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Feminism and the Prevention of Body Dissatisfaction and Disordered Eating among Young Females: Opportunities for Nutrition and Dietetic Practice

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Abstract

Introduction: Disordered eating and body dissatisfaction are socially structured responses and have been linked with eating disorders. Researchers have pointed to feminism as possible protective and predictive factor against eating disorders. Given the dramatic increase in body dissatisfaction and disordered eating associated with the dramatic rise in social media usage amongst young women in the UK, this work set out to test this hypothesis.

Methods: A non-randomized online survey, using existing validated scales was used to examine the association between body dissatisfaction, feminist identity, and disordered eating, among young women in the UK. Online social media platforms were used to recruit 224 young (aged 18 - 31) women. Following data collection, the sample was divided into two subgroups according to disordered eating criteria, positive disordered eating, and negative disordered eating. Mann-Whitney U test indicated a significant difference ($p > 0.05$) between the groups when two feminist subscales were assessed.

Results: The subscale Passive Acceptance had a positive Spearman's correlation with the level of disordered eating and with the Bulimia and Food Preoccupation subscale. Multiple linear regressions demonstrated that feminism was a predictor of body dissatisfaction and disordered eating when assessed by the synthesis subscale. Suggesting feminism is a protective and predictor factor of disordered eating. The link with body satisfaction however was statistically not significant ($p > 0.05$).

Conclusion: The inclusion of gender deconstruction strategies in non-prescriptive interventions, including health education and counselling efforts, is potentially effective in promoting body acceptance and may help prevent disordered eating in young females. Further research involving larger samples is advised to test the impact on body dissatisfaction.

***Keywords:** Eating Disorders; Feminism; Body Dissatisfaction; Dieting; Body Acceptance; Non-Prescriptive Therapy*

Introduction

The prevalence of eating disorders (ED) whilst not exclusive to females is notoriously higher compared with males and particularly in adolescent age-groups [1]. The estimated prevalence of ED for the UK population is ~ 1.25 million [2]. Sweeting., *et al.* (2015) have reviewed UK data for ED prevalence in males and it appears to be underdiagnosed; nonetheless, the prevalence rates amongst individuals aged 11 - 34 in the UK is notoriously greater in females when compared to males. The ratio of Anorexia Nervosa is 0.3% and 0.1% and of Bulimia Nervosa is 1% and 0.33%, respectively among females and males [3]. A key trigger for the development of these psychiatric dis-

eases is body image concerns, such as, low self-esteem and body dissatisfaction [4]. Arguably, both are suggested to be influenced by aesthetic and cultural pressures imposed by society, where objectification of the woman's body, and its value, is directed towards an external and socially constructed beauty standard or ideal, for example thinness, that is often unattainable [5]. Additionally, body dissatisfaction has been associated with the development of mental illnesses, like depression, ED, and body dysmorphic disorder (BDD). Nonetheless, it is recognized as a public health problem [6].

It is widely acknowledged that the body ideal is actively and increasingly promoted through social media [7-9]; the innate need for humans to comply with socially acceptable standard or norms [10], encourages male and females to search and attain the ideal body. As some researchers have suggested, this search, encourages women to engage in disordered eating behaviors, typically commencing during adolescence and may last into adulthood [11,12]. The significant influence of social media, and media generally, on body satisfaction amongst women is highly relevant and has been directly attributed to issues such as body acceptance and body dissatisfaction primarily arising due to increased engagement in social comparison activity [7]. A study carried out with 628 college women where they evaluated the influence of social comparison on eating disorders and body image, showed that the act of comparing themselves to other bodies considered "more attractive" by society, has been associated with greater body dissatisfaction and as well as with eating disorder [13]. Such ideals of beauty portrayed through social media, television and magazines are attributed with increased dissonance, between the real and the idealized body, contributing to negative self-esteem, body dissatisfaction and disordered eating [12].

Reportedly women, especially young women who engage in higher social media usage, are increasingly exposed to social influences that impose a specific and normative standard of 'beauty' and acceptability, that women should aspire to achieve; particularly emphasizing the need to be thin and attractive [14]. Such powerful societal norms play an important role in the development of negative body image, generating body dissatisfaction, reinforcing the dieting culture and resulting in disordered eating [15].

According to The Diagnostic and Statistical Manual of Mental Disorders IV [16], disordered eating is a set of symptoms that are present in behaviors related to bulimia nervosa, anorexia nervosa and binge eating disorder, however, do not completely meet the criteria to be diagnosed as such, being classified as an Other Specified Feeding and Eating Disorder (OSFED). Both disordered eating and body dissatisfaction are related to objectification theory, internalized thin-ideals, social media beauty patterns and dietary culture [17-19].

It is also widely acknowledged that dieting and excessive weight loss can be problematic for health [20,21], inappropriate or excessive dieting may lead to physiological symptoms including fatigue, weakness, irritability, and affect wellbeing, through decreased self-esteem and self-confidence. Moreover, the impact of societal pressures of the ideal body contributes to the pervasive structural imbalance towards and discrimination of women [22]. As Wolf [22] highlighted, by increasing our understanding of how societal pressures are internalized by women from an early age, may help explain the reported impact of a dieting culture as a "political sedative", whereby society and opportunities within are socially structured according to the ideal body; unfortunately those who fail to conform have less of a voice. Literature and campaigners, for example Health At Every Size® (HAES®), argue that the stigma associated with body weight or size has a considerable impact on the mental health and wellbeing of women [23-26].

Individuals engaged in the dieting culture are more likely to develop issues related to body image, self-esteem, and disordered eating [23]. Yet few diets have shown to be ineffective; whereby only 20% of the patients maintain weight loss [59]. Furthermore, severe food intake restriction, common in individuals with Anorexia Nervosa, can cause disruption of normal hunger and satiety signals [27,28]. This disconnection may be re-established with intuitive eating, body positivity [60] and interventions such as HAES® for example [29]. These approaches are based on the understanding of the body's needs and seeking for health and wellbeing as one of the many forms of self-care and not due to oppression or weight stigma [29]. The comprehension that health can be achieved at any size has been demonstrated crucial to improving health and wellbeing [30]. In this way, a feminist approach is to propose that 'women are more than a body'; HAES

adopts a position contrary to the female objectification inherent in patriarchal societies. HAES promotes health in a liberating inclusive way, without societal stigmas associated with size or weight [31] underpinned by feminist thinking.

Feminism provides a lens through which we might deconstruct traditional gender norms, allowing women to critically recognize how society encourages internalization of body ideals through a better comprehension of the negative impact of patriarchal systems [32]. Researchers have suggested feminist beliefs may strengthen young women's resilience towards negative representation of body image [15], increase self-esteem [33] and enhance critical reflection [34]. Others have argued, self-declared feminism may moderate body image dissatisfaction and thus help prevent or protect against disordered eating behaviors [35]. As the literature suggests, the protective or preventative potential of feminist teachings may vary depending on the type of ED; Anorexia Nervosa has been positively correlated with feminism in a justification of eating less as a form of protest [36], whereas Bulimia Nervosa is related to hyper-femininity and greater acceptance of gender norms [37,38].

To better elucidate those matters, Murnen and Smolak [39] conducted a meta-analytic review of 26 studies data about the relationships between feminism, eating issues and body dissatisfaction to help determine whether feminism may protect against body image problems and, consequently, eating disorders. They found an association between feminist identity and lower levels of eating problems and drive for thinness. The higher scores of feminist identity were also associated to lower levels of body shame, suggesting a protective role.

Objectification Theory [40] of female bodies suggests the constant evaluation and monitoring of women's bodies is associated with the development of various psychological problems, including depression, anxiety and disordered eating. Objectification, sexism, and harassment are constantly experienced by women and negatively impacts on mental health and wellbeing [41]. Exposure to objectification and harassment has been shown to distance women from understanding their own bodies, which is especially important when applied to the neuroendocrine system and signals of genuine hunger or satiety and in itself can result in disordered eating behaviors [42].

Studying feminism, it is possible to understand that being female may already increase the risk of developing an ED and body dissatisfaction. When a woman understands why it happens and seeks to deconstruct this thought, by which researchers argue [18,31] is rooted in the Western patriarchal society, it may protect herself from these problems related to eating behaviors and body image concerns [33]. The feminist theory seeks to critically deny gender norms and the need to perform femininity; consequently, it is expected that women with stronger feminists' beliefs will also critically evaluate societal norms of the ideal body which may protect against thin internalization [43].

In an intervention underpinned by feminist approach, targeting females diagnosed Anorexia Nervosa and Bulimia Nervosa, almost half (46%) reported that understanding socio-cultural norms through the lens of feminism motivated them to seek recovery [44]. Holmes [45] advocated for therapeutic treatment of eating disorders, to include gender identity and feminist theories. When tested on patients with Anorexia Nervosa, in England, the approach, involving 10-weekly sessions discussing deconstruction of gender norms and feminist topics, was shown to be effective in encouraging action towards recovery [46].

The tripartite that occurs between body image, disordered eating and feminist identity and its potential as a non-prescriptive or therapeutic intervention, in the prevention of DE, ED and also warrants further exploration. Additionally, testing whether feminism may be useful as a preventive therapy for ED in different cultures and social contexts is also recommended.

Aim of the Study

The present study aims to address this by testing relationships between feminist beliefs, body dissatisfaction and disordered eating, suggested by the literature, in a female population. More specifically, this study examined whether feminism may offer protection against

eating disorders and body dissatisfaction amongst young adult women or may be a predictive tool for use in therapeutic or health promoting settings such as schools.

Methods

Research design

A non-randomized online cross-sectional survey administered via social media platforms was developed to test the following hypothesis:

1. Women with higher levels feminist beliefs have lower body dissatisfaction index than women with lower-level feminist beliefs.
2. Women with higher level feminist beliefs will be less likely to present disordered eating behaviors than lower feminist-identified women.
3. Feminism is a predictive factor of disordered eating and body dissatisfaction.
4. We expect to find a positive correlation between body dissatisfaction index and disordered eating behaviors, a negative correlation between feminism and disordered eating and body dissatisfaction.

Participants

The target population were young adult female, aged 18 - 31 years old, residing in the UK never diagnosed with an ED and/or had a BDD. The exclusion criterion included those with prior medical history of mental illness related to body image and eating. As an online survey this relied upon self-report.

Sample

A sample size of 176 participants was determined using the G*Power 3 software for statistics; the estimative was based on an Independent T-test and Pearson's correlation, aiming for a p = .05 as the effect size.

Recruitment

The survey was launched as the national Covid lockdown was announced; thus, an online survey was utilized. As an online survey social media was chosen as the optimum approach, recruiting sufficient numbers of participants. Purposive and convenience sampling were therefore used to target young female adults, using social media. Posts advertising the study were posted online for four consecutive weeks, on UK-wide Facebook groups specifically citing: feminism, nutrition and dieting in their title; examples include "Girl Power", "Edinburgh Feminist Network", "Bristol University Intersectional Feminist Society", "UK Nutrition Student Mentoring" (See Appendix A for list).

Volunteers following the link to the study were provided with the link to the organizational website for online surveys of the University of Chester, hosted by Jisc. Where they were required to read the Participant Information Sheet (PIS), check for inclusion eligibility before providing Informed Consent. Anyone accessing the study without meeting the inclusion criteria, received a notification, thanked and asked to exit the survey. Participants completing the survey were able to withdraw at any point; all questions had to be completed however for convenience, participants could save and return.

Data collection

The online survey consisted of five sections: sociodemographic information, questionnaire to assess body dissatisfaction (Body Shape Questionnaire, 16-item modified version); assessment of eating behaviors (Eating Attitudes Test, 26-item shortened version), feminist identity (Feminist Identity Composite, 33-item).

Feminist identity

Feminism was estimated using the Feminist Identity Composite (FIC) [47]. FIC is a scale created to measure identification with feminism beliefs, it has 33 items which must be answered in five different levels starting from "strongly disagree" and ending in "strongly agree". This tool has five subscales designed to assess feminist beliefs according to Downing and Roush [48] model (Table 1), with questions referring to passive acceptance, revelation, embeddedness-emanation, synthesis and active commitment.

Stage I - Passive Acceptance	Stage II - Revelation	Stage III - Embeddedness-Emanation	Stage IV - Synthesis	Stage V - Active Commitment
Acceptance of gender roles, patriarchy norms and difficulty seeing sexist behaviours.	Realisation of sexist issues in society, questioning and problematizing male attitudes and behaviours; along with feelings of anger and guilt.	Building a better relationship with the female community and its contents, appropriating a new identity. Sometimes being more selective with men.	Synthesizing a feminist identity. Modified gender view and men individually.	Achievement as a feminist; engagement in non-sexist movements.

Note: Adapted from Downing & Roush (1985, p. 699).

Table 1: *Stages for feminist identity.*

Whereby higher scores indicating greater levels of feminist identity, apart from the Passive Acceptance subscale that has different interpretation, being a measurement related to more acceptance of gender roles and seeing patriarchy as something advantageous, containing seven items with statements such as "I don't see much point in questioning the general expectation that men should be masculine and women should be feminine". The Revelation subscale has eight items and it is the second stage of the Feminist Identity Model, being associated to the recognition of internalized relationships about patriarchy and the role of women in society, including affirmations such as, "Gradually, I am beginning to see just how sexist society really is". The Embeddedness-Emanation is a four-item subscale and consists in the discovery of the woman as something more, besides wife and mother; being described through the female content consumed (music, art, literature), such as, "I am very interested in women artists". There are five items on the Synthesis subscale, containing, "I enjoy the pride and self-assurance that comes from being a strong female", this phase is associated with the internalization of the positive values that exist in being a woman, despite the recognition about the problems. The last phase is assessed by the Active Commitment subscale, it has nine items, for example: "On some level, my motivation for almost every activity I engage in is my desire for an egalitarian world", at this stage the aim is to change the society through engagement in movements that work for improve women's rights. This scale was created and validated based on two other scales (Feminist Identity Scale and Feminist Identity Development Scale) by Fischer., *et al*. [47], in a study comparing questionnaires used to assess levels of feminism, the FIC proved to be an updated and convenient tool [49].

Body image dissatisfaction

Body dissatisfaction was assessed using the Body Shape Questionnaire (BSQ), 16-item modified version, which must be answered by the Linkert-scale using "never", "rarely", "sometimes", "often", "very often" or "always" based on thoughts had over the past four weeks (BSQ 16-A; [50]). Sample items, such as, "Have you worried about your thighs spreading out when sitting down?" and "Has eating sweets, cakes, or other high calorie food made you feel fat?". The responses were summed, with greater scores meaning stronger levels of body

dissatisfaction. This tool was especially interesting for the present study, as it alludes to issues of disordered eating, covering body dissatisfaction that mediates dieting behaviors and feelings such as "feeling fat", with some degree of reliability [51]. This questionnaire is a shorter and validated version of the traditional BSQ (34-items), in the female model for application in women samples, whose highest score is 96. In which interpretation of the score indicates, < 38 (no concern with shape), from 38 to 51 (mild concern), from 52 to 66 (moderate concern), and > 66 marked concern.

Disordered eating

Eating Attitudes Test (EAT - 26; [52]) measures attitudes that are associated with anorexia nervosa, bulimia, dieting, and other behaviors related to disordered eating. This questionnaire is a shorted version of the original EAT (40-items; [53]) and has 26 questions, responses at six levels ("always" to "never"). Whereby higher scores indicate greater levels of disordered eating behaviors. Moreover, equal or above 20 points, results in a positive diagnosis criterion for disordered eating, and warrants referral for assessment by a qualified professional.

The EAT-26 has three subscales: Dieting, Bulimia and Food Preoccupation, and Oral Control. The Dieting subscale has 13 items and is related to the dieting culture, with fear of gaining weight and the thought of counting calories, macronutrients and restricting certain food groups, including statements like, "I aware of the calorie content of foods that I eat". There are 6 items for Bulimia and Food Preoccupation subscale, presenting compensatory and more severe behaviors that are linked to Bulimia Nervosa and Binge Eating Disorder, such as, "I vomit after I have eaten" and "I have gone on eating binges where I feel that I may not be able to stop". For the Oral Control subscale there are 7 statements linking with Anorexia Nervosa symptoms, for example, "I avoid eating when I am hungry". The score interpretation was made for each subscale and also for the whole questionnaire, in which the Likert-scale has a decreasing punctuation value of 3, 2 and 1 for "Always", "Usually" and "Often", respectively; apart from the question 26 that has a creasing score (1, 2 and 3) for "Sometimes", "Rarely" and "Never". The punctuation was summed, and after sum, the sample was divided into two groups: Positive Disordered Eating diagnose, for participants who reached equal or above 20 points (n = 39); and Negative Disordered Eating diagnose for participants who scored below 20 points (n = 185).

Data analysis

The data was submitted to the Kolmogorov-Smirnov test to assess normality and it was not normally distributed as p value was below p = .05. As the assumption of a normal distribution was violated, body dissatisfaction results, feminist identity and level of disordered eating were analyzed by Mann-Whitney U test and Spearman's rho correlation. Sociodemographic data were subjected to descriptive analysis of frequency and percentage. Multiple linear regressions were conducted to analyze prediction among body dissatisfaction, feminism, and disordered eating. All analyses were performed using SPSS software version 20 (IBM Corporation, New York, USA) and the considered p-value for significance was less than p = .05.

Ethical Considerations

As a study on eating disorders and body dissatisfaction there is potential risk for some participants who may self-identify or raise anxiety concerns. Signposting information on relevant agencies was provided in the Participant Information Sheet (PIS) issued whilst obtaining participant consent.

Ethical approval obtained: University of Chester Ethics Committee (August/2020 1687/20/CM/CSN). The study was conducted in accordance to research ethics and governance compliance.

Results

After data screening was completed, sociodemographic data was described (Table 3). The median, range and the *p*-value were calculated for each variable of the FIC, EAT-26, and Body Dissatisfaction (See table 2).

Positive Disordered Eating Diagnose (n = 39)			Negative Disordered Eating Diagnose (n = 185)		
Subscale	**Median**	**Range**	**Median**	**Range**	**P value**
Passive Acceptance	15	21	13	21	.238
Revelation	24	27	25	26	.957
Embeddedness-Emanation	15	15	15	15	.183
Synthesis	29	16	28	16	.013*
Active Commitment	28	21	26	21	.039*
Dieting	20	23	3	18	.000**
Bulimia	7	14	0	8	.000**
Oral Control	2	13	1	9	.002**
Body Dissatisfaction	44	72	48	71	.119

Table 2: *Evaluation of FIC subscales, EAT-26 subscales, and body dissatisfaction between groups.*
**p ≤ .05 (statistically significant two-tailed Man Whitney U test).*
***p ≤ .01 (statistically significant two-tailed Man Whitney U test).*

All participants (n = 224) were resident in the UK and aged between 18 and 31 years. The ethnicity composition of the sample was 81.7% Caucasian, 1.8% Black, 5.8% Asian, 4.5% Mixed, and 6.2% other. Among participants, 77.7% identified as heterosexual, 17.9% as bisexual, 1.8% as homosexual, and 2.6% preferred not to say. Most participants affirmed to not have a religion (71.4%), 18.8% self-identified as Christian, 3.1% Muslim, 0.9% Hindu and 5.8% other or preferred not to say. Most participants were employed full-time (46.4%) or students (32.6%), of which the majority were studying postgraduate (54%) compared with undergraduate (42.4%) courses (Table 3).

Variable	% of sample	n
Occupation		
Employed Full-time	46.4	104
Employed Part-time	12.5	28
Student	32.6	73
Unemployed	5.4	12
Casual Worker	1.3	3
Not working due to ill	0.4	1
Other	1.3	3
Ethnicity		
Caucasian	81.7	183
Black	1.8	4
Asian	5.8	13
Mixed	4.5	10
Other	6.3	14

Sexual Identity		
Heterosexual	77.7	174
Bisexual	17.9	40
Homosexual	1.8	4
Preferred not to say	2.7	6
Marital Status		
Single	75.4	169
Married	6.3	14
Divorced	0.4	1
Other	17.9	40
Religion		
Christian	18.8	42
Muslim	3.1	7
Hindu	0.9	2
None	71.4	160
Preferred not to say	1.8	4
Other	4.0	9

Table 3: *Sociodemographic characteristics of the sample.*

Table 4 demonstrates the data relationships. The subscale Passive Acceptance had a positive correlation with the level of Disordered Eating (p = .032, r = .144) and with the Bulimia and Food Preoccupation subscale (p = .003, r = .198).

Variables PA	RE	EE	SY	AC	B	OC	D	EAT	BD	FIC
PA	-.198**	-.324**	-.117	-.346**	.197**	-.026	.116	.144*	.104	-.306**
RE		.440**	.299**	.419**	-.066	-.077	.047	-.001	.267**	.764**
EE			.480**	.654**	-.008	-.019	.008	-.014	.070	.787**
SY				.583**	.125	-.098	.155*	.115	.041	.680**
AC					.045	-.048	.048	.020	-.023	.831**
B						-.044	.630**	.725**	-.092	.009
OC							-.004	.223**	-.011	-.065
D								.931**	-.023	.071
EAT									-.035	.029
BD										.128
FIC										

Table 4: *Spearman's rho coefficients of correlation for FIC and subscales, BSQ-16, EAT-26 and subscales.*
*Note: PA = Passive acceptance subscale of FIC; RE = Revelation subscale of FIC; EE = Embeddedness-emanation subscale of FIC; SY = Synthesis subscale of FIC; AC = Active commitment subscale of FIC; B = Bulimia and food preoccupation subscale of EAT-26; OC = Oral control subscale of EAT-26; D = Dieting subscale of EAT-26; EAT = Eating Attitudes Test; BD = Body Dissatisfaction; FIC = Feminist Identity Composite. *Correlation is statistically significant at the p≤.05 level (two-tailed). **Correlation is statistically significant at the p ≤ .01 level (two-tailed).*

A positive correlation was found between the Dieting subscale and the Synthesis subscale ($p = .021$, $r = .155$). Body Dissatisfaction was positively correlated to the Revelation subscale ($p = .000$, $r = .267$). No correlation was found between Disordered Eating and Body Dissatisfaction, nor between Disordered Eating and Feminist Identity. A significant difference was found between the groups when the Synthesis subscale was assessed ($p = .013$). A significant difference was found between the groups when the Active Commitment subscale was assessed ($p = .039$). A multiple linear regression was run to predict body dissatisfaction from FIC subscales. These variables statistically significantly predicted body dissatisfaction, $F (5, 218) = 5.948$, $p < .05$, $R = .346$, reckoning for 12% of the variance in body dissatisfaction levels. Only three variables added statistically significantly to the prediction, $p < .05$: Active Commitment ($\beta = -.227$, $t = -2.331$, $p = .021$), Passive Acceptance ($\beta = .166$, $t = 2.436$, $p = .016$) and Revelation ($\beta = .315$, $t = 4.287$, $p = .000$). In prediction of disordered eating levels $F (1, 222) = 7.197$, $p = .008$, $R = .177$ and disordered eating diagnose ($p = .012$), the Synthesis subscale showed a significance of 3.1% and 2.4% of the variance, respectively.

Discussion

This study is one of the first to examine the potential interaction between the three concepts body dissatisfaction, disordered eating, and feminism, in a UK setting. It is therefore novel and is useful in illuminating future research opportunities for understanding the impact of social media in stigmatizing females and the possible protective role for interventions involving strengthening of feminist values on similar populations.

The estimated sample size was exceeded, however as recruitment involved social media sites, there is limited scope for randomizing recruitment, non-randomised sampling and recruitment strategies were used. Need to replace with point about the non-randomized approach for online survey via social media sites. This introduces an unavoidable bias into the sampling thereby reducing the generalizability of our findings. Additionally, the exclusion criterion was based on the volunteers' reliability to self-exclude themselves, by which it relies on human honesty and therefore is subjected to insincerity. The homogeneity of the sample, as in predominantly Caucasian, the broad age range and other sociodemographic data may also limit generalizability. Despite this, uniformity of the data may help limit confounding factors and the means obtained for each of the main measures were also consistent, resulting in a small variability between reported behaviors and beliefs. It is important however to emphasize the validity of the scales employed; we utilized existing measures, with strong effect-size, including subscales. Moreover, the data analysis examined relationships, differences, and predictive factors, thus providing comprehensive results. Despite using four questionnaires, average response time was short, with options to leave and resume included, providing a comprehensive, valid but low effort tool, as acknowledged by participants themselves. With this in mind, this study has merit in reporting on the interaction between feminism approaches and three important concepts associated with eating disorders in young female adults.

Synthesizing a feminist identity and developing a critical evaluation for gender norms are debated by researchers as possible protector factors for disordered eating and negative body image [15,35,39]; likewise, the feminist approach as psychological therapy on eating disorders treatment [37]. Provided that, the feminists findings supported the study hypothesis that women with higher levels of feminist identity would present lower levels of disordered eating behaviors. This result assessed by the Active Commitment and Synthesis subscales, is aligned with Borowsky., *et al*. [33] results. On the other hand, a positive correlation was found when the Dieting and Synthesis subscales were related. This is particularly intriguing as contradicts the antecedent results, reinforcing the eating disorders subtypes matter that each type of eating disorder will variate depending on the gender, and therefore, they have different motivations, explained by Mahowald [36] and White [54].

In addition, feminism is subjectively internalized, hence it does not necessarily play the same protective role in specific dieting behaviors. Moreover, the Dieting subscale analyses precisely eating attitudes towards orthorexia, something that occurs in nowadays culture through encouragement for engaging into diets as a 'healthy lifestyle' promotion and it is not exclusively delivered for the female public.

The Passive Acceptance subscale findings are in accordance with Guille and Chrisler [35] results; it was found that women who scored higher on this subscale and, therefore, had more acceptance of gender norms and denial of patriarchy as a relevant problem, have obtained a higher level of disordered eating behaviors, especially when the Bulimia and Food Control subscale was evaluated. This can be explained by the acceptance forms of imposed beauty standards and femininity, both have been associated to bulimia nervosa. Murnen and Smolak [38] reviewed twenty-two studies with valid data in a meta-analysis relating eating disorders and gender role adherence, they found that women presenting greater eating disorders levels also shared greater levels of feminism.

Contrariwise to Green., *et al.* [43] findings, the Active Commitment subscale results presented a significant difference between the disordered eating groups. Although, it did not predict the relationship when the linear regression was assessed. Nevertheless, Green., *et al.* [43] findings suggest that feminist identity may predicts eating disorder diagnostic when controlling its subtypes. The present study linear regression findings are in accordance to Kinsaul., *et al.* [15] as we did not find a significance when assessing whether feminism would be a prediction factor of disordered eating. Moreover, this relationship is still unclear in the literature, even though a few studies has shown feminism as a predictor factor of eating disorders [35,43].

Conversely to Grippo and Hill [55] prediction analysis, this study linear regression findings suggest that feminists' beliefs may predict body dissatisfaction. Regarding the study fourth hypothesis, it was expected to find a positive correlation between body dissatisfaction index and disordered eating behaviors among the whole sample; nonetheless, this hypothesis was not supported by our findings. In discordance from Kinsaul., *et al.* [15] results, they showed a negative correlation between body satisfaction and disordered eating, however as the tool used to assess body image was different from the one used in the present work, this difference in outcome is difficult to explain. Yet, Borowsky., *et al.* [33] found that feminist-identified women had higher body satisfaction when compared to non-feminist-identified women. Possibly however, the demographic characteristics of the sample here have modified the effect; our sample presented high levels of feminist identity amongst the participants (M = 93.53) in a sample where ethnicity is almost completely Caucasian (81.7%). Others [56,57] have also indicated body dissatisfaction appears to be greater amongst Caucasians. The BD mean of the study was high and this may be due to no difference between the groups of DE, and this may help explain the lack of positive correlation.

Meanwhile, this is one of the few studies that has examined body dissatisfaction, disordered eating, and feminism together, in the UK, to date. At the present study, the joining of these three elements is important to elucidate how one thing leads to another in an endless cycle of female oppression, body dissatisfaction and disordered eating as an attempt to follow a beauty standard. The body dissatisfaction data variable mean of the present study was M = 49.24, meaning mild concern with shape, this is a concerning data considering that negative body image is an alarming public health issue. Following what was hypothesized, greater feminist beliefs would play a predictive role against disordered eating, however, this assumption was not held by our multiple regressions analysis findings. Whereas Green., *et al.* [43] findings contradict the study results, hence the researchers found a statistically significance when tested feminism as an eating disorders diagnostic status predictor. Another relationship discovered here is that Body Dissatisfaction correlated positively with the Revelation subscale ($p = .000$, $r = .267$), it is possible however that as this subscale represents the second stage of feminist identity, it may not be sufficient to protect against body image concerns.

These findings suggest a potential role for incorporating feminism and gender equality concepts in therapeutic interventions for young female adults diagnosed with eating disorders. Exposure to gender deconstruction may also move those contemplating treatment into the action phase. Further research analyzing the potential relationship between feminism, eating disorder and body image, across a range of social and cultures groups, is needed. In countries like the UK, where women traditionally assert female emancipation [58], feminism is relatively more defined. This is worth highlighting because as our findings suggest, by safeguarding high levels of feminists' beliefs, there may be a protective role and opportunity for the prevention of disordered eating or eating disorders. Nonetheless, modern or postmodern feminism, represented by current generations, brings unique problems; this may require updated tools and approaches for measuring feminism. For example, self-labelling as a feminist has its own prejudices, in addition to stereotypes; according to Hurt., *et al.* [34] holding feminists' beliefs is more relevant than self-defining as a feminist. A further strength of the present study, whereby the survey included a feminist questionnaire that identifies levels of feminists' beliefs.

Finally, our findings demonstrate that supporting feminism and denying gender norms may protect women from engaging into disturbed eating behaviors and predicting body dissatisfaction. Inclusion of feminist concepts as part of a wider health education programmed, for young or pre-pubertal girls could provide an interesting and effective tool for strengthening resilience and preventing eating disorders, promoting body positivity, during their development. As the World Health Organization (WHO) asserts, the ability to take control of our own health, including our body and self-identity, is key to health and wellbeing. Reducing the negative impact of societal pressures on pushing a body ideal and body objectification, particularly by the pervasiveness of social media, is a public health priority. Practitioners, teachers, dietitians, and psychologists working with young people to prevent or manage eating disorders, are constantly looking for more tools to assist in protecting young people from the negative and pervasive influences of social media. Although further research is recommended, as this study suggests, exploring the value of feminist beliefs, may provide a cost-effective option.

The findings here are supported by previous studies, however this is the first to examine the relationships between feminism, body dissatisfaction and disordered eating with a sample of young adult women in the UK. Our results demonstrate important influences and potential relationships between these factors, which might be helpful in illuminating pathways to eating disorders. Feminism may also be a useful addition to prevention and treatment strategies. It is important to emphasize that women in more advanced development stages of feminism, in which they are engaged in propagating the movement through active commitment and have absorbed feminism within their own individualities, showed less disturbed eating behaviors. Even though no correlation was found between body dissatisfaction, feminists' beliefs and disordered eating when assessed without the subscales' adjustments, feminism was a predictor of body dissatisfaction and disorder eating when assessed by the synthesis subscale. Future studies are needed to better elucidate these relationships and explore these issues in different cultures and ethnic groups.

Conclusion

The inclusion of gender deconstruction strategies in non-prescriptive interventions, including health education and counselling efforts, is potentially effective in promoting body acceptance and may help prevent disordered eating in young females. Further research involving larger samples is advised to test the impact on body dissatisfaction.

Appendix A

Facebook Groups

"Girl Power"

"Edinburgh Feminist Network"

"Bristol University Intersectional Feminist Society"

"Working Gal's Guide"

"UK Nutrition Student Mentoring"

"Nutrition and Dietetics Team"

"Health Care and Fitness: How To Stop Covid-19"

"Dietitians in Private Practice"

"Nutrition Connections & Info"

"Nutrition Graduates"

"Nutrition and Dietetics Student Group"

"Chester Girl"

"Assistant Psychologists UK"

"She in Bloom"

"Feminists Inspiring Gender Unity, Respect and Equality"

"Not On My Campus UK Community"

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