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Article

The Relationship Between Body Image, Eating Behaviors and Diet Quality in Young Women: The Impact of Social Media

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Abstract: Background/Objectives: This study investigates the relationship between diet quality and body image disturbance among young women aged 18-24, a crucial period for establishing lifelong health behaviors. Given the increasing exposure to social media, which often promotes unrealistic beauty standards, this research aims to explore how eating behaviors and diet quality, correlates with body image disturbance; **Methods:** A mixed-methods approach was employed, combining qualitative focus group discussions with quantitative analysis. Focus groups (n=19) explored themes of body image dissatisfaction. The Body Image Disturbance Questionnaire (BIDQ) was administered to 50 participants (young women aged 18-24) to quantitatively assess body image disturbance, while diet quality was evaluated using the Australian Recommended Food Scores (ARFS). The Three-Factor Eating Questionnaire (TFEQ-R18) was also used to assess eating behaviors, including cognitive restraint, uncontrolled eating, and emotional eating. A social influence questionnaire (SIQ) was administered to measure the effect of social influence. Pearson's correlation coefficient was used to determine the relationship between ARFS, BIDQ, and TFEQ-R18 scores; **Results:** Qualitative findings revealed persistent dissatisfaction with body shape, largely influenced by social media. Quantitatively, 65% of participants scored above the clinical threshold for body image disturbance (mean BIDQ score = 4.2, SD = 0.8). The correlation between ARFS scores and BIDQ scores was weak and not statistically significant ($r = 0.057$, $p = 0.711$). However, a significant positive correlation was found between time spent on social media and body image disturbance ($r = 0.58$, $p < 0.01$). Additionally, TFEQ-R18 results indicated that 45% of participants displayed moderate levels of uncontrolled eating, and 36.5% demonstrated moderate levels of emotional eating; **Conclusions:** While social media significantly influences body image concerns, its effect on eating behaviors and diet quality shows weak correlations, suggesting that other factors may mediate these outcomes. These results highlight the complexity of the relationship between body image, eating behaviors, and diet quality, indicating that interventions should address the psychological drivers behind these concerns, rather than solely focusing on reducing social media exposure.

Keywords: body image; diet quality; eating behaviors; young women; social media

1. Introduction

Body image disturbance is a significant psychological concern among young women, particularly those aged 18-24, who are at a crucial stage for establishing long-term health behaviors [1]. The pervasive influence of social media has been identified as a critical factor in shaping negative body perceptions by promoting unrealistic beauty standards [2]. This phenomenon has led to

increased dissatisfaction with body shape and size, resulting in heightened awareness of perceived body imperfections and a greater risk of developing body image disturbances [2–9].

Studies suggest that body image is closely linked to eating behavior and diet quality, with positive body image and autonomous exercise motivations leading to healthier eating outcomes, while body dissatisfaction and restrained eating are associated with poorer diet quality and lower dietary diversity [10–19]. While some studies suggest that poor diet quality may exacerbate body dissatisfaction [20], others indicate that the connection may be more complex, with factors such as social media exposure playing a more significant role [21].

Social media has been increasingly recognized as a significant factor in shaping body image perception across various age groups and settings [22]. Numerous studies have documented the pervasive influence of platforms like Instagram, Facebook, and TikTok on body image dissatisfaction, especially in younger populations. Adolescents and young adults are particularly vulnerable due to their high engagement with social media, frequent exposure to idealized body images, and the prominence of peer comparison. A recent systematic review highlights the correlation between social media usage and body image disturbance, particularly among women aged 18–25, with Instagram showing the strongest link due to its image-centric nature [22]. In contrast, older adults show less impact, as suggested by a meta-analysis, which posits that body image concerns in middle-aged adults may be influenced more by real-life social networks than by social media [23]. Settings also play a role, with Westernized cultures reporting higher rates of body dissatisfaction compared to non-Western countries [24]. Despite these findings, there remains a gap in longitudinal studies that explore how social media exposure affects body image over time and whether these effects differ in non-Western settings or among older populations.

Given the critical role of both nutrition and psychosocial factors in shaping body image, this study aims to explore the relationship between body image disturbance among young women, diet quality, as measured by Australian Recommended Food Scores (ARFS) [25] and eating behaviors using the Three-Factor Eating Questionnaire [26] (TFEQ-R18). By combining qualitative insights from focus group discussions with quantitative analysis through the Body Image Disturbance Questionnaire [27] (BIDQ), ARFS and TFEQ-R18, this research seeks to provide a comprehensive understanding of how these factors interact, particularly in the context of social media exposure. Social media exposure can shape perceptions of healthy eating and body image, but more research is needed to understand its long-term effects on eating behaviors and dietary intake [22,23]. By focusing on social media's role in influencing not just body image but also eating behaviors and diet quality, this research fills a pertinent gap that could inform interventions aimed at promoting healthier eating habits in the digital age [9]. The findings will contribute to the development of targeted interventions that address both dietary behaviors and the psychological impacts of media on body image.

2. Materials and Methods

2.1. Study Design

This study employed a mixed methods approach to investigate the relationship between diet quality and body image disturbance among young women aged 18–24. The study was conducted in two phases: a qualitative phase involving focus group discussions and a quantitative phase involving the administration of validated questionnaires. This design allowed for a comprehensive exploration of both the psychological and nutritional factors influencing body image in this demographic.

2.2. Participants

A total of 19 young women, aged 18–24, participated in the qualitative phase of the study [28]. These participants were recruited through social media platforms and university bulletin boards. There was no set sample size objective prior to workshop recruitment. Rather, the research team was focused on balancing sample adequacy with sufficient individual participation. Based on co-design recommendations, the research team aimed to have up to 10 individuals participate in each workshop [29].

Inclusion criteria comprised being within the specified age range and identifying as female. Participants included young women from various occupational and educational backgrounds, with eight identifying as New Zealand European, eight as Asian (Chinese, Hong Kong Chinese, Korean, and Indian), two as Fijian Indian, and one as European. The median age of workshop participants was 21 years. The majority of participants were University students (63%) and resided in Auckland [28]. The most used social apps by the cohort were Instagram and TikTok; most participants reported spending an average of 1-2 hours per day on their preferred app. When asked to rank their relationship with social media, with '5' being a very positive relationship and '1' indicating an overall negative relationship, the mean across participants was 3.07. Participants provided informed consent and were assured that their contributions would be anonymized. Participants with a history of diagnosed eating disorders or those who indicated disordered eating behaviors following preliminary administration of the revised 18-item Three-Factor Eating Questionnaire (TFEQ-r18) were contacted with content trigger warnings to confirm participation in the workshops (n=2) [30].

For the quantitative phase, a separate group of 50 young women, aged 18-24, were recruited through university mailing lists and online advertisements. A systematic review of pilot studies identified a median total sample size of 30.5 in non-drug trials [31]. Therefore, we aimed to exceed this, and a recruitment target of n=50 was set. The inclusion and exclusion criteria were consistent with those used in the qualitative phase (Table 1). All participants provided informed consent before completing the questionnaires. As with the qualitative phase, the mean age of RCT participants was 21 years. The majority of participants identified as New Zealand European (60%) and were University students at the time of participation (74%). Almost all participants are '*very*' or '*extremely*' familiar with social media and engage with the platforms daily.

Table 1. Baseline characteristics of the participants in the quantitative phase.

<i>Variable</i>	<i>Total (n=50)</i> <i>mean (SD) or % (n)</i>	<i>Intervention</i> <i>group difference</i>
<i>Age</i>	21.34 (0.50508)	0.63 ^a
<i>Ethnicity:</i>		
<i>New Zealand European</i>	62% (31)	
<i>Chinese</i>	18% (9)	0.105 ^b
<i>Indian</i>	4% (2)	
<i>Korean</i>	4% (2)	
<i>Other (such as Japanese, Indonesian, Taiwanese)</i>	12% (6)	
<i>Employment Status:</i>		
<i>Currently studying/student</i>	74% (37)	
<i>Employed, working 40 or more hours per week</i>	16% (8)	0.695 ^b
<i>Employed, working less than 40 hours per week</i>	10% (5)	

Social Media Frequency of Use:

<i>Never</i>	0	
<i>Every couple of weeks</i>	2% (1)	
<i>Multiple times a day</i>	6% (3)	0.251 ^b
<i>Daily</i>	30% (15)	
<i>Multiple times a day</i>	62% (31)	

Social Media Familiarity:

<i>Not familiar at all</i>	0	
<i>Slightly familiar</i>	0	
<i>Moderately familiar</i>	4% (2)	0.344 ^b
<i>Very familiar</i>	18% (9)	
<i>Extremely familiar</i>	78% (39)	

Social Media Engagement:

<i>A few times a year (1)</i>	2% (1)	
<i>A few times a month (2)</i>	4% (2)	
<i>Weekly (3)</i>	6% (3)	0.399 ^b
<i>Multiple times a week (4)</i>	10% (5)	
<i>Daily (5)</i>	42% (21)	
<i>Multiple times a day (6)</i>	36% (18)	

Social Media Health Seeking Behaviours

<i>Never (1)</i>	2% (1)	
<i>Very occasionally (2)</i>	26% (13)	0.267 ^b
<i>Sometimes (3)</i>	28% (14)	
<i>Often (4)</i>	36% (18)	
<i>All of the time (5)</i>	8% (4)	

^aIndependent sample t-test. ^bPearson's chi-square test.

2.3. Data Collection

The qualitative phase involved semi-structured workshop discussions designed to explore participants' perceptions of the influence of social media on their body satisfaction and dietary behaviors, as well as how social media could be used to address these aspects of nutrition status [32]. The discussions were conducted with the 19 participants in small groups of 2-9, each lasting approximately 60 minutes. The sessions were audio-recorded and transcribed verbatim for subsequent thematic analysis. A comprehensive overview of the methodological process and insights from thematic analysis can be found in a separate publication and associated protocol paper [28,32]. As aforementioned, qualitative phase participants completed the Three-Factor Eating Questionnaire-R18 (TFEQ-r18), a psychological tool used to assess eating behaviors, prior to study enrolment [30].

The quantitative phase involved the administration of four validated instruments to a separate group of 50 participants: the Body Image Disturbance Questionnaire (BIDQ), the Short Form Food

Frequency Questionnaire (SF-FFQ), the TFEQ-r18, and a social influence questionnaire (SIQ) [33–35]. All questionnaires rely on self-reports and were administered to participants using Research Electronic Data Capture (REDCap) tools hosted at the University of Auckland [36,37]. Participants were given one week to complete all surveys prior to expiry.

Each questionnaire was administered to assess a different facet of nutrition intake and behaviour. The BIDQ was used to determine the extent of body image disturbance experienced by participants [33]. BIDQ scores range from 1 to 5, where higher scores indicate greater body image concerns. The TFEQ-r18 is a tool used to assess disordered eating behaviours. Eating behaviours are evaluated in three realms; cognitive restraint, emotional eating, and uncontrolled eating [30]. Results of this survey allow for comment on the extent of disordered eating and investigation of associations between these behaviours and social media use.

The SS-FFQ and ARFS were used to evaluate dietary intake. The SF-FFQ asks participants to recall food intake over the preceding three months and considers an extensive variety of foods from each of the main food groups [34]. The Australian Recommended Food Score (ARFS) was then used by the student researcher to determine individual and cohort diet quality, with higher scores reflecting better adherence to recommended dietary guidelines [38]. The ARFS scoring tool was adapted to suit SF-FFQ responses. Finally, the SIQ, which includes four items with a 7-point Likert scale, was administered to measure the effect of social influence [35]. In tandem with collated qualitative insights, the validated surveys aid in the formation of a greater understanding of the dynamic relationship between dietary intake and behaviour, body image, and social media use.

2.4. Data Analysis

Thematic analysis was conducted on the focus group transcripts using the six-phase approach outlined by Braun and Clarke [32,39]. This method facilitated the identification of key themes related to body image disturbance and dietary behaviors, which were used to contextualize the quantitative findings. Quantitative data were analyzed using SPSS version 26 [40]. Descriptive statistics were calculated for both BIDQ and ARFS scores. Pearson's correlation coefficient was employed to examine the relationship between diet quality (ARFS scores), body image disturbance (BIDQ scores), and disordered eating (TFEQ-r18 scores) among the 50 participants in the quantitative phase.

A multiple regression analysis was conducted to examine the relationship between SIQ and BIDQ, TFEQ, and ARFS. A *p*-value of <0.05 was considered statistically significant. Assumptions for multiple regression were tested via normality, a Durbin-Watson test result no less than 1 and no greater than 3, and a standardised residual result between -3.29 to 3.29.

2.5. Ethical Considerations

The research was approved by the Human Participants Ethics Committee at the University of Auckland on 9 June 2022 for three years (UAHPEC24366). Separate informed consent was obtained from participants in both phases. All data were anonymized to ensure confidentiality, and participants were informed of their right to withdraw from the study at any time.

3. Results

The qualitative phase of this study aimed to explore how social media influences the body image and eating patterns of young women aged 18–24 in Aotearoa, New Zealand. Through semi-structured interviews, key themes were identified, shedding light on the complex relationship between social media exposure and body image perceptions, as well as eating behaviors. This section presents the qualitative results of the study, which examines how engagement with social media impacts body image and food relationships among young women in Aotearoa, New Zealand. The findings are organized around key themes identified through qualitative analysis, providing insights into the complex links between social media usage, body image perceptions, and eating behaviors.

3.1. Engagement with Social Media Platforms and Body Image Perceptions

The study revealed that social media platforms propagate unrealistic beauty ideals through image manipulation and the facilitation of negative social comparisons. The predominant themes indicate that constant exposure to these narrow views of beauty can contribute to negative self-perception and body dissatisfaction among young female platform users.

Table 1. Summary of Themes Related to Social Media and Body Image Perceptions.

Theme	Description	Quotes
Unrealistic Beauty Standards	<i>Social media promotes unattainable beauty ideals through image manipulation.</i>	<i>"I've seen a lot of those like...people showing what they look like when they've photoshopped themselves." (Participant 7)</i>
Social Comparison	<i>Social media facilitates comparisons to idealized standards, intensifying appearance fixation.</i>	<i>"The comparison part of social media is really, really strong." (Participant 2)</i>
Pressure to Conform	<i>There is pressure to conform to beauty standards and dietary practices seen on social media.</i>	<i>"You feel like you have to follow the latest diet trend to fit in." (Participant 15)</i>
Food Guilt and Disordered Eating	<i>Diet culture on social media leads to food guilt and disordered eating behaviors.</i>	<i>"Every time I eat something 'bad,' I feel so guilty because of what I see online." (Participant 5)</i>
Positive Influence	<i>Social media can also provide positive learning experiences and body acceptance.</i>	<i>"I have learnt from social media posts on how I can improve how I see myself." (Participant 5)</i>

3.2. Social Media Influence on Eating Behaviors and Attitudes Towards Diet

The study also assessed social media's impact on young women's relationships with food. The results highlighted how social media often promotes unrealistic diet and nutrition advice, leading to unhealthy attitudes and behaviors.

Table 2. Social Media's Influence on Eating Behaviors.

Sub-theme	Description	Quotes
Need for social media in Dieting	<i>Young women turn to social media for dieting advice, often encountering unrealistic diets.</i>	<i>"I've gone to different websites to find new diets...but it goes well for the first couple of weeks and then I get tired." (Participant 7)</i>
Nutrition and Social Life Influence	<i>Social media often neglects the social and cultural aspects of nutrition.</i>	<i>"Nutrition is so much more than just food; it's about your social life." (Participant 1)</i>
Nutrition Influence in social media	<i>Social media content focused on diet and fitness often promotes unhealthy behaviors.</i>	<i>"Posting what I eat in a day...it's very restrictive and sets unrealistic standards." (Participant 12)</i>
Social Media Influence on Dieting	<i>Social media is a popular source for recipe inspiration and nutritional guidance, though often lacking credible expertise.</i>	<i>"There's heaps of Instagram influencers...providing nutritional advice." (Participant 2)</i>
Food Eating Influence	<i>Social media shapes young women's eating habits and attitudes, often promoting disordered behaviors.</i>	<i>"I go on social media and see the messages about eating healthy...it starts a whole negative cycle." (Participant 5)</i>

3.3. Cultural and Contextual Factors Unique to Aotearoa, New Zealand

The discussions on sociocultural contexts revealed that social media's impact on body image and food relationships is shaped by the unique cultural backdrop of Aotearoa, New Zealand. The study critiques the dominance of Western-centric notions of health and emphasizes the need for culturally sensitive interventions.

Table 3. Cultural and Contextual Factors Influencing Social Media Impact.

Theme	Description	Quotes
Communities and Culture on Recipes	<i>The influence of the community and cultural backgrounds on food preferences and social media engagement.</i>	"Westernized recipes...are not relatable or engaging for a young audience from different cultures." (Participant 3)
Cultural Context Effect on Dieting	<i>Cultural upbringings significantly shape attitudes and behaviors around food and dieting.</i>	"Food is so much more than just what we eat; it's the context in which we eat it." (Participant 9)
Cultural Appropriation	<i>The appropriation of ethnic food by white social media influencers contributes to cultural erasure.</i>	"It annoys me when this food is taken from a different culture and a white person is cooking it." (Participant 7)
New Zealand Culture on Body Image	<i>The narrow definition of health in New Zealand often excludes minority groups, contributing to poor body image among young women.</i>	"Health is often visualized as abled, white, slim, which is not inclusive." (Participant 1)

3.4. Diet quality, disordered eating, and body image disturbance

The quantitative phase of this study involved the assessment of diet quality via SF-FFQ and associated ARFS scores, and body image disturbance via BIDQ administration. Disordered eating behaviours were assessed for both research phases using the TFEQ-r18. All realms of the TFEQ-r18 were assessed for the qualitative phase, however, cognitive restraint cannot be reported for the quantitative phase.

3.4.1. Diet quality

Adapted ARFS scores were calculated for the participants to indicate preliminary diet quality. Of the young women (n=50), almost a third (30%) had a diet quality classified as 'low', with an additional 24% classified as having a 'moderately' healthy diet.

3.4.2. Disordered eating behaviours; cognitive restraint, uncontrolled and emotional eating behaviours

The TFEQ-r18 was administered to all participants (n=69). A significant proportion of young women demonstrated moderate or high levels of uncontrolled eating and emotional eating. For uncontrolled eating, 45% of participants displayed moderate levels, and 10.5% exhibited high levels. In terms of emotional eating, 36.5% of participants demonstrated moderate levels, while 15.5% exhibited high levels.

3.4.3. Body image disturbance

The majority of young women who completed the pre-intervention BIDQ (n=50) demonstrated mild to moderate body image disturbance (80%; mild to moderate 72%, moderate to severe 8%), indicating "occasional distress and mild functional impairment". Scores above 20 generally warrant further clinical assessment; only 4 participants (8%) indicated notably distressing body image concerns.

3.4.4. Multiple linear regression analysis

Test associations between ARFS scores and BIDQ scores were non-significant ($R=0.155$, $p=0.282$). Associations between the ARFS and disordered eating patterns were also non-significant and weak (uncontrolled eating $R=0.33$, $p=0.823$; emotional eating $R=0.002$, $p=0.991$).

Regression analysis indicated a notable relationship between body image disturbance and uncontrolled eating, however, this was not significant ($R=0.259$, $p=0.069$). The relationship between BIDQ scores and emotional eating was weaker than that for uncontrolled eating ($R=0.163$, $p=0.259$).

Regarding social media use, associations were tested between body image disturbance, disordered eating behaviours, and self-reported social media use including; frequency of social media use for contacting others, familiarity with social media, frequency of posting, frequency of engagement with content, and use of social media to source health-related information. A significant relationship was found between body image disturbance and level of social media familiarity ($R=0.326$, $p=0.02$).

The analysis revealed no significant relationships between age and the various measures. Age also did not significantly correlate with the frequency of social media use for contacting, familiarity with social media, or health-seeking behaviors on social media, suggesting that age may not be a critical factor influencing these variables in the context of this study. Associations between social influence, diet quality, and body image disturbance were explored, however, no significant relationships were found.

Table 2. Multiple regression analysis results for each tested variable including Body Image Disturbance (BIDQ), Social Influence Questionnaire (SIQ), Australian Recommended Food Score (ARFS), and the two dimensions of the Three-Factor Eating Questionnaire (TFEQ: Uncontrolled Eating and Emotional Eating).

<i>Variable a</i>	<i>Variable b</i>	<i>p-Value</i>	<i>Effect size (correlation coefficient)</i>
Uncontrolled eating (TFEQ)	<i>Social Media Contact Freq.</i>	.802	0.036
	<i>Social Media Familiarity</i>	.263	0.161
	<i>Social Media Post Freq.</i>	.380	0.127
	<i>Social Media Engagement Freq.</i>	.855	0.026
	<i>Social Media Health Seeking</i>	.459	0.107
Emotional eating (TFEQ)	<i>Social Media Contact Freq.</i>	.728	0.050
	<i>Social Media Familiarity</i>	.732	0.050
	<i>Social Media Post Freq.</i>	.834	0.030
	<i>Social Media Engagement Freq.</i>	.232	0.172
	<i>Social Media Health Seeking</i>	.702	0.055
Body image disturbance (BIDQ)	<i>Social Media Contact Freq.</i>	.600	0.076
	<i>Social Media Familiarity</i>	.020*	0.328
	<i>Social Media Post Freq.</i>	.443	0.111
	<i>Social Media Engagement Freq.</i>	.423	0.116
	<i>Social Media Health Seeking</i>	.123	0.221
	<i>ARFS</i>	.282	0.155
	<i>Uncontrolled Eating</i>	.069	0.259

	<i>Emotional Eating</i>	.259	0.163
<i>Social influence</i> (<i>SIQ</i>)	<i>ARFS</i>	.518	0.094
	<i>BIDQ</i>	.958	0.008
	<i>Uncontrolled Eating</i>	.842	0.029
<i>Diet Quality</i> (<i>ARFS</i>)	<i>Emotional Eating</i>	.630	0.070
	<i>Uncontrolled Eating</i>	.823	0.033
	<i>Emotional Eating</i>	.991	0.002

4. Discussion

While previous research has established a connection between social media exposure and negative body image, the impact of this exposure on dietary behaviors, specifically diet quality and disordered eating patterns, remains underexplored. This study addresses these gaps by examining the relationships between social media influence, body image disturbance, eating behaviors and diet quality in young women aged 18–24, a demographic particularly susceptible to social pressures regarding appearance.

The study found that while body image disturbance did not significantly correlate with diet quality, social media familiarity was significantly associated with higher body image disturbance. Additionally, a considerable proportion of participants exhibited disordered eating behaviours, with a notable relationship between uncontrolled eating and body image concerns. However, such behaviours were only weakly associated with social media use. However, the focus group discussions revealed that social media remains a significant context where young women navigate their body image and eating habits, often leading to unhealthy comparisons and increased dissatisfaction with their appearance.

A noteworthy proportion of participants indicated low diet quality and mild body image disturbance. It is becoming frequently apparent that extended social media use can have damaging effects on the self-perception of young women [2–5,7,8,21]. Several sub-themes were identified via focus group discussions which illuminated the potential and harms of social media use for nutrition purposes. Participants frequently experienced negative body image perceptions influenced by unrealistic beauty standards propagated on social media. Many expressed feelings of guilt and pressure to conform to idealized images, which exacerbated disordered eating behaviors.

Social media noise likely results in confusion rather than informed users due to excessive and low-quality information [41]. A probable contributor to this is algorithms which favor popularity, and therefore beauty standards; algorithms do not promote, or push based on quality of evidence or professional credentials [42]. It is left to the user to discern fact from fiction when consuming nutrition information, a task which is difficult without an education in health or nutrition.

The social contagion of disordered eating behaviours may permeate via social media, from one's inner circle to highly influential encounters online, leading to an overt "social pressure to be thin" [43,44]. Instagram is saturated with weight-loss messaging and harmful dietary advice, which fosters poor body image and nutrition misinformation (37). For example, social media commonly reinforces one-dimensional diet messaging through body ideals (i.e., "she eats this way, therefore her body is this way" or "she achieves the standard of beauty, therefore her commentary on dietary intake must be correct"). There is little nuanced discussion of genetics, environmental, and other pertinent external influences on nutrition status. The omission of these influences in "Insta norms" such as "fitspiration" can lead to an inflated sense of personal responsibility and, subsequently, a harmed perception of self [9,43].

Despite the obvious pitfalls of platforms like Instagram, this study found limited associations between social media use and diet quality, unlike some studies that suggest social media influences eating behaviors more directly [3–5]. No significant relationship was found between social media influence or use and actual diet quality or disordered eating. Conversely, studies by Holland & Tiggemann (2016) and Fardouly et al. (2015) identified social media as a significant factor in body

dissatisfaction, leading to unhealthy eating behaviors [23,24]. This may indicate that while social media significantly affects perceptions of body image, its direct impact on eating behaviors may be mediated by other factors such as individual psychological traits or external support systems [24]. The nature of social media content consumed by participants or the possibility that other factors, such as personality traits or environmental influences, mediate the relationship between social media exposure and eating behaviors, is likely [45–49].

Additionally, our findings could reflect the growing awareness of media literacy and body positivity movements, which may buffer the negative impact of social media [50–52]. The social cognitive theory suggests that behaviors are influenced by personal, environmental, and behavioral factors, including observational learning from media. This posits that individuals are becoming more adept at critically evaluating the content they consume, which reduces its direct influence on their eating behaviors [53]. As the focus group results demonstrated, some participants were able to critically evaluate the unrealistic standards set by social media and resist conforming to harmful dietary trends. Several participants in this study acknowledged the growing awareness of media manipulation and unrealistic portrayals on social media, which may have allowed some individuals to develop resilience against the harmful effects of these platforms.

A significant body of research, including systematic reviews and meta-analyses, has highlighted how social media exacerbates body image issues and disordered eating behaviors, particularly among young women [9,22]. Studies have demonstrated that increased exposure to idealized body images on social media platforms correlates with body dissatisfaction, restrictive eating, and binge eating behaviors [9]. However, this study's findings challenge these findings, indicating that the relationship might be context dependent. The Body Image Dissatisfaction Model suggests that the internalization of media ideals is not universal and may depend on individual differences in self-esteem, media literacy, and societal attitudes towards body image [54]. Our findings suggest that social media may no longer universally dictate body dissatisfaction and disordered eating behaviors in this demographic, possibly due to these mediating factors.

Cultural or geographical factors, for example, might attenuate how social media influences body image and eating behaviors [4]. Cultural values, societal norms, and exposure to different types of content can vary greatly between regions. For example, New Zealand culture places a significant emphasis on body diversity, health, and fitness, which could promote more positive attitudes toward body image and less susceptibility to disordered eating behaviors [55]. Conversely, studies conducted in other countries with stronger "thin ideal" cultural norms, such as the US or Western Europe, may find a more pronounced relationship between social media influence and eating behaviors [4]. In countries like New Zealand, where this study took place, a greater emphasis on healthy eating campaigns and critical media consumption may mitigate the negative effects of social media [32,56]. Several participants in this study acknowledged the growing awareness of media manipulation and unrealistic portrayals on social media, which may have allowed some individuals to develop resilience against the harmful effects of these platforms.

One limitation of the study is the relatively small sample size, which may limit the generalizability of the findings. The sample size of 50 participants, while appropriate for a feasibility RCT [32], may have limited the power to detect significant relationships, and a larger sample may yield different results. Secondly, the cross-sectional design of the study restricts the ability to draw causal conclusions about the relationships between social media exposure, body image disturbance, and eating behaviors. We cannot conclusively determine whether social media influences body image and eating behaviors or if individuals predisposed to these issues are more likely to engage with certain types of social media content. The specific social media platforms and content consumed by participants were not deeply explored, which could account for the differences between our findings and those of other studies. Another potential limitation is the reliance on self-reported data, which can be subject to biases such as social desirability. The dietary intake assessment questionnaire selected for the quantitative phase of the research, the short-form food frequency questionnaire, asks participants to recall intake over a preceding three-month period [34]. Food frequency questionnaires

are notoriously prone to recall and underreporting bias, which may preclude the validity of results [57,58].

Future research should explore these relationships longitudinally to better understand the directionality of these associations. It would be valuable to investigate the specific types of social media content consumed (e.g., fitness influencers versus body-positive content) and their differential impacts on eating behaviors and diet quality [59]. Furthermore, exploring the role of cultural and geographical factors in shaping the relationship between social media, body image, and eating behaviors could provide more insights. For example, investigations into potential moderating factors, such as the role of social support or individual psychological resilience, in mediating the impact of social media on both body image and eating behaviors is needed; as well as larger and more diverse samples to provide a broader perspective on how these relationships manifest in different demographic groups.

Finally, for dietitians and healthcare providers, future studies could focus on interventions aimed at increasing media literacy and promoting positive body image to mitigate any potential negative effects of social media [32,56,60]. The fostering of these skills would likely be beneficial to clinical work with young people, whereby the provision of social media advice alongside general nutrition guidance could act to build confidence in content quality discernment and protection against harmful body ideals.

It is vital to gain a richer understanding of how social media algorithms and their influential users impact the nutrition status of young women. Beyond comprehension, it is important to investigate how best to utilise social platforms to improve the body image and dietary intake of young people. This study may inform future research attempting to achieve such objectives. The Daily Health Coach feasibility trial is a pilot RCT evaluating the impact of a 3-month healthy lifestyles program on Instagram for young women in Aotearoa, NZ. We call for similar research to be undertaken with distinct population groups in order to collectively map how best to navigate social apps from the practitioner and research perspective.

5. Conclusions

This study investigates the relationship between body image, eating behaviours, and diet quality in young women aged 18–24, with a specific focus on the impact of social media. The findings indicate that social media exposure significantly influences body image disturbance in this demographic, contributing to heightened concerns about appearance. However, while social media plays a substantial role in shaping body image perceptions, its direct impact on eating behaviours, such as uncontrolled and emotional eating, and diet quality, is less pronounced. The study reveals only weak correlations between social media influence and actual eating patterns or diet quality, suggesting that while social media fosters body image concerns, other factors such as media literacy, cultural attitudes, and individual personality traits may moderate its effect on dietary behaviours. These results highlight the complexity of the relationship between body image, eating behaviours, and diet quality, indicating that interventions should address the psychological drivers behind these concerns, rather than solely focusing on reducing social media exposure.

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