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**The impact of an educational intervention to protect women against the influence of
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Abstract

Purpose: Media images of unrealistic beauty have been identified as a determinant of women's body dissatisfaction. This experimental study aimed to explore whether the negative impact of such images could be reduced by a one-time educational intervention consisting of a presentation and discussion teaching women to be critical of media images. **Method:** Female psychology students (n=176) from a university in the UK were randomly assigned to the control or intervention group and completed measures of body dissatisfaction after being challenged by images of the perfect female body. Follow up data was collected four weeks later. **Findings:** The results suggested that the intervention had no immediate buffering effect on body dissatisfaction but participants in the intervention group showed a long-term improvement for confidence, attractiveness and body-parts dissatisfaction. **Practical implications:** This one-time intervention could be used to protect young women against the detrimental impact of media images in the longer term. **Value:** This study provides an evidence base for the use of an educational intervention for young people in schools and colleges.

Classification: Research paper

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Key words: educational intervention; media images; body dissatisfaction; young women

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Introduction

Body dissatisfaction can be defined as a negative evaluation of one's physical appearance (Grogan, 2009; Bessenoff, 2006; Dittmar, 2005) and is extremely prevalent among young women in Western Society today (Posavac and Posavac, 2002; Muth, and Cash, 1997).

Researchers have therefore attempted to establish the cause of this problem and have particularly drawn upon social cultural theory, social comparison theory and the role of the media (Heinberg and Thompson, 1995; Irving, 1990; Posavac, Posavac and Posavac, 1998; Richins, 1991; Stice and Shaw, 1994; Thompson, Heinberg, Altabe and Tantleff-Dunn, 1999; Tiggemann, 2003).

Social cultural theory is based on the principle that the societal norms embedded within any culture emanate powerful and influential ideals of what is acceptable (Stormer and Thompson, 1996). The mass media is arguably the most powerful conveyer of socio-cultural ideals in the West due to its pervasiveness within society (Tiggemann and McGill, 2004; Andersen and DiDomenico, 1992; Martin and Kennedy, 1993). Models are used in the media to represent the beauty ideal and it is widely accepted in the advertising industry that 'skinny sells' (Halliwell and Dittmar, 2004). Further, models have become drastically thinner over the last decade and currently the average model is 15% underweight (Johnson, Tobin, and Steinberg, 1989; Stice, and Shaw, 1994). This decreasing size of models may explain the concurrent increase in body dissatisfaction and eating disorders prevalent in Western society (Irving 1990; Shaw, 1995; Stice, Schupak-Neuberg, Shaw and Stein, 1994). In line with this, an American survey of over five hundred adolescent girls found 70% of these girls stated that magazine images determined their ideas of the beauty ideal and 47% wanted to lose weight as a result (Field, Cheung, Herzog, Gortmaker and Colditz, 1999). Body dissatisfaction has also been found to increase through adolescence concurrently with an

awareness of the socio-cultural attitudes and social comparison with media models (Clay et al., 2005; Martin and Kennedy, 1993).

Social Comparison Theory also provides an explanation for why this unrealistic ideal portrayed causes body dissatisfaction (Martin and Kennedy, 1993). Upward social comparisons occur when an individual compares themselves to someone perceived to be socially better than them. If a discrepancy is perceived between the individual and the comparison figure the individual will be motivated to make personal alterations in order to progress towards the comparison standard (Higgins, 1987). Models in the media signify the societal ideal, so are subsequently used as comparison figures. Upward social comparisons reveal a discrepancy between their selves and the media causing a self-discrepancy, which in turn may increase body dissatisfaction (Harrison and Cantor 1997; Posavac and Posavac, 2002).

Some empirical research has explored the association between media presentations of women and experiences of body dissatisfaction. For example, using correlational designs research shows an association between the frequency of viewing popular magazines and the importance placed on the images used in such magazines and factors such as body dissatisfaction, drive for thinness and pathological eating (Harrison and Cantor, 1997; Stice *et al.*, 1994; Stice and Shaw, 1994; Tiggemann, 2003). Other experimental research has explored the impact of showing women magazine images of the ‘ideal body shape’. Using this approach research suggests that acute exposure to media images of thin women for only a few minutes increases body size distortion in those with Anorexia Nervosa, Bulimia Nervosa and pregnant women compared to neutral images (Waller et al., 1992; Sumner et al., 1993;

Hamilton and Waller, 1993). Such exposure can also make women report a significant increase in their body dissatisfaction (Ogden and Munday, 1996; Hawkins et al., 2004; Stice and Shaw, 1994; Halliwell and Dittmar, 2004; Halliwell et al., 2005; Heinberg and Thompson, 1995; see Groesz et al., 2002 for a review). Research also illustrates that an exposure to media images of thin women can have a detrimental impact upon adolescent girls (Champion and Furnham, 1999).

Not all women exposed to such media images, however, show body dissatisfaction and research highlights the role of both upward comparisons and internalisation as potential mediators (Stice et al. 1994; Stormer and Thompson, 1996). Body dissatisfaction may only therefore be exacerbated by media images of the ‘perfect woman’ if a woman internalises these ideals and makes favourable upward comparisons to these images (Stice et al, 1994; Stormer and Thomson, 1996). Accordingly, if internalisation and upward comparisons could be prevented then body dissatisfaction may not transpire.

In line with this, some researchers have argued that women could be taught to be more critical of the methods used by the media as a means to minimise its impact (Oliver, 2001). For example, Stormer and Thompson (1995) developed an educational intervention concerning the methods used by the media to manipulate images making them more ‘ideal’ and reported improvements in young women’s body image and decreased internalisation of the ideal image. Likewise, Thompson and Heinberg (1999) developed an intervention to show how images of beauty are created using techniques such as airbrushing and computer generated images and reported decreases in weight related anxiety. Similarly, Yamamiya et al. (2005) reported a beneficial impact of a media literacy information based intervention on

preventing the adverse effects of media images in women with high levels of internalisation of media ideals and Wade, Davidson and O'Dea (2003) developed a five session intervention focussing on media literacy and self-esteem to improve the weight concerns of adolescents in their sample. Further, Ogden and Sherwood (2008) examined the effectiveness of a one-time intervention consisting of a simple information sheet which advised participants of the beauty secrets such as airbrushing and digital technology used in the media to produce an unrealistic ideal. The results showed an immediate impact on participants' body dissatisfaction. To date however, studies have either used intensive interventions which may be difficult to reproduce for a larger audience or have focused on the short rather than longer term benefits. Furthermore, whereas such interventions may impact upon body dissatisfaction, they also need to be able to protect against subsequent exposure to images of beauty ideals.

In summary, body dissatisfaction is common, particularly amongst women, and research has highlighted the role of the media in creating and / or exacerbating this problem. In line with this, some educational interventions have been developed as a means to teach women to be more critical of the media and to prevent internalisation and upward comparisons. Such interventions have tended however, to be time consuming and intensive and / or short term. Furthermore, whether or not they can protect against subsequent exposure to media images remains untested. Accordingly, the present study aimed to develop a comprehensive intervention that could be used in an educational setting and to assess whether it could act as a buffer against media exposure in both the immediate and longer term. In addition, the study focused on female college students as research indicates that they show high levels of body dissatisfaction and as these would be the target audience as part of their well being training at the start of college if the intervention were found to be effective (Heatherton, Mahamedi, Striepe, Field, and Keel, 1997). It was hypothesised that those receiving the

intervention would report less body dissatisfaction following exposure to media images and that this would persist (or improve) over subsequent weeks.

Method

Design

The study involved both a within and between subject design consisting of two conditions. The between subject variable was the exposure to an educational intervention (intervention vs control), prior to viewing a set of idealised media images and completing a set of body dissatisfaction measures. The within subjects variable was time (immediate response at baseline (t1) vs follow-up after four weeks (t2)).

Sample

Questionnaires were completed by female Psychology undergraduate students from one university in the UK ranging in age from 18 – 45 (mean age 20 years, SD 3.67). There were initially 176 participants at baseline (Control n = 89; Experimental n = 87). Not all participants, however, were present for the follow-up procedure leaving 126 participants who completed both time points (Control: n = 64; Experimental: n = 62). The majority of participants described themselves as white (n=139, 79%). The remaining participants described themselves as mixed race (n=11; 6.3%), Black African (n=8; 4.5%), Black Caribbean (n=6; 3.4%), Chinese (n=4; 2.3%), Indian (n=3; 1.7%), and Other (n=5; 2.8%).

Procedure

Baseline assessment: The study involved 3 year groups and one lecture for each year group was selected. At the end of the lecture the students were asked to participate in a short study concerning body-image. Male students were asked to leave. Female students were informed that they were free to withdraw at anytime. The questionnaires were distributed randomly assigning participants to the control or intervention group. The participants were informed that there were two different types of questionnaires being distributed. They were instructed to follow their instructions carefully as some participants would be required to watch a short presentation before completing the remainder of the questionnaire. The participants were asked to complete the questionnaires in silence and told to note their University Registration Numbers (URN) onto the questionnaire to retain anonymity. Finished questionnaires were collected from the participants in the control group who then left. The control condition therefore involved no intervention. The remaining participants then watched a power point presentation called 'The Truth behind Media Images' to teach them to be more critical of the media. Participants were encouraged to ask questions, which were then actively discussed. Finally the participants were instructed to complete the remainder of their questionnaires before leaving.

Follow-up assessment: The researchers returned to the same lectures four weeks later and distributed the follow-up questionnaires.

Experimental intervention

A 15 minute PowerPoint presentation was constructed consisting of nineteen slides explaining how the media portrays an unrealistic ideal of beauty. The intervention focused

on challenging two key psychological mechanisms involving internalisation and social comparisons as a means to buffer women against the influence of media images (Stice et al. 1994; Stormer and Thompson, 1996). It was therefore predicted that by changing internalisation and social comparisons women would be less influenced by exposure to media images of stereotypically attractive and thin women which would therefore have a less detrimental impact upon aspects of their body image. This was achieved through the educational methods of information giving and discussion with personally relevant examples given throughout to encourage participants to reflect upon and assimilate the information. Furthermore, images of familiar celebrities were used to highlight how the media can encourage women to make upward social comparisons which leave them feeling self critical through a discrepancy between how they see themselves and how they evaluate others. The intervention involved the following information:

- i) Facts were presented about how the size of fashion models have decreased through history, with body dissatisfaction and eating disorders increasing concurrently.
- ii) Disturbing images of size zero models and celebrities were illustrated while healthy celebrity role models were celebrated.
- iii) Beauty secrets used in the media such as make-up and airbrushing were discussed to demonstrate how the ideal portrayed by the media is unrealistic.
- iv) Images of celebrities before and after make-up and airbrushing were presented independently, making the extent to which digital technology is used to enhance media images apparent.
- v) The intervention concluded with a clip from the 'Dove Self-Esteem Campaign®' as a powerful summary of the truth behind media images. It revealed how an ordinary woman can

be drastically transformed into a striking model by the simple use of the beauty tricks discussed previously.

vi) Finally a list of relevant websites was suggested for participants to follow-up what they had learned.

The images and information included in the presentation were selected from the internet. The intervention was in part based upon a similar intervention which had emphasised the impact of airbrushing (Ogden and Sherwood, 2008). But whereas this previous study used a simple information sheet, the current study aimed to develop a more interactive and visually engaging approach that could be used as part of the induction for students starting their college life. Discussions and reflections were encouraged throughout the intervention.

Measures

Previous research indicates that acute exposure to idealised media images can increase body dissatisfaction (Ogden and Munday, 1996; Halliwell and Dittmar, 2004; Halliwell *et al.*, 2005). Idealised media images were therefore introduced as a challenge to assess whether the intervention had successfully worked as a buffer protecting the experimental group's body satisfaction. All participants were exposed to six idealised media images of thin women directly before completing the measures of body dissatisfaction. These images were of stereotypically attractive models representing the unrealistic ideal presented by the media and were similar to those used in previous research (Ogden and Munday, 1996; Ogden and Sherwood, 2008). The models varied in hair colour and ethnicity to ensure they were widely accessible. Bikini and underwear models were used to make their slim, toned body size explicit and to control for fashion. The images presented were not of recognisable or famous

models to ensure participants did not have any preconceptions about the models, which could influence their response to the images. Three of the images were whole body shots and three of the images focused more closely on the models' airbrushed faces. To ensure participants focused their attention on the images they were asked to rate each model's attractiveness out of ten and to place a tick under the model they would most like to look like. The images were selected from the internet. Participants then completed the following measures. Reliability of the measures was assessed using Cronbach's alpha (α) scores. All the alpha coefficients were satisfactory ($\alpha > 0.6$).

Measures

i) Demographics- Age, height and weight (to calculate BMI), ethnicity and occupation were recorded.

ii) Restrained eating questionnaire ($\alpha = 0.92$). Participants completed the Restrained Eating section elicited from the Dutch Eating Behaviour Questionnaire (Van Strien, Frijters, Bergers and Defares, 1986). This consists of ten items. A higher score reflects greater restraint.

iii) Effort ($\alpha = 0.73$). A scale was constructed to determine how much effort an individual put into their appearance. This consisted of 7 items such as: 'How often do you wear make up?'; 'How long do you spend getting ready on a normal day'; 'How much money do you estimate you spend on beauty products in a month?'; 'Do you consider yourself to be a fashionable dresser?'. A higher overall score reflected greater effort.

iv) Exposure ($\alpha = 0.66$). Participants also rated 3 items to assess their exposure to the media: 'How often do you read women's magazines e.g. Company, Cosmopolitan?'; 'How often do you read celebrity/gossip magazines e.g. Hello, OK, Reveal?'; 'How often do you watch celebrity TV shows?' A higher score reflected greater exposure.

Restrained eating, effort and exposure were assessed at baseline as it was predicted that such variables may influence participant's response to the intervention (Mills, Povey, Herman and Tiggemann, 2002). These were used as covariates in all subsequent analysis.

Following these baseline measures those allocated to the experimental group were given a 'Stop page' which included the following statement: '**STOP! DO NOT TURN OVER THE PAGE UNTIL INSTRUCTED.** You will be required to watch a short presentation.' The idealised media images page and measures of aspects of body dissatisfaction followed the intervention. In contrast the control group examined the media images and completed the measures immediately and then left the room.

The following measures were completed at Time 1 (immediately after the media images) and Time 2 (after 4 weeks) to assess aspects of body dissatisfaction:

i) Global body dissatisfaction was assessed using the **Body Shape Questionnaire** ($\alpha = 0.93$; Cooper, Taylor, Cooper, and Fairburn, 1987). This is rated using 10 items rated on 5 point likert scales.

ii) Body self discrepancy was assessed with *Silhouettes* and a 10 point scale ($\alpha = 0.75$; Stunkard, Stinnett and Smoller, 1986). The participants were asked to indicate (i) 'Where on this scale do you think is the ideal female body size?' (ii) 'Where on this scale is the closest to how you are right now?' (iii) 'Where on this scale is the closest to how you would like to look?' A body self discrepancy score was computed from comparing their 'ideal-now' scores and 'now-preferred' scores. A positive score indicated that the individual believed they were overweight.

iii) Facial dissatisfaction: A scale was devised to measure facial dissatisfaction based on the Body Cathexis Scale ($\alpha = 0.72$; Furnham and Greaves, 1994). Participants were asked to rate how happy they were 'Right Now' with each of nine listed facial features (Lips, Teeth, Cheekbones, Eyes, Nose, Smile, Complexion, Skin and Hair). A lower score indicated greater dissatisfaction.

iv) Body parts dissatisfaction was assessed using the Body Cathexis Scale ($\alpha = 0.85$; Furnham and Greaves, 1994) focusing on ten specific body parts (Hips, Bottom, Legs, Tummy, Breasts, Arms, Height, Thighs, Waist and Overall Appearance). The participants were asked to rate to what extent they were happy with each body part listed 'right now'. A lower score indicated greater body dissatisfaction.

v) Attractiveness: participants rated how attractive they felt 'right now' based on 4 items ($\alpha = 0.92$; 'Sexy', 'Pretty', 'Attractive', 'Good Looking'). A lower indicated feeling less attractive.

vi) Confidence: this was assessed in terms of 7 items and participants were asked to rate how confident they felt in a number of different situations: ($\alpha = 0.85$; 'Look in the mirror in the morning?', 'Look in the mirror after applying make-up?', 'Look at other girls your age?', 'Watch films/read women's magazines?', 'Go shopping for clothes?', 'Go on a night out?', 'Go on summer holiday on the beach?'. A lower score indicated lower confidence. Both the attractiveness and confidence ratings were taken from previous research (Ogden and Sherwood, 2008).

Restrained eating, effort, exposure, global body dissatisfaction, body parts dissatisfaction, facial dissatisfaction, attractiveness and confidence were all assessed using 5 point likert

scales and mean scores were computed. Body self discrepancy using silhouettes was assessed using a 10 point rating scale.

Data analysis

The data was analysed in the following ways using SPSS 15: To describe participants' demographic characteristics; to assess demographic differences by condition using chi squared and t tests; to assess the immediate and longer term impact of the intervention on aspects of body dissatisfaction using one way ANCOVA with restrained eating, effort and exposure as covariates; to assess differential changes over time following the intervention (immediate post intervention to 4 weeks follow up) using a repeated measures ANOVA.

Results

1. Participants' demographics

Demographic data are presented in Table 1.

-insert table 1 about here -

The results showed that the majority of participants were young and white with a mean BMI score in the normal weight range (21.58). Participants did not generally make a large amount of effort with their appearance and felt that they only had a small amount of media exposure.

2.Differences in demographics by condition

Differences in demographics by condition are shown in Table 2.

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The results showed no significance difference between conditions at baseline in terms of weight, BMI, ethnicity, effort with appearance or restrained eating. Differences were found, however, for media exposure. In the main, this indicates that the randomisation was successful.

3. Immediate impact of the intervention on aspects of body dissatisfaction

The results were analysed to assess whether the intervention had an immediate effect on body dissatisfaction after being challenged by the media images using ANCOVA. The results are shown in Table 3.

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The results showed no immediate impact of the intervention on body dissatisfaction following media images.

4. Longer term impact of the intervention on aspects of body dissatisfaction

Participants were then followed up after 4 weeks to assess whether the intervention had a longer term impact. Data was analysed for T2 data using one way ANCOVA. The results are shown in Table 4.

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The results showed no longer term impact of the intervention on global body dissatisfaction (BSQ), body discrepancy (ideal/ now or now/preferred) or facial dissatisfaction. Significant differences were found, however, for body parts dissatisfaction (Cathexis), attractiveness and confidence. The means indicate that those exposed to the intervention reported lower body

dissatisfaction with their body, higher attractiveness and higher confidence compared to the control group after being challenged by the media images.

5. Differential changes over time following the intervention

Finally the results were analysed to assess differential changes over the 4 week period using a repeated measures ANOVA. The results showed no significant Time X Group interactions for most measures of body dissatisfaction except for confidence ($F = 4.08$, $p = 0.04$). The means indicate that overall the intervention group's confidence improved over time whereas the control group's confidence stayed the same. This implies that the intervention has a delayed impact improving confidence long-term.

Discussion

The present study aimed to evaluate the impact of an educational intervention to protect women from the detrimental effect of media images. Contrary to our hypotheses the results showed no immediate impact of the intervention which conflicts with previous research (Ogden and Sherwood, 2008; Thompson and Heinberg, 1999; Yamamiya et al, 2005). This may be due to the more complex nature of our intervention compared to a more simple information sheet (eg. Ogden and Sherwood, 2008) or it may be due to the use of the media images as a challenge which has not been included in most previous studies (Thompson and Heinberg, 1999). It may also reflect that beliefs about the media and the impact of media images are ingrained and persistent and may not respond instantly to an intervention. This suggestion is supported by the results at follow up which showed group differences by four weeks in terms of some aspects of body dissatisfaction, namely body parts dissatisfaction

(Cathexis), attractiveness and confidence. Participants may have left the intervention and started to think more critically about the media which could have been ameliorated by subsequent exposure to media images reinforcing what they had learned. Through this they may then have internalized the novel attitudes, replacing their previous attitudes with the new practice of critically scrutinizing media images. This provides support for the theorised role of social comparisons and internalisation as the mechanisms behind the impact of media images on body dissatisfaction (Martin and Kennedy, 1993; Posavac and Posavac, 2002; Stormer and Thompson, 1996). But the results from the present study suggest that the desired changes in an individual's internal schema concerning attractiveness and the prevention of upward comparisons following a media intervention may not occur immediately and may require time for further evidence to be accumulated. Accordingly, although the intervention did not have an immediate buffering effect on the influence of media images it appeared to have had an effect in the longer term. This would suggest that once a more critical approach is adopted to protect against the media, this may be enhanced rather than reduced as exposure continues in the individual's everyday life. There, remained, however no significant differences by follow up in terms of body self discrepancy, global body dissatisfaction or facial attractiveness. These measures may assess more trait rather than state aspects of body dissatisfaction and be less amenable to change.

There are, however, some problems with the study that need to be addressed. First, it is possible that there was some degree of contamination between the arms of the study as all students were from the same university and may have shared their experiences. Second, although the study aimed to explore the longer term impact of an intervention, follow up was only after four weeks. Finally the sample was derived from a student population who may be particularly responsive to discussion and the encouragement to be more critical. Future

research could address such issues using longer follow ups in young adults outside of the higher education setting.

In summary, the literature suggests that the unrealistic images presented in the media have a detrimental impact on women's body dissatisfaction. The results from the present study indicate that an educational intervention exposing the beauty secrets used in the media may act as a buffer against these images and that although this effect may not occur immediately it can be seen as time progresses when the participants have had time to reflect on what they have learnt, and perhaps after subsequent exposure to further images has reinforced the information provided in the intervention. Previous studies have used either simple paper and pen interventions or complex interventions which are time consuming and labour intensive. Further, their impact has only been assessed in the shorter term. The present study provides an evidence base for the use of a 15 minute power point presentation that could be used in an educational setting with students embarking on the college career as a means to protect women against the influence of the media. In the UK there is currently much emphasis placed on student well being, student counselling and student support services. The intervention used in the present study could form part of this support programme as a means to target and improve body dissatisfaction which forms a key part of how students feel about themselves.

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Table 1: Participants' demographic characteristics (n=176)

Variable	Mean (SD)	N (%)	Range
Age	20.22 (3.67)		18 - 45
BMI	21.58 (3.26)		16 - 37
Ethnicity		White=139 (79%) Black African=8 (4.5%) Mixed race=11 (6.3%) Indian=3 (1.7%) Black Carib=6 (3.4%) Chinese=4 (2.3%) Other=5 (2.8%)	
Effort with appearance	1.65 (0.52)		1 - 5
Media Exposure	1.27 (0.87)		1 – 5
Restrained eating	2.81 (0.97)		1 - 5

Table 2: Baseline differences in demographics by condition

Variable	Control (n=89)	Experimental (n=87)	T / X^2	P-value
Age	19.33 (2.33)	20.62 (4.64)	t=-1.42	0.16
BMI	21.64 (3.39)	21.52 (3.15)	t=0.23	0.82
Ethnicity	White = 69 Other= 20	White = 70 Other = 17	$X^2=0.23$	0.66
Effort with Appearance	1.65 (0.45)	1.66 (0.59)	y=-0.06	0.95
Media Exposure	1.14 (0.85)	1.41 (0.86)	t=-2.13	0.04*
Restrained Eating	2.81 (1.01)	2.82 (0.95)	t=-0.07	0.94

*statistically significant ($p < .05$)

Table 3: Immediate impact of intervention on body dissatisfaction following media images (mean / SD)

Variable	Control (n=89)	Experimental (n=87)	F – Value	P- value
Global body dissatisfaction (BSQ)	2.99 (1.05)	2.99 (1.09)	0.06	0.81
Body Discrepancy (Ideal / now)	-1.28 (1.05)	-1.03 (1.58)	2.05	0.15
Body Discrepancy (Now / prefer)	-1.47 (1.53)	-1.17 (1.33)	2.99	0.09
Facial Dissatisfaction	2.91(0 .37)	2.92 (0.40)	0.01	0.96
Body parts Dissatisfaction (Cathexis)	2.55 (0.53)	2.62 (0.53)	1.91	0.17
Attractiveness	2.70 (0.66)	2.90 (0.89)	2.97	0.09
Confidence	2.93 (0.57)	3.02 (0.74)	0.99	0.32

Table 4: Longer term impact of the intervention on aspects of body dissatisfaction
(mean / SD).

Variable	Control (n=64)	Experimental (n=62)	F – value	P -value
Global body dissatisfaction (BSQ)	2.82 (1.02)	2.83 (0.96)	0.01	0.93
Body Discrepancy (Ideal / now)	-1.05 (1.31)	-0.85 (1.29)	0.65	0.42
Body Discrepancy (Now / prefer)	-1.25 (1.17)	-1.03 (0.99)	1.01	0.32
Facial Dissatisfaction	2.82 (0.39)	2.92 (0.46)	1.88	0.17
Body parts dissatisfaction (Cathexis)	2.54 (0.57)	2.71(0.52)	3.84	0.04*
Attractiveness	2.39 (0.73)	2.70 (0.94)	4.03	0.04*
Confidence	2.91 (0.61)	3.18 (0.76)	4.62	0.03*

*statistically significant ($p < .05$)