Compassion Focused Therapy for Body Weight Shame: A Mixed Methods Pilot Trial

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Compassion Focused Therapy for Body Weight Shame: A Mixed Methods Pilot Trial

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Abstract

Individuals with bigger bodies (Body Mass Index > 30) often experience body weight shame, and are at increased risk for mental health vulnerabilities such as depression and anxiety. To date, there have been no studies specifically designed and pilot tested to help with body weight shame for individuals with bigger bodies that do not have a diagnosed clinical condition. The aim of current study is to investigate the initial feasibility of Compassion Focused Therapy (CFT) as a 12-session group intervention for the reduction in body weight shame for individuals with bigger bodies. The study used a mixed methods repeated measures design, with both quantitative and qualitative measures, to assess the initial feasibility of the CFT group based intervention. Participants (N = 5) attended a 12-session/2-hour group CFT program aimed to directly target body weight shame by cultivating compassion. Measurements were conducted at three time points (pre-, post-, and three-month follow-up intervention). Results indicated that CFT had a positive impact on reducing body weight shame, increasing compassion, and improving health engaging behaviors. Qualitative feedback indicated the importance of the group dynamics to help with the de-shaming of body appearance for individuals. Results from this feasibility trial are promising and future research using randomized controlled trial methodologies should be conducted to evaluate the effectiveness of CFT as a treatment option for body weight shame for individuals with bigger bodies.

Key Practitioner Message:

- Body weight shame is a common experience for those with bigger bodies
- No interventions currently exist aimed to help reduce body weight shame individuals with bigger bodies experience, with emphasis rather currently being on weight loss
- Compassion Focused Therapy (CFT) was used in a group format to help those who struggle with body weight shame

- CFT was found to be helpful at reducing body weight shame, increasing compassion, and improving health related behaviors

Keywords: Compassion Focused Therapy; Body Weight Shame; Shame; Obesity; Compassion.

Compassion Focused Therapy for Body Weight Shame: A Mixed Methods Pilot Trial

The physical attractiveness of women, their body weight, size and shape, is of intense scrutiny in Western cultures, particularly with the rise of media and social media outlets (S. Gilbert & Thompson, 1996). Women who are thin are revered; characterized with positivity, success and acceptance (Brownell, 1991). In comparison, individual's living in larger bodies (e.g., a Body Mass Index greater than 30) are viewed with negative attributions resulting in discrimination, stigmatisation and active shaming by dieting companies and the media (Lewis, 1997; Puhl & Brownell, 2013). Moreover, many males struggle with body dissatisfaction, however feel ashamed to talk about it with other men due to stigma (O'Gorman, Sheffield, Clarke, & Griffiths, 2019). Exposing people to constant negative social perceptions about body weight, size and shape, leave many in bigger bodies feeling exposed, vulnerable, and ashamed of how they look and are seen by others. Unfortunately, this can then lead to breakdowns in social connection and affiliative behavior, leaving individuals in bigger bodies feeling disconnected, rejected and lonely because of how they look (P. Gilbert & Procter, 2006).

Obesity, defined as having a Body Mass Index (BMI) greater than 30, is a main health concern in the developed world. Individuals living in larger bodies often experience higher levels of anxiety (Gariepy, Nitka, & Schmitz, 2010) and depression (Nikolic, 2015) compared to individual's with a BMI in the healthy range (BMI 18.5 to 24.9). A nationally representative study by Zhao, Ford, Dhingra et al. (2009) (n = 226,646) investigated the association of BMI with psychiatric disorders controlling for psychosocial or lifestyle factors. The study found weight related differences were evident in the prevalence of current and lifetime psychiatric diagnosis. Specifically, women who were classified as either overweight or obese were 17-53% more likely to experience depression or have a diagnosis of anxiety (9-17%) at some point in their lives. Whilst causal links are unable to be made, results indicated

a positive association between obesity and the most common mental health disorders of depression and anxiety (Gariepy et al., 2010). This is of primary concern as population studies report continual rise in individuals living in larger bodies (World Health Organisation WHO, 2018) as well as the parallel rise in levels of depression and anxiety in the Western world (WHO, 2018). It is therefore important for health care professionals to consider the mental health burden of living in a larger body, and investigate appropriate forms of actions to assist with positive health related behaviors.

"*My Body is Bigger than Yours*": Social Comparison and Social Rank

A key problem for individuals with body weight concerns is social comparison (V. Wood, 1989). According to social rank theory (Price, Sloman, Gardner, Gilbert, & Rohde, 1994; Sloman, Gilbert, & Hasey, 2003), which forms part of social mentality theory (Gilbert, 1992), competition orientates attention towards who is of higher and lower status, and thus social comparison, and subsequently submissive or aggressive behavior occurs. Importantly, we can compare ourselves to others on any dimension, but human competition is particularly focused on trying to be attractive to others, gain and maintain one's status, and avoiding rejection. Thus, the social comparison in regards to one's physical appearance is a constant source of threat.

Social rank theory when applied to body weight concerns suggests that individuals are not competing to be superior to others, rather they are competing to avoid being seen as inferior, and thereby avoid being rejected or excluded by others because of their appearance (McEwan, Gilbert, & Duarte, 2012). Psychopathology can occur when individuals overly rely on social rank motivations in social settings, thus viewing interpersonal situations as overly competitive, and therefore being vulnerable to internal judgements of inferiority, inadequacy, and being undesirable and socially unattractive (Gilbert, 2006). In these contexts the safety behavior of involuntary submissiveness and self-criticism is used in order to prevent any

further competition or aggressive response (Price et al., 1994). In Western cultures individuals living in larger bodies are often '*fat*' shamed about their appearance, imposing a felt sense of low rank (e.g., *"Everyone looks better than me"*). At an extreme, the accumulation of weight and fat is considered in Western cultures as immoral, un-pure and shameful (Gard, 2011; Lupton, 2015; Saguy & Riley, 2005). When the self is viewed as flawed, inferior in social comparison with others; shame is a common emotional response (Marta-Simões & Ferreira, 2016).

Shame is a multifaceted self-conscious emotion focused on one's rank and reputation, where one views themselves as negative or '*bad*' (P. Gilbert & Andrews, 1998). One of the functions of shame is to send warning signals that the self is under social threat and is vulnerable to criticism, exclusion or rejection (Duarte et al., 2017; P. Gilbert, 2003). Shame is defined as the negative thoughts and feelings about how one exists in the minds of others, and has associated experiences of feeling inferior, worthless, unattractive, un-loveable, and undesirable (P. Gilbert, 1997; P. Gilbert & Andrews, 1998). Individuals living in larger bodies experience active shaming often by the media but also close others who might have intentions to be helpful, but rather cause shame for the individuals *(e.g., "you have really let yourself go")* (J. Gilbert et al., 2014; Haines, Neumark-Sztainer, Eisenberg, & Hannan, 2006). Importantly, there is a distinction between external shame (*'That person thinks I am fat and disgusting'*) (Abed et al., 2012) and internalized shame (*'I am fat and disgusting'*) (Swami et al., 2010), with a meta-analysis of 108 studies and 22, 411 participants finding both externalized (r = .56) and internalized shame (r = 42) having significant moderate effects with depression (P. Gilbert, 2004).

When shame occurs, self-criticism is triggered as a defensive coping strategy (P. Gilbert, Durrant, & McEwan, 2006). Self-criticism is an internal process of self-attacking and blaming oneself, with the underlying function of avoiding future failures (P. Gilbert, Clarke,

Hempel, Miles, & Irons, 2004). It is developed from experiences of efforts to improve one-self and prevent errors (Gilbert 1997). Engagement in threat-based approach-avoidance behavior to achieve ideal body shape and avoid shameful body shapes can trigger internal hostility (Dalley & Buunk, 2011; Woud, Anschutz, Van Strien, & Becker, 2011). One example of this is through dieting. Dieting is the most widely used method to reduce body weight however has little evidence of long-term success (Brownell, 1991; Mann et al., 2007). The blame of unsuccessful dieting is often put on the individual through active shaming (i.e., *"you need to control yourself better"*), thereby triggering shame and further self-criticism in order to prevent future failure. Together, shame and self-criticism have been linked to a range of psychopathologies and has been found to have a negative association with health engaging behaviors (Duarte et al., 2017, 2018). Importantly, Compassion Focused Therapy (CFT) was developed specially to target self-criticism and shame (Gilbert, 2014), thus positions itself nicely as an intervention that might be helpful for those experiencing body weight shame.

The aim of CFT is to shift individuals from relying on competitive social rank motivational systems, and cultivate compassionate motivations to help reduce shame and self-criticism and improve wellbeing (Gilbert, 2014). A recent meta-analysis found that fears of compassion were strongly associated with shame and self-criticism, indicating if we can help individuals feel less fearful of compassion it can reduce the levels of shame and self-criticism experienced (Kirby, Day, & Sagar, 2019). Importantly, a meta-analysis of compassion-based interventions by Kirby, Tellegen, & Steindl, (2017), found that interventions not only produced significant moderate improvements in compassion (d = .55), but also significantly reduced symptoms of depression (d = .64), anxiety (d = .49) and psychological distress (d = .47). A preliminary systematic review that included six studies researchers found that self-compassion interventions were promising for weight loss, improved nutritional behaviors and body image (Rahimi-Ardabili, Reynolds, Vartanian,

McLeod, & Zwar, 2018). Finally, a digital CFT intervention has been applied to an existing commercial weight management program, and in a large scale evaluation was found to be helpful at reducing binge eating symptomatology (Duarte et al., 2019). Importantly, however, CFT has not yet been evaluated in a group format for those individuals experiencing body weight shame with a BMI greater than 30. A group context is important for CFT, as an emphasis is placed on the *flow* of compassion (Gilbert, 2014). Thus, the group format permits participants to experience self-compassion, but also provides an opportunity for group members to be compassionate to others and receive compassion from others.

Study Aims

The aim of current study is to investigate the initial feasibility of CFT as a 12-session group intervention for the reduction in body weight shame for individuals with a BMI greater than 30. It is hypothesized that CFT will have a positive effect on body weight shame, social comparison, external shame, compassion, and health engaging behaviors of eating attitudes and physical activity. In addition, an exploratory analysis will investigate participants' experience and satisfaction of the program.

Method

Registration.

This trial was registered on the Australian New Zealand Clinical Trials Registry (ANZCTR) and was provided the registration code ACTRN12618001233213.

Participants.

Participants were eligible for the study if they were (a) over the age of 18; (b) able to attend 12 therapy sessions at the specified time and location; (c) were not currently undergoing psychological treatment; (d) expressed a body weight shame score greater or equal to eight as measured on the body image shame scale; (e) have a self-report BMI greater than 30; and (f) able to read English.

Snowballing techniques (flyers and social media) were used to recruit participants. This resulted in a convenience sample of six participants who expressed interest in the study. One participant discontinued before time one assessment. All participants were undergraduate students. A total of five participants took part in the study with four being female, with an average age of 30.6 years (*SD* = 6.43), and a BMI average of 32.38 (*SD* = 1.98; range 30-35).

Procedure.

Upon expression of interest, participants were screened by a 20-minute standardized telephone interview to insure eligibility was met and informed consent was provided. After the completion of screening, participants were asked to complete a 30-minute baseline survey (Time 1). The intervention was held in a group format (*N* = 5) twice a week for two-hours across a six-week period. Sessions followed the CFT manual protocol by Gilbert, Kirby and Petrocchi (2020), and we have provided a brief outline and description of sessions in Appendix A. Protocol adherence was recorded by the co-facilitator. After the completion of the program, participants were asked to complete an online post-intervention (Time 2) assessment and a three-month follow-up (Time 3). To ensure confidentiality, each participant received a unique username and password. At the final intervention session, participants were asked to complete a program satisfaction survey.

After three-month follow-up assessment was completed, participants were invited to take part in a focus group discussion. The focus group was led by the lead researcher in person and via telephone. After initial greetings, participants provided verbal consent for the lead researcher to record the discussion. Once consent was obtained, prepared focus group questions were asked and participants were instructed to answer as honestly as possible.

Measures

Inclusion criteria.

Body Mass Index (BMI). BMI is a self-report measure of participants weight (kg) divided by height squared (meters). BMI is used by health professionals to categorise respondents into weight categories of obese (BMI greater than 30), overweight (BMI greater than 25), healthy (18.5 to 24.9) and underweight (BMI less than 18.5). According to Bowman and Delucia (1992) self-reported weight and height has been found to vary by 1-3% from individual's actual weight and height.

Primary outcome measure.

Body weight shame. Body Image Shame Scale (BISS) (Duarte, Pinto-Gouveia, Ferreira, & Batista, 2015) is a self-report assessment of body image shame across 14-items. Items measure dimensions of body image shame relating to external criticism and avoidance, as well as internal negative self-evaluations and consequential behaviors. Example: '*It bothers me to see my body undressed*'. Participants respond to these statements using a five point Likert scale (0 = never to 4 = almost always). Higher scores indicate a higher body weight shame. The scale reported good internal consistency $\alpha = .881$.

Secondary outcome measures.

Compassion.

Compassion engagement and action. The Compassion Engagement and Action Scale (CEAS) (P. Gilbert et al., 2017) is a 39-item self-report scale designed to measure three elements of compassion engagement and action on a ranking scale (1 = never to 10 = always). The three subscales assess the flow of compassion: self-compassion, compassion to others and compassion from others. Each subscale has two sections assessing engagement (24-items) example: '*I am motivated to engage and work with my distress when it arises'* and action (15-items) example: '*I direct my attention to what is likely to be helpful to me".* Higher scores indicate higher levels of compassionate engagement and action across the three

elements of compassion assessed respectively. The scale reported unacceptable internal consistency for engagement α = .236 and excellent for action α = .926.

Social Rank.

External shame. Other As Shamer Scale (OAS) is a self-report scale developed by Goss et al., (1994) to measure external shame (global judgements) of how individuals perceive others view or judge them. The scale requests respondents to indicate the frequency of their feelings and experiences across 18-items on a five point scale (0 = never to 4 = almost always). Example: '*I feel other people see me as not good enough'*. Higher scores indicate higher levels of shame. This scale reported good internal consistency α = .885.

Social comparison. Social Comparison Scale (SCS) (Allan & Gilbert, 1995) is a 11-item self-report scale designed to measure judgements concerned with rank, attractiveness and how well one thinks they 'fit in' with others in society. Participants are instructed to indicate the point at which best describes the way in which they see themselves in comparison to others on a ten point rating scale. Low scores indicate feelings of inferiority and general low rank self-perceptions. Example: '*In relationship to others I feel: inferior 1 2 3 4 5 6 7 8 9 10 superior'*. The scale reported good internal consistency α = .879.

Relationship with food.

Eating attitudes. Eating Attitudes Test (EAT-26) (Garner, Olmsted, Bohr, & Garfinkel, 1982) is a 26-item scale designed to measure demographic items (Part A), overall relationship with food (Part B), and relationship with food in the past six-months (Part C). In part A and B, participants are instructed to respond to each item on a six point Likert scale (always to never). Example: '*I am terrified about being overweight'*. In part C participants are instructed to respond to behavioral questions in the past six-months on a frequency scale (never to once a day or more). Example: '*gone on eating binges where you feel that you may*

not be able to stop?' Higher scores indicate higher levels of eating disturbances. The scale reported good internal consistency α = .846.

Physical Activity.

Physical Activity. International Physical Activity Questionnaire (IPAQ) (Booth, 2000) is physical activity monitoring scale measuring type of physical activity engaged in within the last seven days. The measure is comprised of seven items requiring open ended responses measuring five activity domains. Example: '*how much time did you usually spend doing vigorous physical activities on one of those days*?' and four generic items example: '*during the last seven days, how much time did you spend sitting on a week day?*' Higher scores indicate higher amounts of time spent engaging in physical activity. The scale reported good internal consistency α = .876.

Program Satisfaction.

Program Satisfaction. Participant Satisfaction Questionnaire (PSQ) is a 14-item self-report measure assessing participant's satisfaction of the intervention experienced. Participants indicate the response that best describes how honestly they feel about the program on seven point Likert scale (1 = poor to 7 = excellent). An example item includes, '*How would you rate the quality of the program you received?*'. Higher scores on the measure indicate higher participant satisfaction with the program.

Focus Group. Questions were constructed by the lead researcher and program developers to qualitatively measure participant's experience of the program. A standardized script was designed to explore participant's experience of content and development during the program. Five questions were asked: How did you experience the program that you were a part of? Looking back now, how do you think the program has affected some of the feelings you have about your body weight and shape? During our work together, you engaged in a number of exercises such as breathing and compassion focusing. How did you experience

these exercises? During our work together, we focused on experiences of being self-critical and working with self-criticism. How has the program helped you with your self-criticism? If you had to recommend the program to other people how would you wish to recommend it?

Design

A within-subjects repeated measures design was used to assess the effectiveness of the group based intervention at three time periods (pre-intervention, post-intervention and three-month follow-up). Each participant received a workbook and standardized email summarizing the session content, as well as an audio recording of the compassionate imagery exercised performed in the session for that week to be listened to again as part of between session practice. Focus groups were conducted at the three-month follow-up.

Results

Primary Outcome.

Body Weight Shame.

As shown in Table 1, there was a significant main effect of body weight shame across time, $F(2, 8) = 10.03$, $p = .007$. In addition, as seen in Table 2, at post-test assessment 40% of participants reported significant reliable change scores. Results were maintained at three-month follow-up with 60% of participants reporting significantly reliable change.

INSERT TABLE 1 & 2

Secondary Outcomes

Compassion.

As shown in Table 1, there was a non-significant main effect of compassion engagement across time, $F(2,8) = 0.08$, $p = .926$ as well as a non-significant main effect of compassionate action, $F(2,8) = 1.13$, $p = .350$. As seen in Table 2, no participants reported reliable changes in compassion as measured by the CEAS.

Social Rank.

As shown in Table 1, there was a significant main effect of external shame across time, $F(2, 8) = 11.81$, $p = .004$ $\eta^2 = .75$. In addition, as seen in Table 2, at post-test assessment 40% of participants reported significant reliable change score and results were maintained at follow-up assessment. Furthermore, 50% of participants meeting clinical levels of externalized shame reported a significant clinical difference at post-test and follow-up assessment. A non-significant main effect was found for social comparison, $F(2,8)=.261$, $p = 776$. At post-test assessment 40% of participants reported significant reliable change score. At follow-up assessment, 100% of participants reported significantly reliable change. In addition, 100% of participants meeting clinical levels of externalized shame reported a significant clinical difference at post-test. At follow-up assessment 20% of participants maintained a significant clinical difference in social comparison.

Health Engaging Behaviors.

As shown in Table 1, there was a non-significant main effect of relationship with relationship with food, $F(2,8) = 2.46$, $p = .147$ as measured by the Eating Attitudes Test. As seen in Table 2, at post-test assessment 60% of participants reported significant reliable change score. Results were maintained at follow-up assessment with 80% of participants reporting significantly reliable change of eating attitudes. In addition, 60% of participants meeting clinical levels of eating attitudes significantly improved between pre- and post-assessment. At follow-up 100% of participants reported significant clinical improvements.

Physical Activity.

As shown in Table 1, there was a non-significant main effect of physical activity, $F(2,8) = 6.47$, $p = .457$ as measured by the International Physical Activity Questionnaire - Short Form. As seen in Table 2, 20% of participants reported significant reliable change between pre- and follow-up assessment.

Program Satisfaction.

An examination of program satisfaction on mean scores was conducted to assess overall participant satisfaction as measured on the Participant Satisfaction Questionnaire (PSQ). Responses indicate that overall, participants were satisfied with the program with a mean of 6.2 out of 7 (1.09) (Appendix B). Participants indicated that they were "*very satisfied*" with the overall program and indicated if they were to seek help again, they would do the program again.

Qualitative Interview

The interview responses were analyzed using the inductive thematic analysis procedure outlined by Braun and Clarke (2006). Six superordinate themes emerged from the analysis. The first theme concerned the need for safeness to help explore the feelings of shame. The second theme related to common humanity and the shared experience of suffering. The third theme to emerge was how through compassionate wisdom, health engaging behaviors are encouraged. The fourth theme identified the connection within the flow of compassion. The fifth theme identified the ability to mindfully switch from criticism to compassion. Finally, the sixth theme identified the connection the participants had with the content of the program. The superordinate themes and examples of indicative quotations can be seen in Appendix C.

Theme 1: "*When I am safe, I can explore*": The feelings of safeness helps explore feelings of shame.

The first superordinate theme identified addressed the importance of safeness in the exploration of shame. When describing their experience of the program, participants identified that they were initially afraid to attend the sessions and engage in group therapy. Participants indicated being worried with what others thought of them, particularly about their body weight. When a sense of safeness was developed within the group, members expressed that this made it easier for them to share content that was *"deep in their heart"*.

Participant four stated that she felt *"ok to [be] open and honest… kind of knowing that I wasn't going to be judged"*. These statements indicate the importance of setting clear ground rules and allowing members to contribute to the development of these ground rules to make them feel safe. An example of this theme was also provided by participant two who said, *"Some stories [are] just deep in your heart…. At the very beginning you are afraid of it, to share it. But [as] time goes by…it gave us a chance to open our mind"*. It seemed that the safeness of the group experience, encouraged negative emotional experiences to be shared and to be met with compassion.

Theme 2: Common humanity: *"I am not alone with my struggle".*

The second superordinate theme highlighted the importance of connectedness with others. Before the program, participants felt isolated with their concerns and felt they were the only ones struggling with their body weight shame. Group members were able to identify that their struggles were not a sign of weakness but a part of the human experience. This was described by Participant five, *"We all differed so much… and yet we all had similar struggles with our body image, feeling nobody would like us…"*. This quote identified the common human experience of feeling body shame, and whilst participants had different experiences, the underlying process of shame was shared. This indicated the importance of the group therapeutic context, as it allowed for connectedness regarding an emotional experience which often brings disconnectedness.

Theme 3: Compassionate wisdom encourages health related behaviors.

During the program participants often expressed being frustrated with health messages and shared experiences of active shaming. These experiences were described by the participants as others, particularly friends and family, not thinking they were healthy even though they actively participated in dieting and exercise. As their compassionate wisdom strengthened, participants described the ability of shifting from self-criticism to

compassionate encouragement about their food choices. Their compassionate wisdom encouraged health related behaviors through nurturing and providing care towards the body, instead of condemning them. Participant four described this as *"I am choosing to make a healthy choice rather than saying something horrible to myself"*. In addition, Participant five identified how compassionate wisdom was able to interrupt the dieting cycles generated from the threat system *"... I had the tools to interrupt the cycle… 'ok, let's pause this for a moment, let's just shut down this red circle for a sec, lets visit my compassionate self or talk to my compassionate other"*.

Theme 4: Recognising that compassion is more than just me.

The fourth theme to emerge was participants connecting with the flow of compassion. What was noticeable in Session one was that although participants shared their struggles, when the other group members directed compassion towards them, they felt uncomfortable. Over time this reaction to others compassion began to change. Participant two described the importance of needing to accept help from others, *"Don't be afraid to seek help from other[s] because sometimes we do need that… This process will let us feel better. And if you feel better then you will get happy and have a good mood. And if you have a good mood you can have enough energy to encourage others, just like you"*. Participant five commented on the impact that the compassionate flow had upon processing the underlying feelings of an experience of shame and criticism. *"...I know in my head that such a powerful thing is not true. But in my feelings, it feels true. And it is like being able to use the compassionate self or the compassionate other to let those thoughts in, so they can have the effect on the feelings..."*.

Theme 5: Mindfully switching from criticism to compassion

The fifth theme that emerged was the ability to become more mindfully aware of the loops of self-criticism. Participants identified the ability to notice and become aware of their

multiple patterns, particularly those of anger, self-criticism and anxiety, and address them with compassion. Participant four described this process as: *"I don't feel I am criticising myself as much… When I am doing it I am able to kind of check back in with myself more quickly… it doesn't escalate into this never ending loop"*. This was also shared with an example from Participant five *"I have been able to separate the constructive from the destructive… the destructive self-criticism always complains but never has a solution…"*.

Theme 6: The "*stickiness*" felt with the program

Participants expressed that they continued to notice a number of aspects of the program that had stuck and had become part of their daily living. Participant four described the benefits that she felt from the grounding exercises and suggested that this was something that she engaged in on a daily basis *"The grounding exercises kind of re-sets you for the day"*. Participant five recalled the connection she felt with the psychoeducation of emotion regulation systems *"I am feeling this way right now. These are the circles that I think they are coming from… I know what I can do…"*. Responses showed that when participants felt that content '*stuck*' they were able to remember to engage in the skill when needed, as opposed to wait till the following day or remembering when they are calm.

Discussion

The present study is the first ever pilot trial of a 12-session group CFT manualised program to assist individuals with body weight shame. In line with our hypotheses, results found that CFT had a significant positive main effect on our primary outcome of body weight shame, with 40% of participants reporting a significant reliable change score at post-assessment, which increased at three-month follow-up to 60%. These results not only suggest that CFT is a promising therapeutic intervention to treat individuals with body weight shame, but also that ongoing improvements continue after the closure of therapy. There are two likely interpretations of these findings. Firstly, that participants continued with practices after

the closure of therapy. This interpretation is supported by qualitative results. Participants indicated specific exercises within the program that "stuck" with them, for example grounding exercises (e.g., soothing rhythm breathing). Secondly, shifting body weight shame takes time. Although the program was 12-sessions, material was covered in six-weeks. Shame is a stable negative construct (P. Gilbert & Andrews, 1998; Tangney, 2000), and time is needed to have an impact and improve the way individuals judge themselves. One way to examine whether compassion is producing lasting change on shame, would be to examine physiological changes such as heart rate variability (Gross et al., 2013; Kim, Cunnington, & Kirby, 2020; Mazurak et al., 2016; Rockliff, Gilbert, McEwan, Lightman, & Glover, 2008). Those individuals who experience shame have associated low heart rate variability (Kirby, Doty, Petrocchi, & Gilbert, 2017; Kogan et al., 2014), thus measuring the programs impact on physiological state could be very important.

The secondary hypotheses of the study were partially supported. Participants did not report any changes in self-reported measures of compassion as measured at group or individual levels. However, qualitative analysis suggested that the program assisted participants in the experience of compassion. , for example, *" Don't be afraid to seek help from other[s] because sometimes we do need that.... This process/procedure will let us feel better. And if you feel better then you will get happy and have a good mood. And if you have a good mood you can have enough energy to encourage others, just like you"* [Participant two]. Inconsistencies between self-reported results and qualitative results suggest the possibility of measurement error. That is, we had extremely low internal consistency for the engagement subscale of the CEAS. In addition, the CEAS is a broad compassion-based measure, and perhaps did not adequately capture compassionate engagement and action towards the body. This explanation indicates the importance of self-report measures tailored to outcomes of interest, in our case to the experience of body. For example, although the

Others As Shamer Scale is a well-used measure of external shame, the items are general and not specific to the body weight shame, thus the development of the Body Weight Shame scale (Duarte et al., 2015). The same can be applied to compassion, and indeed A recent Body Compassion Scale (Altman, Linfield, Salmon, & Beacham, 2017) has been developed, which could be more appropriate when trying to assess individuals who experiencing body weight shame.

The positive effect of CFT upon social rank measures was supported at both a group and individual level. At individual levels, 40% of participants maintained significantly reliable change in externalized shame at post-intervention and follow-up assessment. In addition, 50% of participants who entered the program with clinical levels of externalized shame reported a clinically significant improvement across time. Whilst these results provide support for the use of CFT for externalized shame, perhaps stronger effects would have been found if participants were able to have additional time with the program and using the exercises. By running the program twice per-week across a six-week period, participants may have experienced difficulties and resistances to engaging in compassionate exercises. Indeed it is common for participants to find compassionate exercises threatening and thus avoid them (Kirby et al., 2019). It is therefore suggested that a greater time frame is provided in future studies, with one session per week recommended.

Non-significant results of social comparison were found at a group level however, at an individual level 40% of participants reported significant reliable change scores from pre- to post-assessment. These results improved across time with 100% of participants reporting a significantly reliable change at follow-up assessment. Furthermore, 100% of participants reported a clinically significant change in social comparison between pre- and post-assessment, however, only 20% of participants maintained these results at follow-up assessment. Again, suggesting additional time with exercises would be helpful.

In terms of the final hypotheses, attitudes towards eating and physical exercise, we found non-significant main effects. However, results of individual clinical and reliable change scores indicated for eating attitudes revealed a significant reliable change for 60% of participants between pre- and post-assessment. These results improved at follow-up assessment with 80% of participants reporting significant reliable change on eating attitudes. In addition, of the participants who reported clinical levels of eating attitudes pre-intervention, 66% of participants reported clinically significant change from pre-post intervention. These results improved over time with 100% of participants reporting significant clinical changes of eating attitudes at follow-up. In relation to exercise, 20% of participants reported significant reliable change between pre-intervention and follow-up. These results support previous research that indicate a range of psychological factors contribute to negative health related behaviors, and when psychological factors are addressed through compassion, health engaging behaviors such as eating attitudes and physical activity can improve (Rahimi-Ardabili et al., 2018).

Limitations and Future Recommendations

Based on our quantitative and qualitative findings CFT appears as a promising form of intervention for individuals experiencing body weight shame. However, these results should be considered in the light of four limitations. The first limitation is small sample size, all participants were university students and 80% were psychology students. Whilst this is a common sample size for pilot trials examining novel interventions (i.e., P. Gilbert & Procter, 2006; Kelly & Carter, 2015), it limits the generalisability of the programs findings. Future research should broaden the participant sample and attempt to recruit a more representative population, and increasing therapy group size from five to between eight-to-twelve participants. These changes may assist the delivery of the program and group therapy dynamics (Dutton et al., 2014; Nackers et al., 2015). Secondly, the program was conducted

across a short six-week intensive period. This potentially impacted the ability for participants to process the content and complete practice tasks between each session. The aim of CFT is to shift individuals from a competitive mind state into a compassionate mind. In qualitative assessment, comments remained competitive, for example, '*if you are confident, you will influence everyone else's opinion'*. These comments continue to view body image competitively. Thirdly, there was no control group, thus the results could be due to expectation effects or time effects. Therefore we recommend having at least a waitlist control group as a comparison in future randomized controlled trial designs. Finally, our study relied on self-report measures. It would be helpful to have more objective measures such as physiological measures (e.g. heart rate variability), as well as BMI.

Conclusion

The results of the current study highlighted the promise of CFT for body weight shame. This 12-session group CFT program was able to reduce the levels of body weight shame experienced, as well as improving health related behaviors. Whilst these results are preliminary, the 12-session group CFT program holds promise as possible intervention for individuals in larger bodies who experience body weight shame.

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Table 1
Main Effects for Compassion Focused Therapy on Primary and Secondary Outcomes.

	Assessment Time						Repeated ANOVA results for time				
	Pre-intervention		Post-intervention		Follow-up				Pre-post	Pre-follow-up	
	M	SD	M	SD	M	SD	F	p	d [95% CI]	d [95% CI]	η^2
Primary outcome											
Body weight shame											
BISS	34.00	11.11	26.60	16.13	23.00	14.52	10.02	.007**	0.53 [-2.08, 16.88]	0.85 [5.24, 16.76]	.715
Secondary outcome											
Compassion											
CEAS-E	117.60	9.76	115.60	4.72	116.80	8.35	0.08	.926	0.26 [-11.79, 15.79]	0.08 [16.14, 17.74]	.02
CEAS-A	85.60	14.40	86.40	12.18	88.40	13.61	1.13	.350	0.05 [-7.57, 5.97]	0.20 [-8.97, 3.37]	.22
Social Rank											
External Shame											
OAS	29.80	11.69	18.60	11.92	18.00	11.57	11.81	.004**	0.94 [1.98, 20.43]	1.01 [4.49, 19.11]	.747
Social Comparison											
SCS	60.20	14.97	63.00	12.70	61.40	18.07	0.26	.776	0.20 [-13.57, 7.97]	0.07 [-12.80, 10.40]	.06
Relationship with food											
EAT-26	19.40	10.13	8.60	7.70	7.60	4.29	2.46	.147	1.20 [-7.73, 29.33]	1.51 [-5.83, 29.43]	.38
Physical Activity											
IPAQ-SF	10.60	5.59	10.00	4.84	8.40	4.03	6.47	.457	0.11 [-1.28, 2.48]	0.45 [-4.03, 8.43]	.178

Note. F = ANOVA univariate interaction effect; d = change score effect size; CI = confidence interval; η^2 – Partial eta squared; BISS = Body Image Shame Scale; CEAS-E = Compassion Engagement and Action Scale - Engagement; CEAS-A = Compassion Engagement and Action Scale – Action; OAS = Other As Shamer Scale; SCS = Social Comparison Scale; Eat = Eating Attitudes Test; IPAQ-SF = International Physical Activity Questionnaire – Short Form.
*p<.05; **p<.01, ***p<.001

Table 2
Results of Individual Assessment

Measure	Time	Reliably Improved	Clinically Improved
		% (n/n)	% (n/n)[a]
BISS	Pre - Post	40 (2/5)	N/A
	Pre - Follow Up	60 (3/5)	
CEAS Engagement	Pre - Post	0 (0/5)	N/A
	Pre - Follow Up	0 (0/5)	
CEAS Action	Pre - Post	0 (0/5)	N/A
	Pre - Follow Up	0 (0/5)	
OAS	Pre – Post	40 (2/5)	50 (1/2)
	Pre - Follow Up	40 (2/5)	50 (1/2)
SCS	Pre - Post	40 (2/5)	100 (5/5)
	Pre - Follow Up	100 (5/5)	20 (1/5)
EAT	Pre – Post	60 (3/5)	66 (2/3)
	Pre - Follow Up	80 (4/5)	100 (3/3)
IPAQ-SF	Pre – Post	0 (0/5)	N/A
	Pre - Follow Up	20 (1/5)	

[a] n for denominator represents the number of participants in the clinical rage at pre-intervention.

Appendix A

Study Protocol

Module	Session Outline
Module 1	Introduction to Compassion and the "Tricky Brain" • *Aim:* To understand how individuals experience compassion, fears they have towards compassion, and beginning psychoeducation of the evolved mind and how it functions. • *Session exercises:* Large group discussions, compassionate imagery, and breathing exercises.
Module 2	Three Types of Emotions: Working with our Body to Support our Mind. • *Aim:* To introduce evolutionary functional analysis of emotion, assist individuals to understand the nature and function of threat-based emotions (anger, anxiety, disgust), drive-based emotions (happiness, excitement), and soothing-based emotions (safeness, contentment). Help individuals clarify compassion as a motive. • *Session exercises:* Large group discussions, 'Stuart Video' and breathing exercises.
Module 3	Learning to Notice what your Mind does: Attention Training and Mindfulness. • *Aim:* To introduce individuals to the nature and function of attention (how to pay attention to attention), with introductions to mindfulness-based practices. • *Session exercises:* Large group discussions, Connecting mindfulness skills with breathing, grounding and body awareness skills such as breathing, use of posture, facial expressions and voice tones, emotion focusing and moving attention.
Module 4	Exploring Safety/Safeness and Compassion from Others. • *Aim:* To introduce individuals to the concept of safeness (exploratory focus) and how that differs to safety (threat focused). To explore how it feels to experience compassion from others. Discussions on how and why our relationships are important to us, and support a range of physiological processes within us. • *Session exercises:* Large group discussions, breathing exercises, compassionate imagery, safe place imagery.
Module 5	The Compassionate-Self. • *Aim:* To introduce individuals to the nature and concept of, The Compassionate-Self. The Compassionate-Self includes three key qualities, wisdom, strength, and commitment. These qualities are described and explored in session. • *Session exercises:* Large group discussions, breathing exercises, and cultivating the compassion-self.

Module 6 The Nature of Multiple Selves as Patterns of the Mind and Compassion Engagement.

- *Aim:* To introduce group members to the concept of multiple selves, with a particular focus on threat based emotions, examining specifically angry-self, anxious-self, and sad-self.
- *Session exercises:* Large group discussion, exploration and experiential practice of multiple-selves and responses, compassionate imagery, and breathing exercises.

Module 7 Working with Self-Criticism.

- *Aim:* To help individuals understand the forms and functions of self-criticism and how to use the Compassionate-Self to work with disappointments, setbacks and rejections.
- *Session exercises:* Large group discussion, experiential exercises (self-monitoring), breathing exercises, compassionate imagery, breathing exercises.

Module 8 Working with Shame and Guilt.

- *Aim:* To help individuals understand the evolution of the threat, drive and soothing systems in social relationships. Exploration of social rank systems and emotions: shame (external, internal), humiliation and guilt.
- *Session exercises:* Large group discussion, experiential exercises (experiencing shame), breathing exercises

Module 9 Deepening Compassion for the Self.

- *Aim:* To help individuals deepen compassion for the self by facilitating broader abilities to opening and tolerating emotional and motivational experiences.
- *Session exercises:* Large group discussion, experiential exercise (directing compassion towards others and self), compassionate letter writing, making compassion focused flash cards, breathing exercises.

Module 10 Compassion Assertiveness.

- *Aim:* To help individuals understand assertiveness and how assertiveness is linked to strength and authority of compassion. Thus allowing for individuals to express themselves confidently not aggressively or passively.
- *Session exercises:* Large group discussion, pair exercises (unhelpfulness of aggressive, passiveness and passive-aggressive responses), refection of compassionate self-identity, breathing exercises.

Module 11 Compassion for Others and Forgiveness.

- *Aim:* To introduce individuals to exploring how to engage in the flow of compassion for others as well as forgiveness and how the suffering of others can influence us and what we feel in our body and what we do.

- *Session exercises:* Large group discussion, practicing of perspective taking and empathy, breathing exercises.

Module 12 Wrap-Up and Reflection.

- *Aim:* To revisit the journey the group has been on and invite individuals to consider prevention and emergency strategies for future difficulties and envision what a compassionate future would involve.
- *Session exercises:* Large group discussion, pair exercises (how to cultivate and strengthen compassion), acknowledgement of challenges, self-gratitude letter, compassionate imagery (compassionate wishes), breathing exercises.

Appendix B

Table
Participant satisfaction with the program

Question	Range	Mean (*SD*)
1. Quality of the program.	7 = Excellent, 1 = Poor	6.2 (1.09)
2. Received help wanted from the program.	7 = Yes definitely, 1 = No definitely not	5.80 (1.30)
3. Program met your needs.	7 = Almost all need have been met, 1 = no needs have been met	5.60 (1.34)
4. Satisfaction with the amount of help received.	7 = Very satisfied, 1 = Quite disappointed	6.00 (1.4)
5. Program helped you deal more effectively with your body concerns.	7 = Yes, it helped a great deal, 1 = No, it made things worse	6.00 (1.00)
6. Program helped you deal more effectively with your weight concerns.	7 = Yes, it has helped a great deal, 1 = No, it made things worse	6.20 (1.09)
7. Relationship with your self improved by the program	7 = Yes definitely, 1 = No definitely not	5.80 (1.34)
8. Satisfaction with the overall program	7 = Very satisfied, 1 = Very dissatisfied	6.40 (0.89)
9. Would you do it again?	7 = Yes, definitely, 1 = No, definitely not	5.20 (1.30)
10. Program helped develop applicable skills	7 = Yes, definitely, 1 = No, definitely not	5.60 (0.89)

11. Program helped with self-criticism in relation to body weight	1 = Yes, definitely, 7 = No, definitely not	2.20 (1.30)
12. The program helped develop more compassionate way of responding to self	1 = Yes, definitely, 7 = No, definitely not	2.00 (1.00)
13. The program helped develop a more compassionate way of responding to others.	1 = Yes, definitely, 7 = No, definitely not	2.80 (1.48)

SD = Standard Deviation

Appendix C

Table

Summary of Qualitative Feedback.

Subordinate themes	Indicative quotations
1. "When I am safe, I can explore": The feeling of safeness helps explore feelings of shame.	"In the beginning it was more like feeling it was a safe enough place to be ok to [be] open and honest and once I had established that it was, kind of knowing that I wasn't going to be judged". Participant 4 "Some stories just deep in your heart.… it is like a procedure. At the very beginning you are afraid of it, to share it. But [as] time goes by…it gave us a chance to open our mind". Participant 2
2. Common humanity: "I am not alone with my struggle".	"Having a therapist that provided an input for their own circumstance … [helped] establish the common foundation 'we are all struggling with somethings, I am teaching this, but I still struggle'. I think really encouraged a 'don't be embarrassed, don't be afraid to talk about this, because even I, the person who has studied this, still struggles with it…" Participant 5 "We all differed so much. We were such different people and we all had different ways of processing and we all had different struggles with our body image…" Participant 5
3. Compassionate wisdom encourages health related behaviours.	"I felt like this time I had the tools to interrupt the cycle when I started to hate myself. To go 'ok, let's pause this for a moment, let's just shut down this red circle for a sec, lets visit my compassionate self or talk to my compassionate other". Participant 5 "I am choosing to make a healthy choice rather than saying something horrible to myself". Participant 4
4. Recognising that compassion is more than just me.	"Don't be afraid to seek help from other[s] because sometimes we do need that. We do need some people who have more experience... This process/procedure will let us feel better. And if you feel better then you will get happy and have a good mood. And if you have a good mood you can have enough energy to encourage others, just like you". Participant 2 "I found it such a powerful approach to dealing with the 'I know in my head that such a powerful thing is not true. But in my feelings, it feels true'. And it is like being able to use the compassionate self or the compassionate other to let those thoughts in, so they can have the effect on the feelings..." Participant 5
5. Mindfully switching from criticism to compassion.	"I have been able to separate the constructive from the destructive and just start to not fight the destructive part … the destructive self-criticism part always complains but never has a solution…" Participant 5

	"I don't feel I am criticising myself as much… When I am doing it I am able to kind of check back in with myself more quickly and be like 'hey, come on, like, be fair'. And so it doesn't escalate into this never ending kind of loop in my brain…" Participant 4
6. The "stickiness" felt with the program	"[The] grounding exercises kind of re-set you for the day. Those kind of breathing exercise are enough to kind of like, ok tone it down a lot and this is now fine. You can think clearly rather than be reactionary". Participant 4 "I found the three circles … useful from a self-awareness perspective. Being able to categorise 'this is what I am feeling right now'. These are the circles I think they are coming from. Just being able to go 'o I am reacting defensively right now, that's not actually helpful'. I know that I can do some calming, breathing, moving into my compassionate other and start making progress..." Participant 5 "The compassionate self/other depending on what mood I am in at the time. Is something that has stayed with me strongly through my extremely difficult time since the program ended…" Participant 5 "There were a lot of things that obviously I hadn't fully understood about myself…I was like 'o, that's what that is'. I kinda put in my mind that I was feeling guilty but it was really shame". Participant 4