FEASIBILITY TESTING OF COMPASSION-FOCUSED INTERVENTION FOR BODY DISSATISFACTION AMONG YOUNG ADULTS: A CONTROLLED TRIAL



by

Firdos Naseem BSP191011

A Research Thesis submitted to the DEPARTMENT OF PSYCHOLOGY in partial fulfillment of the requirements for the degree of BACHELOR OF SCIENCE IN PSYCHOLOGY

> Faculty of Management and Social Sciences Capital University of Science & Technology, Islamabad January, 2023

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CERTIFICATE OF APPROVAL

It is certified that the Research Thesis titled "Feasibility Testing of a Compassion-Focused Intervention for Body Dissatisfaction among Young Adults: A Controlled Trial" carried out by Firdos Naseem, Reg. No. BSP191011, under the supervision of Ms. Parveen Akhtar, Capital University of Science & Technology, Islamabad, is fully adequate, in scope and in quality, as a Research Thesis for the degree of BS Psychology.

Supervisor:

Ms. Pårveen Akhtar Senior Lecturer Department of Psychology Faculty of Management and Social Sciences Capital University of Science & Technology, Islamabad

HoD:

Dr. Sabahat Haqqani Assistant Professor Department of Psychology Faculty of Management and Social Sciences Capital University of Science & Technology, Islamabad Feasibility Testing of a Compassion-Focused Intervention for Body Dissatisfaction among Young Adults: A Controlled Trial

By

Firdos Naseem Registration # BSP191011

Approved by

orven

Supervisor Ms. Parveen Akhtar

Internal Examiner-I Dr. Ishrat Yousaf

Internal Examiner-II Ms. Aysha Aneeq

v~

Thesis Coordinator Ms. Irum Noureen

Head of Department Dr. Sabahat Haqqani

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I wholeheartedly dedicate this thesis to my parents whose constant support and belief in my abilities helped me reach at this stage of life, and to my aunt Zareena Bibi (late) who raised me like my mother and always motivated me to grow higher.

DECLARATION

It is declared that this is an original piece of my own work, except where otherwise acknowledged in text and references. This work has not been submitted in any form for another degree or diploma at any university or other institution for tertiary education and shall not be submitted by me in future for obtaining any degree from this or any other University or Institution.

Firdos Naseem

Reg. No. BSP191011

,

January, 2023

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ABSTRACT

Body dissatisfaction is a growing concern in today's world among both men and women. Self-compassion has been regarded as a potential factor that can alleviate body dissatisfaction; and is grasping greater attention of researchers on account of its significant link with psychological health. The present study investigated whether brief compassionfocused meditation intervention would alleviate body dissatisfaction among male and female young adults. The intervention included three self-compassion-based meditations derived from Mindfulness Self-Compassion program and aimed at enhancing compassionate attitude towards one's body image. Using convenient sampling, a total of 63 participants of the age range 18-25, with a score of ≥ 26 on screening instrument i.e., body shape questionnaire (16a), were recruited from selected universities of Rawalpindi/Islamabad. Participants were randomly assigned to either the experimental or to the waitlist-control group. Pre and post-testing was done and data was analyzed using SPSS. Results indicated significant differences between experimental and waitlist-control group in self-compassion (U=193, z=-4.06, p=.00) and body dissatisfaction (t=-3.88, p=.00) at posttest. Findings provided evidence that self-compassion meditations can be useful and cost-effective means for improving body image concerns among young adults.

Keywords: Self-compassion, Body dissatisfaction, Body image, Meditation, Waitlist-control

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LIST OF ABBREVIATIONS

APA	American Psychological Association
BD	Body Dissatisfaction
BMI	Body Mass Index
CFT	Compassion Focused Therapy
CI	Confidence Interval
df	Degrees of freedom
K-S	Kolmogrov-Smirnov Test
MSC	Mindfulness Self Compassion
SC	Self Compassion
SD	Standard Deviation

Chapter-1 Introduction

Self-compassion is grasping greater attention of researchers on account of its significant link with psychological health. This multifaceted construct has emerged from Buddhist philosophy (Brach, 2003) and is defined by Neff (2003a) as being moved by one's own sufferings and embracing the self with care and empathy. Likewise, according to Gilbert (2010), self-compassion covers a wide range of characteristics such as responsiveness to one's own needs, concern for one's wellbeing, and the tendency to respond to oneself with an empathetic and non-judgmental attitude. Self-compassion comprises three key components which are self-kindness, common humanity, and mindfulness (Neff, 2003b).

Self-kindness means to be kind and empathetic towards own self rather than selfcriticizing and being judgmental (Neff, 2003b). Society emphasizes being kind and compassionate to others but does not equally emphasize learning a compassionate attitude towards oneself (Neff & McGehee, 2010). Individuals usually respond more critically and harshly to their own mistakes as compared to others who encounter similar difficulties; hence self-kindness can foster a supportive and encouraging inner dialogue rather than unforgiving and unsympathetic (Neff, 2003b).

The second aspect "common humanity" means considering the fact that experiences in one's life are part of a greater human experience instead of considering them separate and exclusive (Neff, 2003b). It entails the recognition that no one is perfect, everyone makes mistakes, and goes through challenges in life rather than considering these imperfections as part of only one's own life (Albertson et al., 2015). The third component of the self-compassion is "mindfulness", which implies that one should be aware of own painful thoughts and feelings in a balanced manner instead of being fully occupied with them (Neff 2003b). To be able to show compassion towards oneself, one must be mindful/aware of own suffering, but at the same time balanced awareness is necessary to avoid over-identification or being caught by the pain that exaggerates consequences for self (Neff, 2003b). In recent years, researchers have shifted their attention towards targeting compassion in enhancing wellbeing (Weng et al., 2013; Condon & Makransky, 2020).

Self-compassion serves to foster resilience by assisting people in regulating their reactions to negative situations (Smeets et al., 2014). Individuals with high selfcompassion, when face distressing situations, are more inclined to utilize the adaptive coping strategies (Neff, 2003b). According to Smeets et al. (2014), when individuals confront disliked aspects of themselves, then abilities like self-acceptance and selfkindness can lead to lower harsh judgments. Moreover, according to Neff & McGehee (2010), self-compassion helps realize a person to acknowledge that social rejection or the feelings of being inadequate are experienced by all individuals and it further enables a person to view his/her experiences from a broader perspective/context. Gilbert & Irons (2005), theorized that self-compassion stimulates and activates the soothing system which is linked with feelings of being safe and release of hormone called oxytocin. It also lower down the activity of the psychobiological threat system, which is linked with autonomic arousal and defensiveness. Consistent with this proposition, research studies have demonstrated that practicing self-compassion activities and exercises in stressful events or circumstances could decrease cortisol level as well as enhance heart rate variability, which then help in self-soothing and deactivating defensiveness (Porges, 2007; Gilbert et al., 2008).

An area where self-compassion can be a potential and relevant to be targeted is body image concerns such as body dissatisfaction. The negative subjective judgment of one's own body is called as body dissatisfaction (Presnell et al., 2004). According to (Grogan, 1999, p.2) "Body dissatisfaction involves negative thoughts and feelings of a person regarding his/her body, involving size and shape of the body, muscle tone, muscularity, and weight; and is commonly characterized by a perceived discrepancy between actual and the ideal body shape." Body dissatisfaction has been found to rise during the shift into young adulthood (Bucchianeri, 2013).

Dissatisfaction with the body is usually viewed along a continuum with individuals who are dissatisfied with their bodies at one end, those who are satisfied at the other end, and the majority of the people falling somewhere in the middle (Grogan, 2010). According to the British Social Attitudes Survey (2013), up to 43% of women and 29% of men experience body dissatisfaction. Another study conducted in the United States found that 32% women and 28% men have a negative body image (Fallon et al., 2014). Furthermore, a cross-cultural study conducted by Al Sabbah et al. (2009), in which data was collected from 24 countries and regions across Europe, Canada and USA, revealed that 31-42% girls and 14-42% boys experience body dissatisfaction. In Pakistan, a study conducted by Khan et al. (2011) on a sample of 783 participants found that negative body image dissatisfaction in men was higher than women which was surprisingly different from existing literature. This study conceptualized body image dissatisfaction (BID) in two ways; positive BID and negative BID. Individuals with positive BID were those who had BMI in overweight or

underweight range and wanted to achieve a normal weight, while the individuals with negative BID were those who had BMI either in underweight range and they wanted to stay same or lose more weight, or in overweight range and wanted to gain more weight. Their findings also revealed that 24.7% males and 65% females had positive BID but 75.3% males and 35% females had negative BID. This showed that although women are more dissatisfied with their bodies, their dissatisfaction is somehow due to being actually over or underweight. Moreover, authors also attributed these findings with sociocultural factors of Pakistan which enables women to cover their full body and hence a little bit lower pressure to look like ideal females. However, the lack of disagreement on operational definitions, inadequate standardized measures, and a lack of random samples employed in epidemiological research of body dissatisfaction hinders the establishment of accurate prevalence rates (Fiske et al., 2014). Although body dissatisfaction can be experienced by individuals of any age, the vulnerable periods for developing body dissatisfaction are adolescence and young adulthood (Voelker et al., 2015).

Body dissatisfaction and body shame have been considered to be playing a vital role in the emergence of negative outcomes such as eating disorders (American Psychiatric Association, 2000), and are linked to low self-esteem (Morandi et al., 2021), poor life quality (Mond et al., 2013), and limited physical activities (Ransdell et al., 1998). Due to the severe negative consequences, body dissatisfaction is regarded a key target of interventions and an important area for protective factors focused research (Braun et al., 2016).

Moreover, it has been found that self-compassion and body appreciation are positively related (Homan & Tylka, 2015). Body appreciation is defined as embracing,

appreciating, and respecting own body, resisting society's pressures to internalize stereotypical beauty standards, and admiring the body's functioning and health (Tylka & Wood-Barcalow, 2015) and it is a positive psychological strength associated with optimism and satisfaction in life (Avalos et al., 2005). Hence, self-compassion can enhance body appreciation and a sense of respect for own body.

Literature Review

This section focuses on the theoretical and empirical literature related to selfcompassion, and its role in wellbeing especially in reducing body image-related problems. Furthermore, it encompasses the empirical evidence of compassion-focused interventions for reducing self-criticism associated with many problems, showing its potential use for lowering body dissatisfaction.

Self-Compassion and Wellbeing

The association between self-compassion and overall wellbeing has been explored by numerous studies. Research supports that individuals possessing self-compassion are healthier psychologically than those lacking it (MacBeth & Gumley, 2012). A study conducted by Neff et al. (2007) concluded that self-compassion not only mitigate psychopathology, but also leads to psychological strengths which are positive and desirable like optimism, wisdom, happiness, personal initiative etc. Additionally, Imtiaz and Kamal (2016) also found that compassion towards self, promotes optimism and wellbeing as well as counter ruminative inclinations among elderly. Self-compassion not merely results in substitution of unpleasant feelings with pleasant ones, rather individuals with higher levels of self-compassion rationally embrace and accept inadequacies and unpleasurable experiences (Neff & Dahm, 2015). Moreover, Marsh et al., (2018) in a meta-analysis regarded self-compassion as an important element to be targeted in wellbeing interventions for youth. Self-compassion has also been associated with lower perceived stress, higher satisfaction with life, and a sense of self mastery (Neely et al., 2009). Furthermore, Inam and colleagues (2021) found that self-compassion and empathy both lead to happiness.

Self-compassion and Body Image

Self-compassion is regarded as a protecting aspect that may help to alleviate the negative consequences of body image concerns (Braun et al., 2016). According to Gilbert and Miles (2002), people become vulnerable to psychological distress and disorders when they perceive their physical bodies as unappealing, unwanted, and a reason for shamed self. Lower self-compassion is linked with limited emotional regulation skills such as reduced utilization of adaptive strategies of emotion regulation and heightened use of maladaptive strategies like cognitive and behavioral avoidance, rumination, excessive worrying etc. (Finlay-Jones, 2020). Self-compassion, as an emotional regulation approach, has the ability to alleviate discomfort and suffering associated with body dissatisfaction (Albertson et al., 2015). Mosewich and colleagues (2011) conducted a study and found a negative relationship of self-compassion with negative body image aspects such as body shame, body dissatisfaction, objectified body consciousness, and social physique anxiety. Moreover, a study conducted by Przezdziecki (2013) on women who recovered from breast cancer, found that self-compassion plays a mediating role in the association between body image disturbance and psychological distress.

Body Dissatisfaction

Body dissatisfaction can arise due to multiple factors including biological, environmental, developmental, sociocultural, and dispositional, and among these sociocultural factors (family, peers, media) are highlighted as playing the most important role in developing body image-related concerns including body dissatisfaction and disordered eating (Fritzsimmon-Craft, 2011). Individuals feel pressurized to be according to the norms and standards of appearance, conveyed through these sources, which ultimately lead them towards negatively evaluating own body. Hence self-compassion, by making individuals more resilient to stressors, can help them to respond to challenging circumstances more effectively (Dupasquier et al., 2020; Zessin et al., 2015). Comparison of appearances is reported to be a significant mediator in the association between sociocultural factors and body dissatisfaction development (Myers & Crowther, 2009). To interpret the comparisons with a balanced and empathetic attitude, self-compassion may aid to overrule the appearance comparisons (Albertson, 2013).

Gender and Body Dissatisfaction

Women have been a focus of research on body dissatisfaction. Male body image was initially overlooked as a research topic, because males with clinical eating disorders were less likely to come (Olivardia et al., 1995) and the masculine self-concept neglected body image as an essential part (Hargreaves & Tiggemann, 2006). Over time research on men has shown that men experience body dissatisfaction as well (Najam & Ashfaq, 2012). Males and females regard body image equally and suffer from varying degrees of body dissatisfaction, but the expression of it might be different across genders (Turel et al., 2018). According to Hargreaves and Tiggeman (2009), body dissatisfaction has become common in males and is linked with with variety of negative outcomes including disordered eating, depression, and excessive exercise. It has also been linked to health risking behaviors for enhancing muscular tone such as consuming steroids and other harmful additives (Cafri et al., 2005). Furthermore, thin ideal internalization is typically considered to be prevalent in females, but contemporary studies suggest that men also possess thin ideal internalization (Convertino et al., 2022). It has been shown by epidemiological studies that the prevalence of eating disorders in men has risen in recent years and at a faster rate than in women (Murray et al., 2017).

Shaheen and colleagues conducted a comparative study in 2016 and found no gender differences in body dissatisfaction. Moreover, a correlational study was conducted by Rodgers and colleagues (2017) on 232 participants including both males and females, which found that there is a negative relationship of self-compassion with perceived overweight status and appearance-based comparison while a positive relation with appearance esteem in both males and females. Another study by Abbasi and Zubair (2015) on male and female university students found a positive relation of self-compassion with psychological wellbeing and body image. Self-compassion also plays a mediating role between appearance-based self-worth and dysmorphic concerns (Khan et al., 2021). Self-compassion enhances body appreciation and acceptance by giving individuals an alternate way to appreciate themselves instead of focusing on achieving societal body norms (Berry et al., 2010). Although self-compassion has been regarded as a personality tendency by most of the literature, experimental investigations have shown it as skill that can be developed or learned (Ferrari et al., 2019).

Compassion-focused Interventions

Compassion-focused interventions are considered as the third wave behavioral interventions that promote mindfulness, acceptance, metacognition, and psychological flexibility in order to manage emotional expression or experience (Linardon et al., 2018).

It has been demonstrated by several studies that compassion-based interventions can enhance self-compassion (Kirby, 2017). These interventions have been used for different problematic behaviors and general aspects as well. For example, Sadeghi et al. (2018) investigated the impact of compassion focused therapy on depression and anxiety levels of breast cancer patients. Findings of this study revealed a significant reduction in the levels of both depression and anxiety. Furthermore, Shahid & Farhan (2022) examined the impact of self-compassion intervention on academic motivation and academic stress, and findings showed a significant increase in academic motivation and a significant decrease in academic stress. Cultivating a compassionate mindset is helpful for addressing selfcriticism and shame, making it particularly useful for body image disturbances and related harmful outcomes (Goss et al., 2010).

Compassion-focused Interventions and Body Image

Self-compassion-based interventions attempt to instill compassion, warmth, and emotional attentiveness towards the body and are expected to reduce shame by lowering the negative assessment associated with that feeling (Turk et al., 2021). Even brief interventions, which demand lower involvement, can lead to improved body image and enhanced dietary behaviors. According to one study, a self-compassion combined with a mindfulness program showed more short-term weight reduction than a mindfulness program alone, demonstrating the extra component offered by self-compassion which facilitated the change (Mantzios & Wilson, 2015). Moreover, self-compassionate writing interventions have also been proven to decrease the levels of body dissatisfaction (Mofffit et al., 2018; Stern & Engeln, 2018) and enhance the levels of body appreciation (Seekis et al., 2017). Another compassion-based intervention study conducted by Toole and Craighead (2016), showed that in contrast with control group, intervention group reported higher body appreciation, lower body survelliance and appearance based self-worth at post assessment.

Internet Based Interventions

According to a meta-analysis by Calbring et al. (2017) online and internet-based interventions can be equally effective as face-to-face interventions for a variety of psychological and somatic disorders. The negative evaluation of body image along with greater importance of body shape and weight constituting self-worth are considered crucial targets in prevention and intervention efforts (Wagner, 2020). For both the treatment and prevention of psychological disorders, internet-based therapies and interventions have shown successful outcomes (Andersson, 2016). Individuals with high self-criticism are usually hesitant and ashamed to seek help due to self-stigmatization and persistent feelings of shame, consequently, rather than seeking help in face-to-face settings they may prefer to suffer alone (Kreiger et al., 2016). Hence such interventions may have an advantage to help such people as well.

Evidence suggests that home-based or internet-based interventions can enhance self-compassion. For example, a randomized control trial for investigating efficacy of Mindfulness Self Compassion program also known as MSC program (Neff & Germer, 2013), which included some home-based meditation practices proved to be beneficial and indicated a significant gain in self-compassion and mindfulness along with other positive changes. Moreover, a study conducted by Rodgers et al., (2018) revealed that selfcompassion based intervention via an internet application "BodiMojo" can lead to enhanced appearance esteem and self-compassion. Those individuals who used the app and practiced the tasks and meditations reported significant improvement in appearance esteem and self-compassion as compared to the control group.

Theoretical Framework

The tripartite evolutionary model of the emotional regulation (Gilbert, 2009), serves as the theoretical background of this study. This model was the basis of Compassion Focused therapy (CFT) founded by Gilbert for clinical population. As intervention used in this study is taken from Mindfulness Self Compassion (MSC) program, which is the variant of CFT for general population, hence this model is used as theoretical model for this study. According to this model, emotional regulation systems consist of three systems which include threat system, drive system, and the soothing system. An imbalance in these systems results in psychopathological symptoms and disorders, particularly overly using threat and drive system, and under-using soothing system.

Individuals with body dissatisfaction experience guilt and shame due to perceived threats to their body image (Goss & Gilbert, 2002). Soothing system can be activated to develop self-reassurance and self-compassion ultimately reducing shame and selfcriticism. The compassion-focused interventions attempt to balance these systems by enabling such people respond to self-criticism with self-compassion and kindness, developing a more compassionate mindset. The compassionate mindset ultimately develops more kind, caring and non-judgmental attitude towards oneself which then lead to alleviating body image concerns.

Figure 1

Hypothetical Model of Emotional Regulation System



Rationale

Body dissatisfaction is a growing concern among both men and women (Khan et al., 2011). Its prevalence, causes and risk factors are extensively explored but to our knowledge there is limited work on its interventions, especially in Pakistan. In collectivistic culture, there is a frequent day to day interaction of people with each other and people identify themselves as members of groups, this may have a pressure on individuals to have an appearance according to the cultural body ideals in order to avoid shame and feel fit in (Kawamura & Rice, 2008, pp. 587-608). Literature indicates that body dissatisfaction can lead to depression and anxiety (Macbeth & Gumley, 2012), eating disorders (Rohde et al., 2015), and even suicide ideation (Brausch & Muehlenkamp, 2007). The serious negative consequences highlight the attention toward treatment-focused research. Tackling the condition, before it becomes a disorder might benefit the vulnerable population and prevent serious consequences.

The intervention employed in this study has been used in other cultures but in Pakistan, its implementation has not been seen yet. There are already limited facilities in Pakistan to deal with the mental health related issues. Also, there is an extensive stigmatization for those seeking help for mental health problems, especially sensitive issues like body dissatisfaction or body dysmorphia, due to which people prefer to suffer alone. Remote interventions can help the reluctant individuals seek treatment for their issues. In this era of technology, the possibility of assisting people in feeling good about their bodies through the use of free and readily accessible technology offers significant potential for improving people's wellbeing. The intervention is available online for later use as well.

Objectives

- 1. To examine the impact of compassion focused meditation intervention on enhancing self-compassion and body appreciation among young adults.
- 2. To determine the impact of compassion focused intervention on lowering body shame, body dissatisfaction and appearance contingent self-worth.

Hypotheses

H1: There will be a significant increase in levels of self-compassion and body appreciation at post-assessment as compared to pre-assessment in experimental group.

H2: There will be a significant decrease in body shame, body dissatisfaction, and appearance contingent self-worth at post assessment as compared to pre-assessment in experimental group.

H3: There will be significant differences between experimental and waitlist-control group in levels of self-compassion and body appreciation at post-assessment.

H4: There will be significant differences between experimental and waitlist-control group in levels of body dissatisfaction, body shame, and appearance contingent self-worth at post-assessment.

Chapter-2 Method

Research Design

The study utilized a quasi-experimental design with waitlist-control group to determine the impact of self-compassion meditation intervention on improvement in the self-compassion level and body image concerns of young adults. In contrast with true experimental design, in this study, for screening participants were recruited through convenient sampling rather than random sampling.

Ethical Considerations

The information sheet and consents forms were prepared by considering the ethical guidelines of APA (2003). Approval from Department of Psychology of Capital University of Science and Technology was sought. Information sheet was given along with the consent form to the participants. In the information sheet participant were informed about the purpose of the study, duration and procedure of the study along with the rights including: voluntary participation, rights to withdraw, rights about the confidentiality, anonymity of identity and results. Data was kept confidential and anonymity was ensured by assigning codes to participants.

Sample and Sampling Strategy

Participants were recruited through convenient sampling. Participants were 18-25 years old males and females approached by visiting selected classes of the easily accessible universities for screening. A total of 63 participants after screening were randomly divided into experimental and waitlist- control group with 32 participants in experimental group and 31 in waitlist control group.

Sample Size

The present study is a feasibility testing and sample size of 63 participants was considered adequate on the basis of existing literature on sample selection in feasibility trials of interventions (e.g. Khalid et al., 2022; Rogers et al., 2022).

Sample Selection Criteria

Inclusion Criteria

Both males and females of age range 18-25 years with score 26 and above on screening questionnaire i.e., body shape questionnaire (BSQ-16a).

Participants having adequate internet access.

Participants able to understand questionnaires and the intervention in English language.

Exclusion Criteria

Individuals under any psychological therapy were excluded.

Instruments

Demographic Sheet

Demographic information about age, gender, education in years, parents' occupation, marital status and family system was obtained. Also, participants were asked about their weight and height and this information was used to calculate their BMI.

Screening Instrument

Body Shape Questionnaire (Evans & Dolan, 1993) was used as screening questionnaire. This is a six-point Likert scale with scores range 16-96. A score of \geq 20 on this scale represent body image concerns (Nichols et al., 2009). Based on data obtained during screening, a cut off score of 26 was obtained by calculating median. Participants scoring 26 and above were considered to be eligible for inclusion. Screening questionnaire

also included questions regarding participants' adequate internet access, understanding of English language as well as if they are receiving any psychological therapy or not.

Self-Compassion Scale-Short Form

This scale is shorter version of Self-Compassion Scale developed by Neff (2003a). Shorter version used in this study is developed by Raes et al. (2011), and it basically assesses the levels of self- compassion encompassing all the components i.e. self-kindness, self-judgment, common humanity, isolation, mindfulness, and over identification. Items are responded on a five-point likert scale and responses range from 1 as almost never to 5 as almost always. The shortened version is nearly perfectly correlated with original long scale (r>.97) and has alpha reliability of .87 (Raes et al., 2011).

Body Appreciation Scale

This scale is developed by Avalos et al. (2005). It comprises 13 items and is used to gauge positive body image. The responses on the items of scale range from 1 being never to 5 being always. Higher the scores on the scale, higher is the body appreciation. The scale has shown good internal consistency. The value of Cronbach alpha has been found to be α = .93 (Avalos et al., 2005).

Body Shape Questionnaire-16A

This scale is developed by Evans and Dolan (1993) and is used to evaluate body shape concerns and dissatisfaction. In order to evaluate body dissatisfaction, items of this scale are phrased negatively. Responses range from 1 as "never" to 6 as "always". By summing up the items, total score is computed. Higher the scores, higher the level of dissatisfaction with one's body. The scale showed a strong internal consistency of .93 to .97 (Evans & Dolan, 1993).

Objectified Body Consciousness Scale-Body Shame Subscale

This scale is developed by Mckinley and Hyde (1996). Its body shame subscale consisting of eight items was used for assessing body shame. It assesses how a person feels if cultural expectations for one's body are not met. Responses range from 1 indicating strongly disagree to 7 indicating strongly agree. Higher scores represent higher body shame. Cronbach alpha for this subscale has been found to be .97 (Forbes et al., 2006).

Contingencies of Self-Worth Scale-Appearance Subscale

This scale is developed by Crocker et al. (2003) and has seven subscales focusing on seven different domains. The appearance subscale comprising five items was used for the purpose of the current study. Responses on the items range from 1 as strongly agree to 7 as strongly disagree. Higher the scores, higher is the self-worth based on appearance. The scale has shown good psychometric properties on all subscales. Appearance subscale has shown internal consistency of .76 (Albertson et al., 2015).

Intervention

The intervention was derived from Mindfulness Self Compassion Program (MSC) developed by Neff and Germer (2013). In this program, along with weekly physical meetings, participants were instructed to practice self-compassion meditations each day. Self-compassion meditation audio files are provided to facilitate meditation practice at home. The MSC program is primarily concerned with assisting participants in developing self-compassion, with secondary emphasis on mindfulness. In the present study, three guided self-compassion meditation audio files from the MSC program were selected with the permission of the developer of the program and were delivered as standalone intervention to the participants. Participants were provided links of these meditations along with some basic instructions: "Find a comfortable, preferably a separate place, listen to the

instructions, and practice this meditation once per day this week. Also keep your eyes closed when practicing the meditation." Intervention was spread over three weeks.

Week one

During the first week the meditation audio file provided to the participants was Compassionate Body Scan. In this meditation practice, the intention was to help the listeners get in touch with the body sensations and focus on bringing compassion, kindness, and gratitude towards their body. Participants were instructed to think about how each part of their body performs several functions and take a kind and calm stance towards these parts. Also, in case of judgmental feelings participants are asked to return to normal sensations. They are asked to be compassionate towards oneself accepting the fact that we are imperfect human beings and accepting it with an open heart.

Week two

For the second week, the meditation audio file delivered to the participants was Affectionate breathing. As the name indicates, the focus is on the breath and the participants are first asked to take three deep breaths in order to remove any tension of the day. Then they are asked to develop an intent for breathing in affection and kindness for one self and breathing out affection and kindness for others who are also going through hard times. Participants are asked to appreciate each breath, comfort and sooth themselves and then relax in the feelings of kindness they are generating.

Week three

The meditation for the third week was loving kindness meditation. It was meant for generating feelings of goodwill and kindness for oneself and for others as well. Listeners are asked to notice the breath, focus on the breath in different areas of body, to make them centered and calm. Then they are asked to imagine someone close to them and repeat some phrases to that person: *May you be safe. May you be peaceful. May you be healthy. May you live with ease and well-being.* Then listeners are instructed to include themselves in the circle of good will repeating the similar phrases by replacing the word "you" with "we". Then they are asked to focus exclusively on themselves and are made realized that they too deserve kindness. Participants then have to repeat following phrases to themselves *May I be safe. May I be peaceful. May I be healthy. And May I live with ease. May I accept myself as I am.* Participants are also asked to put hands on their heart to feel the physical warmth of their hand. In the end participants are asked to let themselves rest in the feelings of goodwill, kindness, caring, and compassion that they have generated, and try to carry those feelings throughout the day.

The intervention was delivered through online procedure to the experimental group. Participants were provided link of meditation each week along with the necessary instructions. The intervention delivery took place in 21 days. To make sure whether the intervention group listened to the meditation podcasts or not and to engage them throughout the intervention period, a feedback form/journal (See Appendix D) was formed and sent to participants via google form after each week in which they reported the number of days they practiced the meditation, the duration of it as well as the most helpful component of the particular meditation.

Procedure

Participants were approached by visiting selected classes (where instructors showed agreement and allowed the researcher to visit the classroom) of specified universities of Rawalpindi/Islamabad. Firstly, body shape questionnaire (BSQ-16a) was used for screening purpose. During screening participants were briefed about the purpose
and procedure of the study. They were informed that if they meet the eligibility criteria, they will be contacted for further study. After screening, participants meeting the inclusion criteria were contacted and consent was taken for a three-week home-based study.

Participants willing to participate were given codes and then randomized on 1:1 basis into experimental group and the waitlist-control group through Random Allocation Software (Saghaei, 2004).

Pretesting on targeted variables was done for both groups online through google forms. Those in the experimental group received three weeks online intervention, the details of which are mentioned above. Post assessment of both experimental and waitlistcontrol group was done 4 weeks after baseline assessment. Participants in the waitlistcontrol group were provided links of mediation files along with instructions after both groups have completed post assessment. The waitlist-control group was not surveyed again after the intervention.

Analyses

Data was analyzed using Statistical Package of Social Sciences (SPSS 25.0). Descriptive analysis was done for demographics and outcome variables. Frequencies along with percentages were calculated for categorical variables. Mean, median, mode, standard deviation, skewness, kurtosis and Kolomogrov Smirnov (K-S) were calculated for continuous variables. Histograms are presented for pictorial representation of distribution of data.

To determine the pre-post differences in scores within groups, paired sample t-test was performed for normally distributed data and Wilcoxon signed rank test was performed for non-normally distributed data. Furthermore to assess the difference between scores of experimental and waitlist-control group, independent sample t-test was performed for normally distributed data and Mann Whitney U test was performed for non-normally distributed data.

Figure 2

Participants Flow



Chapter-3 Results

The present study was aimed at determining the impact of compassion-focused intervention on body dissatisfaction among young adults. This chapter presents the results of the study along with descriptive and inferential statistics of targeted variables for the experimental and waitlist-control group.

Participants

There were total 195 participants approached for screening. Four declined to participate during screening process. Those who filled screening questionnaire, 94 met the eligibility criteria out of which 34 participants declined to participate. A total of 64 willing participants meeting the inclusion criteria were recruited who were then divided into experimental and waitlist-control group.

There were 32 participants in both groups. One participant in the experimental group completed the pre assessment but did not complete post assessment while only one participant in waitlist-control group neither completed pre nor post assessment who was excluded from the study. Hence 63 participants comprised the sample of this study with 32 participants in experimental group and 31 participants in the waitlist-control group (See Figure 2 for detailed participants' flow diagram). There were 20 females in both groups while 12 and 11 males in experimental and waitlist-control group respectively.

Demographic Characteristics of the Participants

In the sample, categorical demographic variables were gender, discipline of study, family system, marital status and parent's occupation. Although data was obtained using open ended questions for some of these variables, later categories were formed on the basis of obtained data. There were two continuous variables in demographic variables which were age and BMI (Body Mass Index). BMI was calculated through self-reported weight (kgs) and height (meters). Then categories of underweight, healthy weight, overweight and obese were formed according to standard Adult BMI criteria¹ given by World Health Organization (WHO, 2010).

¹ BMI < 18.5 BMI=18.5 - 24.9 BMI=25 - 29.9 BMI=30 and above

underweight healthy weight Overweight Obese

		Experimental	Waitlist-Control	Total
		Group	Group	10tal (N=63)
	-	(n=32)	(n=31)	(11-03)
Variables	Categories	f (%)	f (%)	f (%)
Gender				
	Male	12 (37.5)	11 (35.5)	23 (36.5)
	Female	20 (62.5)	20 (64.5)	40 (63.5)
BMI				
Classification				
	Underweight	4 (12.5)	4 (12.9)	8 (12.7)
	Healthy weight	21 (65.6)	15 (48.4)	36 (57.1)
	Overweight	5 (15.6)	10 (32.3)	15 (23.8)
	Obese	2 (6.3)	2 (6.5)	4 (6.3)
Discipline of Study				
,	Psychology	16 (50.0)	16 (51.6)	32 (50.8)
	Accounting	8 (25 0)	9 (29 0)	17(270)
	and Finance	0 (23.0)) (2).0)	17 (27.0)
	Computer	8 (25.0)	6 (19.4)	14 (22.2)
	Science	0 (2010)	0 (1) 1)	
Family System	NT 1		17 (54.0)	
	Nuclear	20 (62.5)	17 (54.8)	37 (58.7)
	Joint	12 (37.5)	14 (45.2)	26 (41.3)
Marital Status	0.1	20(02,0)	20 (0 < 0)	(0, (0, 5, 2))
	Single	30 (93.8)	30 (96.8)	60 (95.2)
Eath ar's	Married	2 (0.3)	1 (3.2)	5 (4.8)
Compation				
Occupation	Businessman	12 (37 5)	14 (46 7)	26(41.0)
	Government	12 (37.3)	14 (40.7)	20 (41.))
	Ioh	9 (28.1)	10 (33.3)	19 (30.6)
	Skilled			
	Labor	3 (9.4)	3 (10.0)	6 (9.7)
	Teacher	4 (12.5)	-	4 (6.5)
	Other	4 (12.5)	3 (10.0)	7 (11.3)
Mother's				
Occupation				
*	Housewife	22 (68.8)	22 (71.0)	44 (69.8)
	Teacher	9 (28.1)	5 (16.1)	14 (22.2)
	Other	1 (3.1)	4 (12.9)	5 (7.9)

Frequencies (f) and percentages (%) for the demographic characteristics of study sample

Note: f = frequency, %= percentage

Table 1 outlines the demographic composition of the sample. Considering the total participants, majority of the participants were female (63.5%). Most of the participants had healthy body mass index (57.1%) and others were underweight (12.7%), overweight (23.8%) and obese (6.3%). Out of 63 participants, 60 (95.2%) were single and only 3 (4.8%) were married. Participants belonging to nuclear family system were 37 (58.7%), and 26 were from joint family system (41.3%). The table also shows the demographic characteristics of both groups separately, which shows an almost similar distribution in both groups.

Participants were both males and females ranging in age from 18-25 years (M = 21.11, SD = 1.72) with mean (BMI) of 23.47 (SD= 5.23). The mean age of experimental group was 21.63 (SD = 1.70), skewness was .34 and kurtosis was -.70 while mean age of waitlist control group was 20.81 (SD = 1.66), skewness was .56 and kurtosis was -.05.

Table 2

Mean and standard deviation of BMI of experimental group, waitlist-control group, and total sample

	Experimental Group (N= 32)	Waitlist-Control Group (N= 31)	Total (N = 63)
Characteristics	M(SD)	M(SD)	M(SD)
BMI	23.13 (5.15)	23.82 (5.37)	23.47 (5.23)

Note: *BMI* = Body Mass Index, *SD* = Standard Deviation

Table 2 represents the descriptive statistics of BMI. The mean BMI of the experimental group was 23.13 (SD = 5.15), skewness was 1.57 and kurtosis was 5.87 while mean BMI of waitlist-control group was 23.82 (SD=5.37), skewness was 1.13 and kurtosis was 2.82. Figures 3 and 4 illustrate the distribution of BMI in experimental and waitlist control group.



Distribution of BMI in Experimental Group (N=32)

Figure 4

Distribution of BMI in waitlist-control (N=31)



Reliabilities of Scales in Terms of Cronbach's Alpha Reliability (a)

Table 3 represents the reliabilities of scales, used in this study, calculated in terms

of internal consistency (Cronbach's alpha).

Table 3

Cronbach's Alpha reliabilities of Self Compassion Scale- Short Form (SC-SF), Body Appreciation Scale (BAS), Body Shape Questionnaire (BSQ), Body Shame Subscale of Objectified Consciousness Scale (BS), and Appearance Subscale of Contingencies of Self Worth Scale (CSW-A)

Scales	Items	М	SD	α	Ra	nge	Skewness	Kurtosis
					Potential	Actual		
SC-SF	12	34.79	6.82	.67	12-60	19-48	32	30
BAS	13	45.29	13.51	.95	1-5	1.31-5.00	39	-1.03
BSQ	16	46.48	17.75	.92	16-96	16-87	.45	62
OBC-BS	8	30.22	10.55	.78	0-7	1.00-6.38	02	75
CSW-A	5	24.33	4.54	.54	1-7	2.80-6.60	.02	62

Note: *M* =Mean, *SD*= Standard Deviation, α = Cronbach alpha

As shown in table 3, body shape questionnaire and body appreciation scale having the α values of .92 and .95 respectively have high internal consistency reliability, selfcompassion scale and body shame subscale having α values of .67 and .78 respectively have moderate internal consistency reliability and appearance subscale having the α value of .54 have just acceptable internal consistency reliability.

Descriptive Statistics of the Measures

Self-Compassion

In this study self-compassion is measured through Self Compassion Scale-Short Form. Table 4 presents the mean, median, mode, standard deviation, skewness, kurtosis and normality test of distribution of pretest and posttest scores on self-compassion scale for the experimental group.

Table 4

Mean, Median, Mode, Standard Deviation, Skewness, Kurtosis and Kolmogorov-Smirnov test statistics of self -compassion of the experimental group (N=32).

Scale	М	Median	Mode	SD	Skewness	Kurtosis	K-S	р
SC (Pretest)								
SC	34.97	35.00	35.00	7.50	66	15	.16	.04
(Posttest)	10.04	12.00	20.00	4.55		1.20	10	20
	42.84	43.00	39.00	4.55	86	1.39	.10	.20

Note: SC = Self Compassion, *M* =Mean, *SD*= Standard Deviation, *K*-*S* = Kolmogrov-Smirnov

Table 4 shows that for experimental group, the values of skewness and kurtosis at pretest are -.66 and .15 respectively and the value of K-S is .16 (p= .04), which indicates that scores are non-normally distributed. The values of skewness and kurtosis at posttest are -.86 and 1.39 respectively, and the value of K-S is .12 (p=.20), which indicates that scores are normally distributed in posttest.

Table 5 presents the mean, median, mode, standard deviation, skewness, kurtosis and normality test of distribution of pretest and posttest scores on self-compassion scale for the waitlist-control group.

Mean, Median, Mode, Standard Deviation, Skewness, Kurtosis, and Kolmogorov-Smirnov test statistics of self-compassion of the waitlist- control group (N=31) measured by Self Compassion Scale

Scale	М	Median	Mode	SD	Skewness	Kurtosis	K-S	р
SC (Pretest)								
	34.61	34.00	38.00	6.18	.25	56	.12	.20
SC (Posttest)								
	36.13	38.00	41	6.82	57	.23	.15	.05

Note: SC = Self Compassion, *M* =Mean, *SD*= Standard Deviation, *K*-*S* = Kolmogrov-Smirnov

As shown in table 5, for the waitlist control group, the values of skewness and kurtosis at pretest are .25 and -.56 respectively, and the value of K-S is .12 (p= .20) which indicates that scores are normally distributed in pretest. In posttest the values of skewness and kurtosis are -.57 and .23 respectively, while value of K-S is .15 (p=.05), which indicates that scores are non-normally distributed in posttest.

Figures 5 and 6 illustrate the distribution of pretest and posttest scores across selfcompassion scale for experimental group. Figures 7 and 8 illustrate the distribution of pretest and posttest scores across self-compassion scale for waitlist-control group.

Distribution of scores across scale "Self-Compassion Scale" at pretest of the experimental group (N=31)



Distribution of scores across scale "Self-Compassion Scale" at posttest of the experimental group (N=32)



Distribution of scores across scale "Self-Compassion" at pretest of the waitlist-control group (N=31)



Distribution of scores across scale "Self-Compassion" at posttest of the waitlist-control group (N=31)



In the present study, body appreciation was measured through body appreciation scale. Table 6 presents the mean, median, mode, standard deviation, skewness, kurtosis and normality test of distribution of pretest and posttest scores on body appreciation scale for the experimental group.

Table 6

Mean, Median, Mode, Standard Deviation, Skewness, Kurtosis, and Kolmogorov-Smirnov test statistics of body appreciation of the experimental group (N=32).

Scale	М	Median	Mode	SD	Skewness	Kurtosis	K-S	р
BA (Pretest)								
	3.57	4.07	4.08	1.10	76	69	.20	.00
BA (Posttest)								
	3.78	4.00	3.77	.78	59	81	.17	.02

Note: BA = Body Appreciation, M =Mean, SD= Standard Deviation, K-S = Kolmogrov-Smirnov

Table 6 shows that for experimental group, in both pretest and posttest, value of K-S is indicating non-normal distribution of scores. The values of skewness, kurtosis, and K-S at the pretest are -.76, -.69, and .20 (p=.00) respectively while those at posttest are -.59, -.81, and .17(p=.02) respectively.

Table 7 presents the mean, median, mode, standard deviation, skewness, kurtosis, and normality test of distribution of pretest and posttest scores on body appreciation scale for the waitlist-control group.

Mean, Median, Mode, Standard Deviation, Skewness, Kurtosis, and Kolmogorov-Smirnov test statistics of body appreciation of the waitlist-control group (N=31) measured by Body Appreciation Scale.

Scale	М	Median	Mode	SD	Skewness	Kurtosis	K-S	р
BA (Pretest)								
	3.36	3.23	2.15	.98	.07	-1.10	.11	.20
BA (Posttest)								
	3.54	3.38	3.15	.78	.01	-1.09	.14	.12

Note: BA = Body Appreciation, M =Mean, SD= Standard Deviation, K-S = Kolmogrov-Smirnov

Table 7 shows normal distribution of scores at pretest considering the K-S test statistic. The values of skewness and kurtosis are .07 and -1.10 respectively, and the value of K-S is .11 (p=.20). At posttest, scores are also normally distributed. The values of skewness and kurtosis are .01 and -1.09 respectively and the value of K-S is .14 (p=.12)

Figures 9 and 10 illustrate the distribution of pretest and posttest scores across body appreciation scale for the experimental group. Figures 11 and 12 illustrate the distribution of pretest and posttest scores across body appreciation scale for the waitlist control group.

Distribution of scores across scale "Body Appreciation" at pretest of the experimental group (N=32)



Distribution of scores across scale "Body Appreciation" at posttest of the experimental group (N=32)



Distribution of scores across scale "Body Appreciation "at pretest of the waitlist control group (N=31)



Distribution of scores across scale "Body Appreciation "at posttest of the waitlist control group (N=31)



Body Dissatisfaction

In the present study, body dissatisfaction was measured by Body Shape Questionnaire. Table 6 presents the mean, median, mode, standard deviation, skewness, kurtosis and normality test of distribution of pretest and posttest scores on body shape questionnaire for the experimental group.

Table 8

Mean, Median, Mode, Standard Deviation, Skewness, Kurtosis, and Kolmogorov-Smirnov test statistics of Body Dissatisfaction of the experimental group (N=32).

Scale	М	Median	Mode	SD	Skewness	Kurtosis	K-S	р
BD (Pretest)								
	48.29	46.00	23	21.06	.36	-1.22	.11	.20
BD (Posttest)								
	32.84	32.00	31	8.38	.22	34	.11	.20

Note: BD = Body Dissatisfaction, *M* =Mean, *SD*= Standard Deviation, *K*-*S* = Kolmogrov-Smirnov

The table 8 shows that K-S test statistic has non-significant value which means that scores are normally distributed in both pretest and posttest with skewness as .31, kurtosis as -1.22, K-S as .11 (p=.20) at the pretest while skewness as .22, kurtosis as -.34, and K-S as .11 (p=.20) at the posttest.

Table 9 presents the mean, median, mode, standard deviation, skewness, kurtosis, and normality test of distribution of pretest and posttest scores on body shape questionnaire for the waitlist-control group.

Mean, Median, Mode, Standard Deviation, Skewness, Kurtosis and Kolmogorov-Smirnov test statistics of body dissatisfaction of the waitlist-control (N=31) group measured by Body Shape Questionnaire

Scale	М	Median	Mode	SD	Skewness	Kurtosis	K-S	р
BD (Pretest)								
	45.19	45.00	45.00	13.91	.34	.08	.09	.20
BD (Posttest)								
	43.65	43.00	29.00	13.06	.35	.16	.09	.20

Note: BD = Body Dissatisfaction, *M* =Mean, *SD*= Standard Deviation, *K*-*S* = Kolmogrov-Smirnov

As shown in table 9, for the waitlist control group, the values of skewness and kurtosis at pretest are .34 and .08 respectively, and the value of K-S is .09 (p= .20) which indicates that scores are normally distributed in pretest. The values of skewness and kurtosis at posttest are .35 and .16 respectively, and the value of K-S is .09 (p=.20), which indicates that scores are normally distributed in posttest.

Figures 13 and 14 illustrate the distribution of pretest and posttest scores across body shape questionnaire for experimental group. Figures 15 and 16 illustrate the distribution of pretest and posttest scores across body shape questionnaire for the waitlist control group.

Distribution of scores across scale "Body Shape Questionnaire" at pretest of the experimental group (N=32)



Distribution of scores across scale "Body Shape Questionnaire" at posttest of the experimental group (N=32)







Distribution of scores across scale "Body Shape Questionnaire" at posttest of the waitlist control group (N=31)



Body Shame

Body shame was measured through body shame subscale of Objectified Body Consciousness scale. Tables 10 depicts the mean, median, mode, standard deviation, skewness, kurtosis and normality test of distribution of pretest and posttest scores on body shame subscale for the experimental group.

Table 10

Mean, Median, Mode, Standard Deviation, Skewness, Kurtosis, and Kolmogorov-Smirnov test statistics of Body Shame of the experimental group (N=32)

Scale	М	Median	Mode	SD	Skewness	Kurtosis	K-S	р
BS (Pretest)								
	4.23	4.37	2.00	1.31	09	-1.15	.09	.20
BS (Posttest)								
	3.88	4.00	4.00	1.07	.08	62	.12	.20

Note: BS = Body Shame, *M* =Mean, *SD*= Standard Deviation, *K*-*S* = Kolmogrov-Smirnov

Table 10 is showing that for the experimental group scores have normal distribution in both pretest and posttest (K-S value is non-significant). The values of skewness, kurtosis and K-S are -.09, -1.15, and .09 (p=.20) respectively at pretest while .08, -.62, and .12 (p=.20) respectively at posttest.

Table 11 presents the mean, median, mode, standard deviation, skewness, kurtosis, and normality test of distribution of pretest and posttest scores on body shame for the waitlist-control group.

Mean, Median, Mode, Standard Deviation, Skewness, Kurtosis, and Kolmogorov-Smirnov test statistics of body shame of the waitlist-control group (N=31) measured by Body Shame Subscale of Objectified Body Consciousness Scale

Scale	М	Median	Mode	SD	Skewness	Kurtosis	K-S	р
BS (Pretest)	3.72	3.50	3.00	1.08	34	32	.11	.20
BS (Posttest)								
	3.44	3.38	3.00	.82	.31	56	.09	.20

Note: BS = Body Shame, *M* =Mean, *SD*= Standard Deviation, *K*-*S* = Kolmogrov-Smirnov

The above table shows that for waitlist-control group, scores are normally distributed at pretest with skewness as -.34, kurtosis as -.32, and K-S as .11 (p=.20). The distribution is also normal at posttest with skewness as .31, kurtosis as -.56, and K-S as .09 (p=.20).

Figures 17 and 18 illustrate the distribution of pretest and posttest scores across body shame scale for the experimental group. Figures 19 and 20 illustrate the distribution of pretest and posttest scores across body shame scale for the waitlist control group.

Distribution of scores across the scale "Body Shame" at pretest of the experimental group (N=32)



Distribution of scores across the scale "Body Shame" at posttest of the experimental group (N=31)



Distribution of scores across scale "Body Shame" at pretest of the waitlist control group (N=31)



Distribution of scores across scale "Body Shame" at posttest of the waitlist control group (N=31)



Appearance Contingent Self-Worth

In this study, appearance contingent self-worth was measured through appearance subscale of Contingencies of Self-Worth Scale. Table 12 shows the mean, median, mode, standard deviation, skewness, kurtosis and normality test of distribution of pretest and posttest scores on body appreciation scale for the experimental group.

Table 12

Mean, Median, Mode, Standard Deviation, Skewness, Kurtosis, and Kolmogorov-Smirnov test statistics of contingent self-worth based on appearance of the experimental group (N=32).

Scale	М	Median	Mode	SD	Skewness	Kurtosis	K-S	р
CSW-A (Pretest)								
CSW-A	4.84	4.80	4.40	.99	09	75	.12	.20
(Posttest)	4.40	4.40	3.00	1.08	.03	-1.05	.10	.20

Note: CSW-A = Contingent Self Worth-Appearance, Body Appreciation, <math>M = Mean, SD = Standard Deviation, K-S = Kolmogrov-Smirnov

The table 12 indicates that scores are distributed normally in both pretest and posttest (K-S value is non-significant). At pretest, the values of skewness and kurtosis are -.09 and -75 respectively, and the value of K-S is .12 (p=.20), which are indicating normal distribution. At posttest, the values of skewness and kurtosis are .03 and -1.05 respectively, and the value of K-S is .10 (p=.20), indicating normal distribution.

Table 13 presents the mean, median, mode, standard deviation, skewness, kurtosis, and normality test of distribution of pretest and posttest scores on body appreciation scale for the waitlist-control group.

Mean, Median, Mode, Standard Deviation, Skewness, Kurtosis, and Kolmogorov-Smirnov test statistics of contingent self-worth based on appearance of the waitlist-control group (N=31) measured by Appearance Subscale of Contingencies of Self Worth Scale.

Scale	М	Median	Mode	SD	Skewness	Kurtosis	K-S	р
CSW-A (Pretest)								
	4.91	5.00	2.15	.84	.21	57	.10	.20
CSW-A (Posttest)								
	4.73	4.60	4.40	.73	.44	09	.13	.20

Note: CSW-A = Contingent Self Worth-Appearance, Body Appreciation, <math>M = Mean, SD = Standard Deviation, K-S = Kolmogrov-Smirnov

For waitlist-control group, the table 13 shows that scores are normally distributed in both pretest and posttest (K-S value is non-significant). At pretest, the values of skewness and kurtosis are .21 and -.57 respectively, and the value of K-S is .10 (p=.20), which are indicating normal distribution. At posttest, the values of skewness and kurtosis are .73 and -.09 respectively, and the value of K-S is .13 (p=.20), which are also indicating normal distribution.

Figures 21 and 22 illustrate the distribution of pretest and posttest scores across appearance subscale for the experimental group. Figures 23 and 24 illustrate the distribution of pretest and posttest scores across the appearance subscale for the waitlist control group.

Distribution of scores across scale "Contingent self-worth-Appearance" at pretest of the experimental group (N=32)





Distribution of scores across scale "Contingent self-worth-Appearance" at posttest of the experimental group (N=31)



Distribution of scores across scale "Contingent self-worth-Appearance" at pretest of the waitlist-control group (N=31)





Distribution of scores across scale "Contingent self-worth-Appearance" at posttest of the waitlist-control group (N=31)



Inferential Statistics

Increase in the levels of Self -Compassion

The scores for self-compassion in the experimental group were non-normally distributed at pretest and normally distributed at posttest. The scores in waitlist-control group were normally distributed at pretest and non-normally distributed at posttest. Hence to find out pre-post differences Wilcoxon signed-rank test was performed on both groups.

Table 14

Wilcoxon signed-rank test for pre-post differences in "Self-Compassion" of both experimental and waitlist-control group

Group	Pret	test	Post	test	Ζ	р
-	М	SD	М	SD	-	
Experimental	34.97	7.45	42.84	4.55	-4.54	.00
Waitlist- Control	34.61	6.18	36.13	6.82	63	.53

Note: M= Mean, SD= Standard deviation, Z = test statistic p= significance value

The Wilcoxon signed-rank test (Table 14) shows that posttest scores of experimental group were significantly higher than pretest scores (Z= -4.54, p= .00). On the other hand waitlist control group have not shown any significant change from pretest to posttest (Z= -.63, p=.53).

Due to non-normal distribution of data, Mann Whitney U test was performed to determine differences across groups (See Table 15).

Mann Whitney U test for differences in "self-compassion" between groups at pretest and posttest.

Variables	Exj	Experimental		tlist-Control			
	N	Mean Rank	N	Mean Rank	U	Ζ	р
SC (Pretest)	32	33.47	31	30.48	449	65	.51
SC (Posttest)	31	40.77	31	22.23	193	-4.06	.00

Note: N= No of participants, SC= self-compassion, p= significance value, U= Mann Whitney test value

Table 15 shows that at pre-assessment there were no significant differences on selfcompassion score between experimental and waitlist-control group (U= 449, z= -.65, p=.51). At post-assessment, self-compassion score were significantly higher in experimental group as compared to control group (U= 193, z= -4.06, p=.00).

Increase in the levels of Body Appreciation

The scores for body appreciation in the experimental group were distributed nonnormally at pretest and posttest. The scores in waitlist-control group were distributed normally at pretest and posttest. Hence to find out pre-post differences for experimental group Wilcoxon signed-rank test was performed, and to find out pre-post differences for waitlist control group, paired sample t test was performed.

Wilcoxon signed-rank test for pre-post differences in "Body Appreciation" of experimental group

Group	Pret	test	Postt	est		
-	Μ	SD	M SD		Ζ	р
Experimental	3.61	1.10	3.78	.78	-2.24	.02

Note: M= Mean, SD= Standard deviation, Z = test statistic, p= significance value

The Wilcoxon signed-rank test (Table 16) shows that posttest scores at body appreciation scale of experimental group were significantly higher than pretest scores (Z= -2.24, p= .02).

Table 17

Paired sample t-test for pre-post differences in "Body Appreciation" of waitlist-control group

Group	Pre	etest	Post	test					
	M	SD	М	SD	t (30)	р	LL	UL	Cohen's d
Waitlist Control	3.36	.98	3.54	.79	-2.70	.01	32	05	.20

Note: M= Mean, SD= Standard deviation, t= value of t statistic, p= significance value, CI = Confidence Interval, LL= Lower Limit, UL= Upper Limit, *Cohen's d* = effect size

As shown in table 17, paired sample t-test indicates that there was a significant increase in body appreciation scores at posttest (M=3.54, SD=.79) as compared to pretest (M=3.36, SD=.98), in waitlist-control group t (30) = -2.70, p=.01, d= .20 with small effect size.

For non-normally distributed data, Mann Whitney U test was performed to determine differences in body appreciation between experimental and control group.

Mann Whitney U test for differences in "body appreciation" between groups at pretest and posttest.

Variables	Experimental		Waitlis	t-Control			
	N	Mean Rank	N	Mean Rank	U	Ζ	р
BA (Pretest)	32	34.27	31	29.66	423.50	-1.00	.32
BA (Posttest)	31	34.10	31	28.90	400	-1.14	.25

Note: N= No of participants, BA= Body Appreciation, p= significance value, U= Mann Whitney test value

Mann Whitney U test (Table 18) reveals no significant differences in body appreciation between experimental and control group at both pretest (U= 423.50, z= -1.00, p= .32) and posttest (U=400, z= -1.14, p= .25).

Decrease in the levels of Body Dissatisfaction

The scores for body dissatisfaction in the experimental group and waitlist-control group were normally distributed at both pretest and posttest. Hence to find out pre-post differences paired sample t test was performed on both groups.

Table 19

Paired Sample t test for pre-post differences in "body dissatisfaction" of both experimental and waitlist-control group

Group	Pretest		Posttest				95%	6 CI	
	М	SD	М	SD	t (30)	р	LL	UL	Cohen's d
Experimental	48.29	21.06	32.84	8.38	5.19	.00	9.37	21.53	.96
Waitlist- Control	45.19	13.91	43.65	13.06	.65	.52	-3.35	6.45	.11

Note: M= Mean, SD= Standard deviation, t= value of t statistic, p= significance value, CI= Confidence Interval, LL= Lower Limit, UL= Upper Limit, Cohen's d = effect size

Paired sample t-test (Table 19) indicates that there was a significant decrease in body dissatisfaction scores at posttest (M=32.84, SD=8.38) as compared to pretest (M=48.29, SD= 21.06) in experimental group t (30) =5.19, p=.00, d= .96 with a large effect size. It also indicated that there was no significant difference in scores for pretest (M=45.19, SD= 13.91) and posttest (M=43.65, SD= 13.06) in waitlist-control group t (30) = .65, p=.52.

Due to normal distribution of data, independent sample t-test was performed to determine differences in body dissatisfaction scores between groups (See Table 20).

Table 20

Independent sample t-test for differences in "body dissatisfaction" between groups at pretest and posttest

Variables	Experi Gro	mental oup	Wai Con Gre	Waitlist- Control Group		95% CI			
	М	SD	М	SD	t (61)	р	LL	UL	Cohen's d
BD (pretest)	47.72	20.98	45.19	13.91	.56	.57	-6.47	11.52	.14
BD(posttest)	32.84	8.38	43.65	13.06	-3.88	.00	-16.38	52	.98

Note: BD= Body dissatisfaction, M= Mean, SD= Standard Deviation, t= value of t statistic, p= significance value, CI = Confidence Interval, LL= Lower Limit, UL= Upper Limit, *Cohen's d* = effect size

Table 20 shows that there were no significant differences on body dissatisfaction scores in experimental (M= 47.72, SD=20.98) and waitlist-control group (M= 45.19, SD=13.91) at pre-assessment t (61) = .56, p=.57. On the other hand, body dissatisfaction scores were significantly lower in experimental group (M= 32.84, SD=8.38) as compared to waitlist-control group (M= 43.65, SD=13.06) at post-assessment t (61) = -3.88, p = .00, d=.98 with a large effect size.

Decrease in the levels of Body Shame

The scores for body shame in the experimental group and waitlist-control group were normally distributed at both pretest and posttest. Hence to find out pre-post differences paired sample t test was performed on both groups.

Paired Sample t-test for pre-post differences in "body shame" of both experimental and waitlist-control group

Group	Pre	Pretest Posttest			95% CI				
	М	SD	М	SD	t (30)	р	LL	UL	Cohen's d
Experimental	4.23	1.31	3.88	1.07	2.61	.01	.07	.61	.29
Waitlist- Control	3.72	1.08	3.44	.82	1.76	.09	04	.59	.30

Note: M= Mean, SD= Standard deviation, t= value of t statistic, p= significance value, CI= Confidence Interval, LL= Lower Limit, UL= Upper Limit, Cohen's d = effect size

As shown in table 21, paired sample t-test indicates that there was a significant decrease in body shame score from pretest (M=4.23, SD= 1.31) to posttest (M=3.88, SD=1.07) in experimental group t (30) =2.61, p=.01, d= .29 with a small effect size. It also indicates that there were no significant differences in body shame scores in pretest (M=3.72, SD= 1.08) and posttest (M=3.44, SD= .82) in waitlist-control group t (30) = 1.76, p=.09.

Due to normal distribution of data, independent sample t-test was performed to determine differences in body shame scores between groups (Table 22).

Independent Sample T test for differences in "body shame" between groups at pretest and posttest.

Variables	Experi Gro	mental oup	Wai Cor Gr	itlist- ntrol oup			95%	_	
	М	SD	М	SD	t (df)	р	LL	UL	Cohen 's d
BS (pretest)	4.17	1.32	3.72	1.08	1.48(61)	.14	16	1.06	.37
BS(posttest)	3.88	1.07	3.44	.82	1.81(60)	.07	04	92	.46

Note: BS= Body shame, M= Mean, SD= Standard Deviation, t= value of t statistic, df= degrees of freedom, p= significance value, CI= Confidence Interval, LL= Lower Limit, UL= Upper Limit, *Cohen's d* = effect size

Table 22 indicates that there were insignificant differences between experimental (M=4.17, SD=1.32) and control group (M= 3.72, SD=1.08) at pretest t (61) = 1.48, p=.14. Also it shows insignificant differences between experimental (M= 3.88, SD=1.07) and control group (M= 3.44, SD=.82) at posttest t (60) = 1.81, p = .07.

Decrease in the levels of Appearance Contingent Self Worth

The scores for appearance contingent self-worth in the experimental group and waitlist-control group were normally distributed at both pretest and posttest. Hence to find out pre-post differences paired sample t test was performed on both groups.

Group	Pretest		Posttest				95%	∕₀ CI		
	М	SD	М	SD	t (30)	р	LL	UL	Cohen's d	
Experimental	4.84	1.00	4.40	1.08	2.97	.006	.14	.74	.42	
Waitlist- Control	4.90	.84	4.73	.73	2.30	.02	.02	.33	.22	

Paired sample t-test for pre-post differences in "Appearance contingent self-worth" of both experimental and waitlist-control group

Note: M= Mean, SD= Standard deviation, MD= Mean Difference, t= value of t statistic, p= significance value, CI= Confidence Interval, LL= Lower Limit, UL= Upper Limit, Cohen's d = effect size

As shown in table 23, paired sample t-test indicates that there was a significant decrease in appearance contingent self-worth at posttest (M=4.40, SD=1.08) as compared to pretest (M=4.84, SD= 1.00) in experimental group t (30) =2.97, p=.006, d= .42 with small effect size. It also indicates that there was a significant decrease in appearance contingent self-worth at posttest (M=4.73, SD=.73) as compared to pretest (M=4.90, SD= .84) in waitlist-control group t (30) = 2.30, p=.02 with small effect size.

Due to normal distribution of data, independent sample t-test was performed to determine differences in appearance contingent self-worth scores between groups (See Table 24).
Table 24

Independent sample t-test for differences in "Appearance contingent self-worth" between groups at pretest and posttest

Variables	Experimental Group		Waitlist- Control Group			95% CI		95%		
	M	SD	М	SD	t (df)	р	LL	UL	Cohen's d	
CSW-A (pretest)	4.83	.98	4.90	.84	37(61)	.71	54	.38	.01	
CSW-A (posttest)	4.40	1.08	4.73	.73	-1.44(60)	.15	80	.13	.36	

Note: CSW-A=Contingent Self Worth-Appearance, M= Mean, SD= Standard Deviation, t= value of t statistic, df= degrees of freedom, p= significance value, CI= Confidence Interval, LL= Lower Limit, UL= Upper Limit, *Cohen's d* = effect size

Table 24 shows insignificant differences in appearance contingent self-worth between experimental (M=4.83, SD=.98) and control group (M= 4.90, SD=1.84) at pretest t (61) = -.37, p=.71. Also, it revealed insignificant differences between experimental (M= 4.40, SD=1.08) and control group (M= 4.73, SD=.73) at posttest t (60) = -1.44, p = .15.

Chapter-4 Discussion

The current study was aimed at investigating the feasibility of a compassionfocused intervention for improving body image concerns among young adults. The objectives were to explore whether self-compassion meditations can enhance selfcompassion and body appreciation along with lowering body dissatisfaction, body shame, and appearance-contingent self-worth. The study utilized a quasi-experimental design with waitlist-control group. Except for the screening process, remaining procedure including pretesting, intervention delivery and post assessment were done online. This study provided a piece of evidence that practicing a guided a compassion-focused meditation for three weeks can positively impact self-compassion and body image concerns among young adults. Despite the fact that outcome evaluation was not powered, it revealed significant improvements in levels of self-compassion and body dissatisfaction.

The compassion focused meditation intervention can reduce body dissatisfaction and body shame by encouraging participants to treat themselves kindly instead of being judgmental. It leads participants to acquire a more tolerant attitude toward their bodies by reducing the negative judgmental self-talk. Furthermore, the component of common humanity inherent in the intervention enables them to see a bigger picture that not all bodies are perfect, one should accept the self with an open heart, all people have inadequacies and they do experience such circumstances, also help in lowering body image concerns. Another component of the intervention is aimed at mindfulness, which helps in lowering body dissatisfaction by providing participants a balanced awareness of perceived flaws in the body. It should be noted that there were no significant differences in pre-assessment scores on all variables between the experimental group and waitlist-control group which provided support for appropriate randomization and a desired sample for the study.

It was hypothesized that there will be a significant increase in levels of selfcompassion and body appreciation at post-assessment as compared to pre-assessment in experimental group. Findings showed that participants who received the intervention demonstrated significantly higher scores on self-compassion at posttest but the waitlistcontrol did not show any significant change. These findings are in line with the findings of an online self-compassion based intervention study by Kriegar et al. (2016). Similar findings were also reported by Seekis et al. (2020), who used a facebook-enhanced selfcompassion intervention for improving body image. However, it has also been found that posttest scores were significantly higher for body appreciation in not only the experimental but also in the waitlist-control group which was in contrast with the hypothesis. Although waitlist control group have also shown significant change, the effect size was small. The participants were selected from specified classes and it is possible that there might be a spillover in the intervention. Participants from experimental group might have shared what is happening in the intervention.

It was also hypothesized that there will be a decrease in levels of body shame, body dissatisfaction and appearance contingent self-worth at post-assessment as compared to pre-assessment in experimental group. Results revealed that experimental group have shown significant decrease on body dissatisfaction level at posttest with large effect size and significant reduction in body shame at posttest with small effect size. On the other hand there were no significant pre post changes on body dissatisfaction and body shame for waitlist-control group. Literature supports that self-compassion appears to buffer against shame and other negative emotions (Ferreira et al., 2013).

As it has been observed in the demographics that most of the participants were in the category of healthy body mass index, the dissatisfaction with body shape might be due to perceived discrepancies between ideal and real self. However, since the body shape doesn't solely depend on weight or BMI, there might be some other reasons for body dissatisfaction among the participants like the skin tone, physique, or shape of different body parts etc. Since in this study, body shape questionnaire (Evans & Dolan, 1993) was used to assess levels of body dissatisfaction and it assesses overall concern with the body shape not related to the specific features, reasons of body dissatisfaction can't be determined. Self-compassion meditation appeared to reduce body dissatisfaction in participants by altering the negative view and enhancing a more compassionate mindset towards self.

Another finding contrasting with the hypothesized outcome was that there was significant reduction in appearance contingent self-worth in not only the experimental but also in the waitlist-control group but again the effect size was small for the waitlist control group. Higher scores on body appreciation and lower scores on appearance contingent selfworth at posttest in both experimental and waitlist-control group cannot be solely attributed to intervention effects rather some external factors like spillover in the intervention might have played a role. Another possible reason might be the small sample size which was unable to detect effect of the intervention.

Waitlist-control group, despite showing no significant change in levels of body dissatisfaction, have shown an increase in body appreciation from pre to post assessment.

This could also be explained in terms of the measure used for body appreciation. The study utilized body appreciation scale (Tylka & Wood-Barcalow, 2015a) for measuring body appreciation which basically addresses a holistic attitude towards body image. According to Tylka & Wood-Barcalow (2015b), individuals might feel unsatisfied with some body features or body parts but at the same time they might respect and love their body as a whole.

Across groups differences were also expected. It was hypothesized that experimental group will demonstrate a significant increase in self-compassion and body appreciation; and a significant decrease in body dissatisfaction, body shame, and appearance contingent self-worth at posttest as compared to waitlist control group. The findings revealed mixed outcomes.

Experimental group has demonstrated significant increase in self-compassion and a significant decrease in body dissatisfaction with large effect sizes as compared to control group. These findings are in line with the findings of the study conducted by Albertson et al. (2015). However, findings also revealed insignificant differences between experimental and control group on body shame, body appreciation and appearance contingent self-worth after the intervention. For the insignificant differences on body appreciation and appearance contingent self-worth the reason might be that both of the groups had already significant pre-post differences on these two variables. For body shame, although pre post differences were significant for experimental group with small effect size, but independent t-test did not reveal significant differences between experimental and waitlist-control group on body shame after the intervention. Slight mean differences were observed on body shame scores between groups, but they were not significant. This finding is in contrast with the previous studies which suggest that self-compassion mitigate shame (Neff and Vonk, 2009, Gilbert & Procter, 2006).

The very low attrition rate (3.12%) in this study is a promising feature to support such interventions in the future on a large scale. The intervention used in the study was a brief intervention. The lengthy and intensive interventions have a greater risk of high attrition and are time consuming (Moffit et al., 2018). Significant improvement on some aspects using brief interventions like the one used in this study suggests that there are relatively quick and effective ways to increase self-compassion and can be employed for improving body image concerns or other issues.

The present study used technology as a mode of intervention delivery. Technologyassisted interventions are in emerging trend now. The significant changes achieved using technology-based interventions provide evidence that such interventions with the minimal human role can be very beneficial (Dölemeye et al., 2013). These can help in providing services to those who don't have enough resources or access to specialists. Furthermore, these can help those who are reluctant to seek help due to stigmatization.

Conclusion

In conclusion, this study has suggested that brief self-compassion trainings and interventions can be helpful in mitigating body image concerns among young adults in a world which constantly pressurizes them to be according to beauty standards and beauty ideals. Consistent with the findings of existing literature, self-compassion appears to be an important and potential target for wellbeing interventions for youth especially for those issues which are characterized by self-criticism and shame like body image dissatisfaction. The core components of self-compassion i.e., self-kindness, common humanity, and mindfulness together attempt to build a more positive and a compassionate mindset allowing individuals to be flexible in their thinking and being able to deal with themselves in a kind and compassionate way.

Furthermore, this was an internet-based intervention. Internet is used by 94% of youth (aged 18-24) in developed countries, 67% in developing countries and 30% in the least developed countries (International Telecommunication Union, 2017). Hence such internet-based interventions can be encouraging and have the potential to help individuals and enhance their wellbeing.

Limitations

- 1. The subjective self-report nature of data was one of the limitations of the study.
- 2. Convenient sampling was used which lowers the generalizability of the results.
- 3. The outcome evaluation was not powered, and sample size was selected on the basis of existing literature on sample size in feasibility trials.
- 4. There were no means to completely ensure that participants were listening and practicing the meditation. The number of days they practiced the meditation and duration of it was also dependent on self-report.
- 5. Both experimental and waitlist-control group were aware of the differences in their allocation. It was an open label study. Comparison to waitlist-control group is not as powerful as comparison to active control because it may overestimate treatment effects (Cunningham, 2013).

Implications and Recommendations

- 1. This study adds a facet of body dissatisfaction to the literature of compassion focused interventions such as Compassion Focused Therapy (CFT) or Mindfulness self-compassion program (MSC). People in media industry can benefit through this intervention, since they also struggle with body image concerns. Another population which can get benefit from this intervention is athletes who also experience body dissatisfaction. Moreover, it contributes for addressing the third SDG's most pertinent concern of mental wellbeing by adapting the evidence-based therapeutic intervention
- 2. Future studies can be carried out with a relatively large sample with a more powered controlled trial. Studies can use an active control group rather than waitlist-control group.
- 3. Future researchers can develop a more robust manipulation check to track whether participants actually practice meditation or not. They can create short unforetold surveys which can appear immediately after each session which participants can fill at the moment and somehow give an indication that participants have practiced the meditation or any assigned task
- 4. As literature suggests that body dissatisfaction can lead to eating disorders, researchers can test the effectiveness and efficacy of such interventions for disordered eating as well.
- 5. Future research can compare this intervention with other brief self-compassion interventions like self-compassionate letter writing, to deal the body image issues.

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Annexures

Appendix A. Information Sheet

I am Firdos Naseem, a student of Capital University of Science and Technology, Islamabad. I am doing a research study which aims to find out the effect of compassion focused intervention on body dissatisfaction among young adults under the supervision of Ms. Parveen Akhtar.

Body dissatisfaction is when a person is not satisfied with his/her bodily features and negatively evaluates him/herself. It is an emerging issue and has several negative consequences. To take part in this study, kindly read the following details. If you want more information regarding this study, you can ask questions.

Purpose of the Research

The purpose of this research is to examine whether a compassion-focused intervention can help reduce body dissatisfaction among young adults. It is a home-based meditation intervention.

What is involved in the Study?

The time duration of this study is two to three weeks. Your consent is necessary to take part in this study. All the participants will be pre-assessed using some questionnaires. Furthermore, there will be two groups of participants. Your allocation to any group will be completely random and will be done by the software/system. Participants in Group A will receive intervention and then fill out questionnaires again after the intervention. Participants in Group B will fill out questionnaires after 3 weeks of pre-assessment, and then will be given intervention. The intervention includes three meditations of almost 15-20 minutes. In each week, participants will listen to and practice the given meditation once per day at any time of the day. A form will also be provided in which participants will give feedback on the meditation practice. Your participation is completely voluntary and you have the right to withdraw from the study at any time without any penalty.

Risks

There are no foreseeable risks and harms in this study. In case of any discomfort or problem that arises due to this study, you can contact at the contact information given at the end.

Privacy and Confidentiality

Your information will be kept confidential and will be used for research purposes only. The overall results of the participants will be derived and the participants' identities will not be revealed in any way. Data will be discarded after the research purpose has been fulfilled.

Contacts for Questions

If you have any questions regarding this research, you can ask right now or later on in case of any questions you can ask via email at:

bsp191011@cust.pk

Appendix B. Consent Form

To indicate your consent, mark tick (\checkmark) in the boxes to the right of the following statements and sign the form.

I hereby confirm that I have read the above information carefully and understood	
the purpose of the study.	
I have been informed fully about the research.	
I understand that my participation is voluntary and I have the right to withdraw	
from the study at any time without any of my rights being affected.	
I understand that information obtained will be kept confidential, will be	
anonymous, and will be used only for research purposes.	
I am willing to participate in this study.	

Participant's Sign _____ Date _____

Researcher's Sign _____

Date _____

Appendix C. Demographic Sheet

Please fill in the following information. Tick (\checkmark) mark those where options are given.

Code Assigned				
Age				
Gender	M	ale	F	emale
Height	Feet		Inches	8
Weight (Kgs)			1	
Education in Years				
Study Major /Field of Study				
Relationship/Marital Status (Tick one)	Single	Married	Widow	Divorced
Family System (Tick one)	Nue	clear	Joint	
Father's Occupation			1	
Mother's Occupation				

Appendix D. Meditation Feedback / Record Form

Did you practice meditation this week?

How many numbers of days you practiced the meditation?

For how long have you practiced meditation?

Did you find any difficulty in practicing meditation?

What did you find most helpful in this meditation?

Appendix E. Self-Compassion Scale- Short Form (SCS-SF)

HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES

Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:

Almost Never				Almost
				Always
1	2	3	4	5

Sr. No	Items	1	2	3	4	5
1	When I fail at something important to me I become consumed by feelings of inadequacy					
2	I try to be understanding and patient towards those aspects of my personality I don't like.					
3	When something painful happens I try to take a balanced view of the situation.					
4	When I'm feeling down, I tend to feel like most other people are probably happier than I am.					
5	I try to see my failings as part of the human condition.					
6	When I'm going through a very hard time, I give myself the caring and tenderness I need					
7	When something upsets me I try to keep my emotions in balance.					
8	When I fail at something that's important to me, I tend to feel alone in my failure					
9	When I'm feeling down I tend to obsess and fixate on everything that's wrong.					
10	When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.					
11	I'm disapproving and judgmental about my own flaws and inadequacies.					
12	I'm intolerant and impatient towards those aspects of my personality I don't like.					

Appendix F. Body Shape Questionnaire (BSQ-16A) For Females

We should like to know how you have been feeling about your appearance over the **PAST**

FOUR WEEKS. Please read each question and circle the appropriate number to the right.

Please answer all the questions.

Never	Rarely	Sometimes	Often	Very Often	Always
1	2	3	4	5	6

OVER THE PAST FOUR WEEKS:

Sr. No	Items	1	2	3	4	5	6
1	Has feeling bored made you brood about your shape?						
2	Have you thought that your thighs, hips or bottom are too large for the rest of you?						
3	Have you worried about your flesh being not firm enough?						
4	Have you felt so bad about your shape that you have cried?						
5	Have you avoided running because your flesh might wobble?						
6	Has being with thin women made you feel self- conscious about your shape?						
7	Have you worried about your thighs spreading out when sitting down?						
8	Has eating even a small amount of food made you feel fat?						
9	Have you avoided wearing clothes which make you particularly aware of the shape of your body?						
10	Has eating sweets, cakes, or other high calorie food made you feel fat?						
11	Have you felt ashamed of your body?						

12	Has worry about your shape made you diet?			
13	Have you felt happiest about your shape when your stomach has been empty (e.g. in the morning)?			
14	Have you felt that it is not fair that other women are thinner than you?			
15	Have you worried about your flesh being dimply?			
16	Has worry about your shape made you feel you ought to exercise?			

Appendix G. Body Shape Questionnaire (BSQ-16A) For Males

We should like to know how you have been feeling about your appearance over the **PAST FOUR WEEKS**. Please read each question and circle the appropriate number to the right. Please answer all the questions.

Never	Rarely	Sometimes	Often	Very Often	Always
1	2	3	4	5	6

OVER THE PAST FOUR WEEKS:

Sr. No	Items	1	2	3	4	5	6
1	Has feeling bored made you brood about your shape?						
2	Have you thought that your thighs, hips or bottom are too large for the rest of you?						
3	Have you worried about your flesh being not firm enough?						
4	Have you felt so bad about your shape that you have cried?						
5	Have you avoided running because your flesh might wobble?						
6	Has being with thin men made you feel self- conscious about your shape?						
7	Have you worried about your thighs spreading out when sitting down?						
8	Has eating even a small amount of food made you feel fat?						
9	Have you avoided wearing clothes which make you particularly aware of the shape of your body?						
10	Has eating sweets, cakes, or other high calorie food made you feel fat?						
11	Have you felt ashamed of your body?						

12	Has worry about your shape made you diet?			
13	Have you felt happiest about your shape when your stomach has been empty (e.g., in the morning)?			
14	Have you felt that it is not fair that other men are thinner than you?			
15	Have you worried about your flesh being dimply?			
16	Has worry about your shape made you feel you ought to exercise?			

Appendix H. Objectified Body Consciousness Scale-Body Shame Subscale

Circle the number that corresponds to how much you agree with each of the statements on the following pages.

Circle NA only if the statement does not apply to you. Do not circle NA if you don't agree with a statement. For example, if the statement says "When I am happy, I feel like singing" and you don't feel like singing when you are happy, then you would circle one of the disagree choices. You would only circle NA if you were <u>never</u> happy.

Strongly	Disagree	Disagree	Neither	Agree	Agree	Strongly
Disagree		Somewhat	Agree nor	Somewhat		Agree
			Disagree			
1	2	3	4	5	6	7

Sr. No	Items	1	2	3	4	5	6	7	NA
1	When I can't control my weight, I feel like something must be wrong with me.								
2	I feel ashamed of myself when I haven't made the effort to look my best.								
3	I feel like I must be a bad person when I don't look as good as I could.								
4	I would be ashamed for people to know what I really weigh.								
5	I never worry that something is wrong with me when I am not exercising as much as I should.								
6	When I'm not exercising enough, I question whether I am a good enough person.								
7	Even when I can't control my weight, I think I'm an okay person.								
8	When I'm not the size I think I should be, I feel ashamed.								

Appendix I. Body Appreciation Scale (BAS)

Please indicate whether the question is true about you never, seldom, sometimes, often, or always.

Never	Seldom	Sometimes	Often	Always
1	2	3	4	5

Sr. No	Items	1	2	3	4	5
1	I respect my body					
2	I feel good about my body.					
3	On the whole, I am satisfied with my body.					
4	Despite its flaws, I accept my body for what it is.					
5	I feel that my body has at least some good qualities					
6	I take a positive attitude towards my body					
7	I am attentive to my body's needs.					
8	My self-worth is independent of my body shape or weight.					
9	I do not focus a lot of energy being concerned with my weight or body shape.					
10	My feelings toward my body are positive, for the most part					
11	I engage in healthy behaviors to take care of my body.					
12	FOR WOMEN: I do not allow unrealistically thin images presented in the media to affect my attitudes toward my body.FOR MEN: I do not allow unrealistically muscular images of men presented in the media to affect my attitudes toward my body.					
13	Despite its imperfections, I still like my body.					
Appendix J. Contingencies of Self-Worth Scale- Appearance Subscale

INSTRUCTIONS: Please respond to each of the following statements by circling your answer using the scale from "1 = Strongly disagree" to "7 = Strongly agree." If you haven't experienced the situation described in a particular statement, please answer how you think you would feel if that situation occurred.

Strongly	Disagree	Disagree	Neutral	Agree	Agree	Strongly	
Disagree		Somewhat		Somewhat		Agree	
1	2	3	4	5	6	7	

Sr.No	Items	1	2	3	4	5	6	7
1	When I think I look attractive, I feel good about myself.							
2	My self-esteem is unrelated to how I feel about the way my body looks.							
3	My self-esteem is influenced by how attractive I think my face or facial features are.							
4	My sense of self-worth suffers whenever I think I don't look good.							
5	My self-esteem does not depend on whether or not I feel attractive.							

Appendix K. Permission of Scales

Running head: SELF-COMPASSION SCALE-Short Form (SCS-SF) 1							
To Whom it May Concern:							
Please feel free to use the Self-Compassion Scale – Short Form in your research (12 items instead of 26 items). The short scale has a near perfect correlation with the long scale when examining total scores. We do not recommend using the short form if you are interested in subscale scores, since they're less reliable with the short form. You can e-mail me with any questions you may have. The appropriate reference is listed below.							
Best wishes,							
Kristin Neff, Ph. D. e-mail: kristin.neff@mail.utexas.edu							
<u>Reference:</u> Raes, F., Pommier, E., Neff, K. D., & Van Gucht, D. (2011). Construction and factorial validation of a short form of the Self-Compassion Scale. <i>Clinical Psychology & Psychotherapy. 18</i> , 250-255.							
NW Nichole Wood-Barcalow	Janet Hyde To: BSP191011 - FIRDOS NASEEM Mon 10/10/2022 20:38						
Thu 06/10/2022 22:42	Mckinley OBC96 PDF - 2 MB OBC_Survey_Handbook 02 19 DOC - 38 KB						
- PAS-2	2 attachments (2 MB)						
DOC - 40 KB	Dear Firdos,						
hi Firdos, Thanks for reaching out with the request to use the Body Appreciation Scale-2. It's attached and includes the scoring information. Best of luck to you in your endeavor!	Yes, you have permission to use the Body Shame subscale from the Objectified Body Consciousness Scale. I am attaching a copy of the original article in which it was published, as well as a handbook that will give you additional information. Best wishes for success with your research. Dr. Hyde						
warmly, Nichole Nichole Wood-Barcalow, PhD Licensed Psychologist Wood-Barcalow Psychological Services, LLC 470 Olde Worthington Road, Suite 200 Westerville, OH 43082 (614) 392-7975 www.drwoodbarcalow.com	Janet Shibley Hyde Professor Emerit of Psychology and Gender & Women's Studies University of Wisconsin–Madison 1202 W. Johnson St. Madison, WI 53706 USA Pronouns: she/her The University of Wisconsin-Madison occupies ancestral Ho-Chunk Iand.						



Instrument Title:	Contingencies of Self-Worth Scale	
Instrument Author:	Crocker, J., Luhtanen, R. K., Cooper, M. L., &	
	Bouvrette, A.	
Cite instrument as:	Crocker, J., Luhtanen, R. K., Cooper, M. L., &	
	Bouvrette, A (2012) . Contingencies of Self-Worth	
	Scale . Measurement Instrument Database for the	
	Social Science. Retrieved from www.midss.ie	

Permission to Use the Measure

Researchers who wish to use the Contingencies of Self-Worth Scale in their research have our permission to do so, with the caveat that it is properly acknowledged by including the correct citation for the measure in any reports. We would appreciate learning about what you are using the measure for, and what you find.

Appendix L. Support Letter for Data Collection



C.U.S.T.

Capital University of Science & Technology

Islamabad

Islamabad Expressway, Kahuta Road, Zone - V, Islamabad, Pakistan Telephone :+92-51-111-555-666 :+92-51-4486700 Fax :+92-51-4486705 Email :info@cust.edu.pk Website :www.cust.edu.pk

Ref. CUST/IBD/PSY/Thesis-180 October 6, 2022

TO WHOM IT MAY CONCERN

Capital University of Science and Technology (CUST) is a federally chartered university. The university is authorized by the Federal Government to award degrees at Bachelor's, Master's and Doctorate level for a wide variety of programs.

Ms. Firdos Naseem, registration number BSP191011 is a bona fide student in BS Psychology program at this University from Spring 2019 till date. In partial fulfillment of the degree, she is conducting research on "A randomized control trial of compassion focused intervention for body dissatisfaction among Pakistani adults". She is required to collect data from your institute.

Your cooperation is highly appreciated. Please feel free to contact undersigned, if you have any query in this regard.

Best Wishes,

Dr. Sabahat Haqqani Head, Department of Psychology Ph no. 111-555-666 Ext: 178 sabahat.haqqani@cust.edu.pk

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