of Palman and Alick (2000), reported the retest correlation coefficient 0.84 over a distance of two weeks [45]. Mohammadi [45] reviewed Psychometric Properties of the scale in Iranian society and has reported the validity of this scale through Cronbach Alpha, test-

retest and break a 0.69, 0.78 and 0.68. In addition, there is a positive correlation with the Cooper Smeat Self Esteem scale 0.61. In this study, Cronbach's alpha was 75/0.

3. Findings

In this study AMOS software was used to test the theoretical model of structural equation modeling. The Kolmogorov - Smirnov test was used to determine the normality of the data. The results of this test showed that the data are normal.

Table 1: Demographic characteristics of the sample group

		Frequency	Percent
Age	18-21	110	39.28
	22-25	124	44.28
	26 and up	46	16.42
Marital Status	Single	208	69.33
	Married	72	30.66

Table 2: Descriptive findings of research subscales

Scale Statistical index	Number	Average	Standard Deviation
Self-Kindness	280	15.40	3.94
Self-Judgment	280	16.57	3.96
Human Shares	280	13.0	3.19
Isolation	280	12.32	3.10
Mindfulness	280	12.98	3.01
Increasing Replication	280	13.07	3.10
Appearance Evaluation	280	25.60	4.41
Face Orientation	280	41.67	7.19
Fitness Evaluation	280	45.39	4.98
Fitness Orientation	280	0.62	7.30
Mental weight	280	6.04	1.68
Body Areas Satisfaction	280	34.92	7.93
Somatization	280	14.07	3.67
Interpersonal Sensitivity	280	16.45	4.21
Depression	280	12.65	5.62
Anxiety	280	15.23	5.02
Self-Esteem	280	24.24	13.55

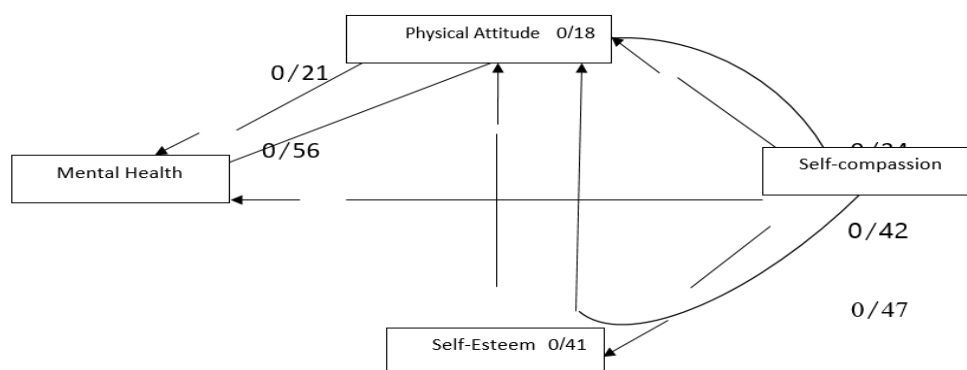
As can be seen in the table, minimum and maximum mean belongs to the fitness orientation (0.62) and organs evaluation (45.39) and the lowest and highest standard deviation belongs to mental weight (1.68) and satisfaction with areas of the body (7.93).

First the main research question which is: "If providing the model based on mediator roll of self-esteem and body image in relation between mental health and self-compassion enjoys good fit or not?" will be answered. For this purpose, Amos Software and path analysis has been exploited.

Table 3: fitness indicators of model analysis

Indicator	Amount	Limit
$\frac{\chi^2}{df}$	1.60	Less than 3
RMSEA	0.05	Less than 0.1
CFI	0.90	More than 0.9
NFI	0.93	More than 0.9
NNFI	0.92	More than 0.9
GFI	0.92	More than 0.9
AGFI	0.94	More than 0.9

Models χ^2 of df/χ^2 shows the obtained amount is 1.60. So we can conclude is probably consistent with theoretical model. GFI, AGFI, CFI are 0.92, 0.94 and 0.90 respectively, nearby 1 that can be a sign of goodness and fit of model. RMSEA is equal to 0.5 that is the right amount. NFI, NNFI Indicators also have the right amount. As a result, based on data obtained in this study the model is suitable and approved. Then the direct and indirect effects of variables related to the research model will be discussed.



Graph 1: General model derived from the mediating role of body image and self-esteem

Table 4: Direct effects amount and path coefficients in the overall model

Criterion Variable	Predictor Variable	Not Standardized Coefficient	Standardized (β)	T	Sig
Mental Health	Self-Compassion	0.51	0.42	15.09	0.00
Self-Esteem	Self-Compassion	0.53	0.47	22.73	0.01
Body Image	Self-Compassion	0.12	0.21	9.35	0.03
Mental Health	Body Image	0.16	0.56	7.06	0.03
Physical Attitude	Self-Esteem	0.22	0.34	5.14	0.04

Based on the information contained in Table 4 regarding the direct effect of self-compassion on mental health coefficient is (β : 0.42 and $p < 0.00$) and t values equal to 15.09. That is to say self-compassion is making a significant impact on mental health.

Regarding the effect of self-compassion on self-esteem path coefficient is (β : 0.47 and $p < 0.01$) and t value is equal to 22.73. That is to say self-compassion is making a significant impact on self-esteem. Regarding the effect of self-compassion on physical attitude path coefficient is (β : 0.21 and $p < 0.03$) and t value is equal to 9.35. That is to say self-compassion is making a significant impact on physical attitude. Also in relationship of physical attitude and mental health path coefficient is (β : 0.56 and $p < 0.03$). So, significant effect of physical attitude on mental health was proved. In addition, in relationship of self-esteem and physical attitude path coefficient is (β : 0.34 and $p < 0.04$). So, the effect of these two variables is significant. The values of variables indirect effects in the model can be seen in the table below.

Table 5: The values of variables indirect effects and Path coefficient in the overall model

Indirect Effects of Variables	Estimated Value	Sig
The Effects of Self-Compassion on Self-esteem on Physical attitude	0.41	0.05
The Effects of Self-Compassion on Physical attitude on Mental health	0.18	0.05

4. Discussion and Conclusion

As mentioned before, the aim of this study is to "examine the relationship between self-compassion, mental health, physical attitude and self-esteem in students to develop a structural model". Structural equation analysis model was used to evaluate the proposed model. Final results showed good fit with the observed data. Because self-compassion is a new topic there are not so many researches in this issue. Researches that are a little in line with are reported.

The **first hypothesis** results showed self-compassion is making a significant impact on physical attitude. Women who reported high self-compassion are making tend to report satisfaction with the physical attitude. This finding was consistent with the other researchers [12,17,33,46-49].

One aspect of self-compassion is less judgment about self. It seems that regardless of body size, shape, or different social ideals, women with high self-compassion making more tolerance for their physical appearance. A person having self-compassion does not avoid the painful feelings but tries to be close to them with Kindness and understanding and a sense of communal human. In addition, self-compassion increases women's motivation to exercise [15].

The **second hypothesis** results showed self-compassion affects self-esteem that is in line with studies of other researcher. [7,46]. People who have high self-compassion due to their high self-acceptance and low self-criticism feel valued. In addition, people with high self-compassion in facing unpleasant events that involves the evaluation and social comparison, considering that all human beings may make mistakes, experience less negative emotion (Human Shares component). This causes the person instead of drowning in negative emotions and feelings of isolation and being alone accept them and try to not lose self-esteem.

Third hypothesis results showed that self-compassion is making an impact on mental health. Increasing of self-compassion improves the mental health over time. This finding is in accordance with the findings of other researchers. [2-4,7,8-10]. According to this concept, persons who hold high self-compassion accept their failures that they themselves are its cause and believe that all human beings may make mistakes. So, people who hold high self-compassion hold more mental health than those with less self-compassion. A person who hold high self-compassion judges himself with less stringent, easier accepts painful events and his self-assessment and reaction is based on actual performance. These people are less likely to develop anxiety, depression, and sleep problems, so, Self-compassion cause behaviors in order to maintain and improve mental health. In other words, self-compassion mediates failures and decreases its effects on individuals.

The **fourth hypothesis** test showed that the physical attitude can be a predictor for mental health. Impaired physical attitude can lead to problems such as anorexia, mental bulimia, weight change, sleep disturbance, lack of energy, anxiety, depression, self-blame and guilt without reason. All of which are symptoms of mental health problems [18]. Impaired physical attitude can be a risk factor in the development of eating disorders or body disorder background. In this issue researches have pointed out to the relationship between physical attitude and depression [26], Social Phobia [27] and anxiety [28]. A person with desirable body image is less favorable to social comparisons that lead to anxiety and depression pays. So, the mental health of a person with desirable physical attitude is more than the person with undesirable physical attitude.

In the **fifth hypothesis** test results showed that physical attitude can affect self-esteem. Women who have high self-esteem have high self- acceptance and do not act on the basis of social ideals and have high physical attitude. This finding is in line with research results of other researchers [29, 32,33,35,50].

With increasing in self-esteem, a sense of empowerment and being valuable appears in person, and Changes such as high self-esteem, ambitious and tend to have better health appears in person. Self-esteem is an overall assessment of person's general dissatisfaction or satisfaction related to appearance (body or face). In women low self-esteem leads to less satisfied with apparent. In contrast, women who have high self-esteem tend to positively evaluate their bodies.

Women who feel they are of limited value have negative self-image and feelings of inferiority. When people are given a lot of negative feedback, their Self-esteem and self-worth will be threatened and they are trying to focus and emphasis on their appearance to keep their self-worth. While a person feels physical attitude or for any reason dissatisfied with physical attitude, self-esteem comes down and there is no basis to regain self-esteem and the vicious circle continues. But people who have high self-esteem accept their body and do not act to promote physical attitude in order to increase self-esteem.

Regarding indirect effects between self-compassion and self-esteem and physical attitude, Self-compassion in addition to direct effect on mental health also has indirect effects through physical attitude as a mediator. With regard to the effects of self-compassion on self-esteem and self-esteem on physical attitude, Self-compassion is making an indirect effect on physical attitude and to improve self-esteem improves the physical attitude.

Regarding indirect effects between self-compassion and physical attitude and mental health, Self-compassion in addition to direct effect on mental health also has indirect effects through physical attitude as a mediator. According to the above issues physical attitudes affect mental health and Self-compassion is making an impact on physical attitude. Self-compassion with improved physical attitude improves mental health.

At the end of the study due to limitations such as the use of self-report instruments which can be associated with bias and using only female participants as population, it is recommended that in future research participants be male, and their effects of components on them to be monitored. Due to the direct and indirect effects of research variables and the importance of examined variables, it seems necessary for education specialists and parents to strengthen this essential component from childhood. And it is proposed to other researchers to examine other affective factors mediating in relationship between mental health and self-compassion.

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