Evaluating the implementation of an eating disorder prevention programme in the New Zealand tertiary environment

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Abstract

Background: Eating disorder (ED) rates increased during the COVID-19 pandemic, indicating the need for increased efforts in ED prevention work. The Body Project is an ED prevention programme that has demonstrated successful reduction in ED onset in young females worldwide. It targets the risk factor of thin-ideal internalisation by encouraging participants to challenge societal beauty standards through written and verbal exercises. The primary objective of this study was to implement the Body Project in the New Zealand (NZ) tertiary environment and gather qualitative experience from student participants and other stakeholders involved in the pilot implementation.

Methods: Semi-structured interviews were conducted online with student participants (n=6), peer educators (n=3) and counsellors (n=3) that were involved in the training and implementation of the Body Project at a university in NZ, based on convenience sampling from the wider study. A pragmatic approach to qualitative research was used, to gather real-world perspectives. Codes and themes were derived from interview data.

Results: Interviewees (n=12) were all female, of which majority (50%) were of New Zealand European/Pakeha ethnicity. Three key themes emerged from analysis: *Programme structure and delivery* including subthemes training and session logistics; *Influences on engagement in the Body Project* including subthemes relatability, inclusivity, group dynamics, and personal concerns or perceptions as influencing factors; *Impact of the Body Project* including subthemes changes participants made since completing the programme and perceived value. Results found that the Body Project improved body satisfaction for 66% of participants (n=4). Participants valued peer educator relatability because it made them feel more comfortable participating. All participants and peer educators could relate to the thin ideal personally. To improve the programme, peer educators should have more training on group management and differentiating behavioural challenges from body activism; and ongoing support from counsellors to maintain boundaries, minimise pro-thin discussion and process personal triggers.

Conclusion: The findings of this study highlight the positive impact of the Body Project for body satisfaction, and the programme was well received, with all participants recommending to a friend. To enhance programme effectiveness, improvements in peer educator training, alongside ongoing support from counsellors, are recommended.

Relevance of the programme should be further explored from different cultural perspectives in NZ, particularly Māori.
Key words: Body Project, eating disorder, body dissatisfaction, prevention programme, thin ideal, New Zealand

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List of Abbreviations

Abbreviation	Meaning
AN	Anorexia Nervosa
ARFID	Avoidant/Restrictive Food Intake Disorder
ASPEN	American Society for Parenteral and Enteral Nutrition
BAS	Body Appreciation Scale
BDI	Beck Depression Inventory
BDS	Body Dissatisfaction Scale
BED	Binge Eating Disorder
BFNE	Brief Version of the Fear of Negative Evaluation Scale
BIQLI	Body Image Quality of Life
BMI	Body mass index
BN	Bulimia Nervosa
BSI	Brief Symptom Inventory
BSQ	Body Shape Questionnaire
CBT	Cognitive behavioural therapy
CES-D	Centre for Epidemiologic Studies Depression Scale
COREQ	Consolidated Criteria for Reporting Qualitative Research
CREDS	Central Region Eating Disorder Services
DMS	Drive for Muscularity Scale
DRES	Dutch Restrained Eating Scale
DSM-5	Diagnostic and Statistical Manual of Mental Disorders, 5^{th} edition
EAT	Eating Attitudes Test
ED	Eating disorder
EDANZ	Eating Disorders Association of New Zealand
EDDS	Eating Disorder Diagnostic Scale
EDE-Q	Eating Disorder Examination Questionnaire
FBT	Family based treatment
IBSSR	Ideal Body Stereotype Scale – Revised
ICC	Intraclass correlation coefficient

MBAS	Male Body Attitudes Scale
MBSRQ	Multidimensional Body-Self Relations Questionnaire
MDDS	Muscle Dysmorphia Disorder Inventory
MESH	Medical Subject Headings
NZEDC	New Zealand Eating Disorder Clinic
OBCS	Objectified Body Consciousness Scale
OSFED	Other Specified Feeding and Eating Disorder
PANAS	Positive Affect and Negative Affect Scale
PD	Purging Disorder
PHQ	Patient Health Questionnaire
QOL	Quality of life
RSES	Rosenberg Self-Esteem Scale
SATAQ	Sociocultural Attitudes Towards Appearance Questionnaire
SIEDS	South Island Eating Disorder Services
SOQ	Self-Objectification Questionnaire
WHO	World Health Organisation

CHAPTER ONE: INTRODUCTION

1.1 Summary and Justification for Research

Eating disorders (EDs) are disturbances in eating-related behaviours, that impact health and psychosocial functioning (American Psychiatric Association, 2013) and have some of the highest mortality rates of all mental disorders (Santomauro et al., 2021). A systematic review of studies from 2000-2018 that involved ED diagnoses established a predicted lifetime ED prevalence of 8.4% for women and 2.2% for men worldwide (Galmiche et al., 2019).

Interaction between several psychological, socio-cultural, and biological factors contribute to the development of an ED (Barakat et al., 2023; Cass et al., 2020; Stefanini et al., 2019). The origin of an ED is multi-faceted, with risk factors including gender, socioeconomic status, adverse events during childhood, and ethnic minority status (Barakat et al., 2023). Understanding these risks is important in terms of being able to diagnose EDs early or even prevent them through targeting modifiable risk factors such as body dissatisfaction, low self-esteem, or perceived pressure from the media (Marks et al., 2020; Rosewall et al., 2018; Yamamiya & Stice, 2023). Body dissatisfaction is the risk factor that is commonly targeted in ED prevention programmes, t

Demand for prevention of EDs has grown, as the COVID-19 pandemic caused global ED rates to surge (Devoe et al., 2023). In New Zealand (NZ), this increased rate of EDs (Hansen et al., 2021) coincided with a pandemic-related worsening of the healthcare worker shortage (Fenton et al., 2023). Publicly funded inpatient care in NZ is available in Auckland, Wellington and Christchurch. Outpatient services, which include family-based treatment (FBT) and cognitive behavioural therapy (CBT), are also available. As of March 2022, 81 people were waiting for consultation with the Auckland ED services team (Tupu Ora) (Auckland District Health Board, April 2022). Many people cannot afford to wait this long to access public care, so they turn to private treatment instead. However, the cost of private treatment in NZ is high, which poses a significant barrier to seeking help for an ED (Surgenor et al., 2022). Reducing barriers to seeking treatment is important, as timely ED treatment is a key factor influencing treatment outcome (Potterton et al., 2021). Early intervention may reduce the need for intensive or inpatient treatment in the future (Fukutomi et al., 2020).

Although EDs can arise at any age, a large-scale meta-analysis reports the median age for onset of eating and feeding disorders to be 18 years old (Solmi et al., 2022). This aligns with NZ statistics, as Te Whatu Ora (national public health service) published data showing that 15- to 19-year-old females had the highest hospital admissions for eating disorder-related symptoms out of any group in NZ: 280 out 567 hospitalisations in the year ending June 2021 (Te Whatu Ora - Health New Zealand, 2024) This age range indicates that EDs typically occur during high school to early in tertiary education. Hence, why many ED intervention programmes, including the Body Project (Stice & Presnell, 2007) and Media Smart (Wilksch et al., 2018), target younger populations rather than adults. University may be an optimal setting for psychological intervention, including ED prevention, as it is a crucial time of development (Harrer et al., 2020). In NZ, all universities offer a range of student health, counselling, and support services. However, to the best of the author's knowledge, and after conversation with Massey University Student Health and Counselling, it was established that there were no other ED prevention-specific programmes being run in the NZ tertiary education space.

The Body Project is a cognitive dissonance-based programme that aims to reduce the risk of ED onset through targeting a reduction in thin-ideal internalisation (Stice & Presnell, 2007). The thin ideal refers to the socially constructed notion that the thinner the body, the more attractive and desirable a person becomes, leading to a sense of self-dissatisfaction if one cannot reach this unrealistic goal despite changing lifestyle behaviours. The Body Project is unique in that group sessions are facilitated by peer educators who have been trained by qualified counsellors, rather than run by the counsellors themselves. It involves participants taking part in a series of verbal, written and behavioural exercises that get them to critique the thin ideal in their own words. Results have shown that after taking part in the Body Project, participants may have significant reductions in body dissatisfaction, restrained/disordered eating, and ED symptoms (Hudson et al., 2021; Luo et al., 2021; Stice et al., 2023; Stice et al., 2021). The Body Project has been successful worldwide, implemented in countries such as the United States (Stice, Rohde, et al., 2017), Brazil (Hudson et al., 2021), China (Luo et al., 2021) and Turkey (Ergut & Keser, 2022). The Body Project was effective in reducing ED onset in a range of different cultural and ethnic groups, including Asian, Hispanic, Native American and Pacific groups (D'Adamo et al., 2023).

It cannot be assumed that the same effects of the Body Project will be replicated in the NZ context due to cultural, social, and environmental differences. Therefore, a specific study looking at the efficacy of the Body Project in NZ needed to occur.

The Body Project has already been utilised in NZ, with the New Zealand Eating Disorders Clinic (NZEDC) providing an adapted version of the Body Project, run by an experienced ED clinician for relapse prevention rather than initial ED prevention (New Zealand Eating Disorders Clinic, 2024). There is currently no published qualitative data examining the implementation process in NZ. Other countries have undertaken qualitative studies of the Body Project and found that adaptations needed to be made, such as changing the script to include more gender-neutral language (Ross, 2022). This study aimed to gather qualitative responses from those involved in the implementation of the Body Project within Massey University to identify any necessary adjustments before potential broader implementation in the NZ tertiary space. Broader implementation is needed in the tertiary space, as current ED prevention work is not adequate. Qualitative interviews with participants, peer educators and counsellors were undertaken to ensure that the implementation process was followed from start to finish—from training to execution of the Body Project sessions.

1.2 Aims and Objectives

1.2.1 Aims

- To implement the Body Project within a tertiary education system.
- To evaluate the effectiveness of implementing the Body Project in the New Zealand tertiary environment.

1.2.2 Objectives

- To qualitatively explore counsellor, peer-educator and student impressions and experiences of the Body Project intervention through individual in-depth interviews conducted online.
- To determine if any adjustments to the Body Project are necessary to adapt to the New Zealand context, and explore what the changes may be.

- To explore perceived barriers and facilitators to engagement in the Body Project.

1.2 Thesis Structure

Chapter One introduces the purpose and scope of the research, as well as outlining aims and objectives. Chapter Two is a narrative review of relevant literature, exploring the background of eating disorders, the current action to tackle the treatment of EDs in New Zealand, and the success of a proposed prevention programme (the Body Project) in international settings. Chapter Three has been prepared as a research manuscript and includes an introduction, research methods, results from semi-structured interviews, and discussion around the efficacy of the Body Project in the NZ tertiary environment. Chapter Four concludes the results, whether they met aims and objectives, and discusses the limitations of the research.

1.3 Researchers' Contributions

Table 1.1 Contributions of researchers

Researcher	Contribution
Cate Davis	MSc Nutrition and Dietetics student. Primary thesis author, involved in ethics application, participant recruitment, allocation and management, survey distribution, fidelity rating and conducting interviews.
Prof Ajmol Ali	Primary academic supervisor. Coordinated recruitment and training of peer-educators and counsellors, funding and study design. Advised on thesis structure, content and ethics application.
Prof Rozanne Kruger	Academic supervisor. Advised on study design, ethics application, thesis structure and content.
Garalynne Stiles	Academic supervisor. Advised on study design, ethics application, fidelity training, clinical trial registration, thesis structure and content.

Researcher	Contribution
Prof Eric Stice	Overseas consultant, Stanford University. Co-founder of the Body Project, responsible for training of counsellors and advising the study.
Prof Heather Shaw	Overseas consultant, Stanford University. Responsible for fidelity training of researchers.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

An estimated 70 million people worldwide suffer from some form of eating disorder (ED) (Smith et al., 2023), and EDs are one of the leading causes of disability in young females, although cases in males are rising (Dane & Bhatia, 2023). The Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5) identifies several categories of ED: Anorexia Nervosa (AN), Bulimia Nervosa (BN), Binge Eating Disorder (BED), Avoidant/Restrictive Food Intake Disorder (ARFID), Other Specified Feeding or Eating Disorder (OSFED), Unspecified Feeding or Eating Disorder, Pica and Rumination Disorder (American Psychiatric Association, 2013). This review will focus on the disorders that have body dissatisfaction or thin-ideal internalisation as a risk factor. Body dissatisfaction was one of the factors that predicted the onset of BN, BED and purging disorder (PD), which fits into the category of OSFED (Stice, Gau, et al., 2017; Yamamiya & Stice, 2023). Other research has acknowledged that thin-ideal internalisation (the degree to which one strives to obtain a thinner body) was also one of the predictive factors of AN (Charrat et al., 2023; Del Casale et al., 2023). This review aims to explore the risk factors for EDs and what prevention work is currently being done.

This review will also critically evaluate current ED prevention programmes, such as the Body Project (Stice & Presnell, 2007), Media Smart (Wilksch et al., 2018) and BodyKind (Mahon et al., 2023). These programmes have resulted in beneficial outcomes, including reduced risk of ED onset (D'Adamo et al., 2023; Stice et al., 2020; Wilksch et al., 2018) and improved understanding of body image (Mahon et al., 2023). One of the most successful ED prevention programmes is the Body Project, which has demonstrated efficacy in both females (Stice et al., 2019) and males (Brown et al., 2017; Brown & Keel, 2015) and multiple ethnic groups (Hudson et al., 2021; Luo et al., 2021; Stice et al., 2021).

2.1.1 Search strategy

A search was performed using the following online databases: Discover, PubMed and Google Scholar. Medical Subject Headings (MeSH) terms were used in varying combinations, and relevant articles were selected (see Figure 2.1).

Date searched: December 2023 – October 2024

Search terms:
"Eating disorder*" OR "anorexia nervosa" OR "bulimia nervosa" OR "binge eating disorder*" OR "feeding and eating disorders"[MeSH]

WITH one of the following search terms;
zealand OR aoteoroa OR nz OR "New Zealand"[MeSH]
maori OR māori OR "Maori people"[MeSH]
price OR expense OR money OR financial OR cost OR "economics"[MeSH]
"risk factor*" OR "contributing factor*" OR "predisposing factor*" OR predictor* OR cause* OR "vulnerability factor" OR "risk factors"[MeSH]
"cognitive behav* therapy" OR cbt OR "cognitive behavioral therapy"[MeSH]
mortality OR "mortality rate" OR death OR "death rate" OR "mortality"[MeSH]
complications OR "side effects" OR problems OR challenges OR impacts OR "adverse effects"[MeSH]
"cognitive dissonance" OR "dissonance based" OR "cognitive dissonance"[MeSH]
intervention OR program* OR "prevention program*" OR "early medical intervention"[MeSH] OR "psychosocial intervention"[MeSH]
therapy OR psychotherapy[MeSH]
prevalence OR incidence OR "prevalence"[MeSH]
"body project" OR "cognitive dissonance" OR "cognitive dissonance"[MeSH]
tertiary OR university OR 'universities"[MeSH]

Limits applied: Since 2004

Figure 2.1 Search Strategy

2.2 Impact of eating disorders on health and economy

Eating disorders have severe consequences for both psychological (Udo & Grilo, 2019) and physical health (Smith et al., 2023), with one of the highest mortality rates for all mental disorders due to medical comorbidities and increased risk of suicide (Hambleton et al., 2022). It was estimated that between 55% and 95% of people with a diagnosed ED will also experience a comorbid psychiatric disorder at some stage in their life (Hambleton et al., 2022). For example, AN, BN and BED have all been associated with increased risk of mood disorders, anxiety disorders, substance use disorders and personality disorders (Udo & Grilo, 2019). The risk of physical comorbidity also increases, as EDs can cause bradycardia (low heart rate) and osteoporosis, among other serious side effects (Dalle Grave et al., 2021). Refeeding syndrome is one of the major physical risks that can arise from an ED, as it can result in heart failure, respiratory failure and seizure if not addressed straight away (Cass et al., 2020).

Psychosocially, EDs have been shown to negatively impact engagement and productivity in education, work, family and social environments, as well as decrease general wellbeing and quality of life (van Hoeken & Hoek, 2020). Family members are also impacted by the stress of being a carer for a person with an ED (Stefanini et al., 2019) and Surgenor et al. (2022) found that 93.2% of people who cared for a person with an ED felt there were significant or very significant impacts on family life. Being a carer can be psychologically, financially, time and resource-draining. Surgenor et al. (2022) found the median amount of money ED carers lost per year was NZ$11,650 worth of wages (based on income in 2020), which can further strain the already complex relationship dynamic between family and the ED patient. It should be noted that not all people suffering from an ED will have a designated 'carer,' and Surgenor et al. (2022) may have over-recruited those who felt a significant financial burden, so the median loss of wages may not be accurate or representative of the wider NZ population.

The cost of ED treatments for New Zealand's healthcare system is currently unknown. It has been estimated that the total economic cost of EDs from 2018 to 2019 in the US was US$64.7 billion, equating to US$11,808 per affected person (Streatfeild et al., 2021). This estimation had several limitations as it could not control for confounding comorbidities, include all associated costs (such as dietitian appointments or group therapy), or estimate the long-term costs associated with EDs (such as osteoporosis). An Italian study looking at 170 patients with AN found that 39.4% were readmitted to hospital at least once within 12 months of discharge (Marzola et al., 2021). There is an acknowledged gap in the literature around ED readmissions in NZ. However, one may assume that this 'revolving door' phenomenon of rehospitalisation with an ED that occurs worldwide (Khalsa et al., 2017) would also occur in NZ. Hospitalisation substantially increases ED-related costs to healthcare systems (Weissman & Rosselli, 2017), and therefore, it would be beneficial to prevent EDs from developing to a point where hospitalisation is needed for medical stability. Focus on preventative work should be prioritised as a public health initiative, as it could reduce strain on outpatient services and reduce costs associated with hospital admissions.

2.3 Barriers to accessing treatment

Stigmatisation, shame, denial and failure to acknowledge the severity of an individual's ED are some of the key barriers when it comes to accessing ED treatment, potentially even more of a barrier than practicalities such as cost (Hamilton et al., 2022). External stigmatisation may present as the public misconception that someone with an ED is attention-seeking or being vain (Mills et al., 2023). Moreover, those with EDs were perceived to be more responsible for their illness when compared to other psychological disorders (Hamilton et al., 2022). Blaming someone for their illness can lead to feelings of shame or guilt around their ED, which are associated with social withdrawal and decreased help-seeking behaviours (Mills et al., 2023). Other common factors preventing treatment-seeking are denial of one's ED severity and not wanting to burden or worry other people with their problems (Ali et al., 2020). Ethnicity and body mass index (BMI) can also impact ability to access treatment, as Clark et al. (2023) found that Māori patients reported being denied ED support due to having a normal BMI.

There is a stereotypical view that EDs only occur in "SWAGs" (Skinny White Affluent Girls) (Clark et al., 2023), which might influence the perception that eating disorders do not affect Māori as greatly as Pakeha (New Zealanders of European ethnicity) populations. However, research has established higher rates of developing BN in Māori relative to non-Māori (Lacey et al., 2020), which was due to both social and systematic barriers (Clark et al., 2023). Social barriers include stereotypical views of what an ED should look like physically, and the shame, stigma or discrimination that may be experienced if an individual presents with disordered eating symptoms but does not have the extremely low BMI expected with AN. Systematic barriers include inaccessible service locations and poor assessment methods from health professionals. This poor diagnostic process means EDs in Māori are likely being underdiagnosed (Lacey et al., 2020). Therefore, any NZ-specific research into prevention or treatment should include an ethnically diverse sample to ensure that all cultural groups are being reached.

According to the Eating Disorder Association of New Zealand (EDANZ), EDs, in general, are incredibly difficult to treat due to a variety of reasons, including slow diagnosis from primary healthcare practitioners and lack of access to effective treatment (Eating Disorder Association of New Zealand, 2018). In NZ, funded specialist eating disorder services are available in Auckland (Tupu Ora), Wellington (Central Region Eating Disorder Services (CREDS)) and Christchurch (South Island Eating Disorder Services (SIEDS)). These urban-based settings pose an access issue for rural communities, especially if there are financial barriers, such as a lack of car or alternative transport options. Furthermore, the facilities are extremely limited in terms of bed space for inpatient care, with only 21 beds across the three cities (Eating Disorder Association of New Zealand, 2024).

Timely access to ED treatment is an important factor influencing ED prognosis, yet a systematic review found individuals with AN wait an average of 2.5 years before they receive treatment for their ED (Austin et al., 2021), A study on Australian adolescents found that only 10.1% of participants (n=1002) with diagnosed EDs had ever sought help for a body image issue (Fatt et al., 2020). It should be noted that in this study, ED diagnosis was self-reported, and help-seeking was in relation to body image, not just seeking help for their ED in general. Nonetheless, it demonstrates that there are significant barriers when it comes to accessing ED treatment. Evidence suggests that delaying treatment is an indicator of poorer outcomes as it gives more time for maladaptive thoughts and behaviours to become engrained, making it harder to break habitual behaviours (Austin et al., 2021). Early intervention is therefore not only beneficial for individual outcomes but also from an economic perspective (Mills et al., 2023). Ideally, a service would be free for participants, accessible, and focused on preventative action. Little is currently known about preventative action against EDs being taken in NZ, thus highlighting a gap in the literature, and indicating the need for research into ED prevention in NZ.

2.4 Prevalence of eating disorders in New Zealand

In NZ, there was an estimated lifetime prevalence of 1.3% for BN and 0.6% for AN in 2006 (Oakley Browne et al., 2006), with the current prevalence unknown. However, it should be acknowledged that many EDs go undiagnosed, so the accuracy of the previous estimation may be incorrect. In the year ended June 2022, a total of 1,650 people were seen by the Te Whatu Ora

ED team (Te Whatu Ora - Health New Zealand, 2024), not including those seen in primary care or private practice. The most likely group to be seen by the ED team was 15- to 19-year-old females, followed by 20- to 24-year-old females (Te Whatu Ora - Health New Zealand, 2024). Typically, this indicates high school or university-age students. Targeting disordered eating behaviours in this younger population would therefore be valuable in potentially preventing ED development.

The COVID-19 pandemic resulted in a surge of both in-patient and outpatient eating disorder admissions worldwide (Devoe et al., 2023), and New Zealand was no exception, with Waikato Hospital inpatient admissions doubling from 2019 to 2020 (Hansen et al., 2021). The wait for public ED treatment therefore got longer, with 2021 data showing the average wait time between referral and face-to-face appointment was 61 days in Auckland (Auckland District Health Board, April 2022) and 114 days in Christchurch (Christchurch District Health Board, March 2022). To address increased requirements, in 2022, the NZ Government allocated an additional \$3.9m to the \$15.5m already assigned to eating disorder support (Beehive.govt.nz, 2022). Many individuals choose to access private treatment while waiting for government-funded treatment (Surgenor et al., 2022), which adds considerable financial stress on the already challenging situation of navigating an ED. New Zealand-based research by Clark et al. (2023) has found that the stress associated with the cost of private ED treatment and the need for time off work has resulted in financial guilt, which increases the likelihood of individuals choosing to discontinue treatment for their ED. The long wait lists and high financial cost of EDs for both individuals and the healthcare system highlights a need for more preventative efforts.

It is important to note that prevention of EDs is preferable to treatment once the ED has developed. Introducing an ED prevention programme in the NZ context would be different to other countries in that NZ has a publicly funded healthcare system, and therefore, a prevention programme could be funded by government initiative. New Zealand also has a very multicultural society, particularly among young people. Prior to COVID-19, international education was New Zealand's fifth-largest export industry, bringing in young people from multiple ethnicities and cultures – which the current government hopes to revive (New Zealand National Party, 2024). It would be imperative to hear directly from these young people if an ED prevention programme were to be introduced in NZ to make sure it is both culturally safe and applicable.

2.5 Risk factors for eating disorder development

Rather than being caused by a singular risk factor, EDs can develop due to multiple risk factors, which can be separated into modifiable and non-modifiable factors (Figure 2.2).

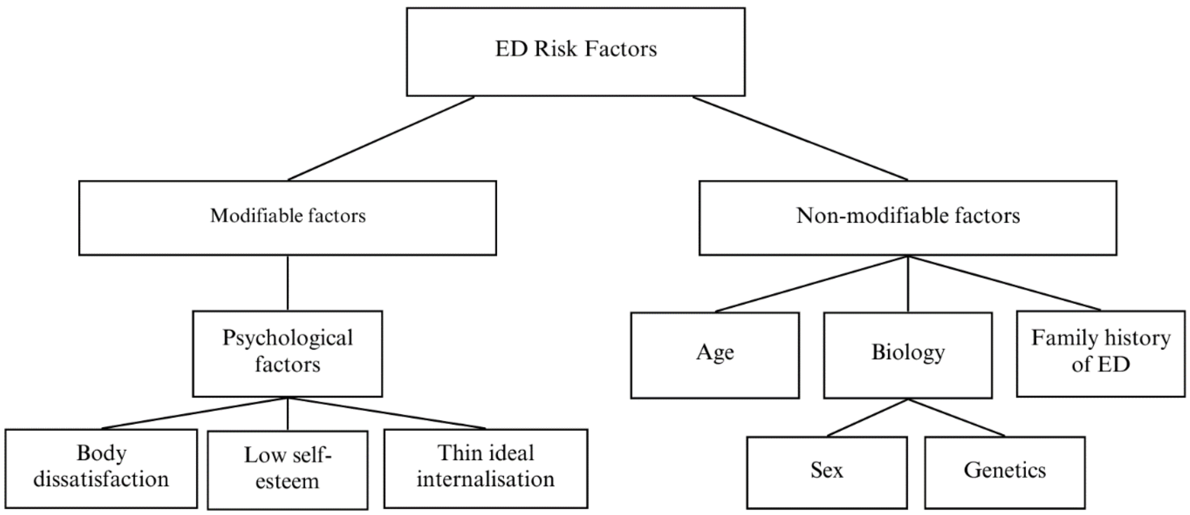

Figure 2.2 Risk factors for eating disorder development

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The genetic component of ED development is something that is still being explored, and thus far, eight gene loci have been identified as being associated with AN development (Watson et al., 2019). Eating disorders are also known to disproportionately affect females compared to males (Galmiche et al., 2019). For males, their earlier testosterone exposure, combined with higher circulating testosterone levels after puberty (compared to females), may be protective against eating pathology (Culbert et al., 2021), but influencing psychosocial factors need to be explored. Some suggest that rates in females are higher because they traditionally have more societal pressures around appearance and weight (Culbert et al., 2021), with low self-esteem and high body dissatisfaction increasing susceptibility to EDs for adolescent females (Rosewall et al., 2018). However, it should be noted that males too, may suffer from body dissatisfaction (Brown et al., 2017).

Body dissatisfaction is a significant risk factor for ED development and is becoming increasingly normative, particularly in young populations (Cleland et al., 2023). Ngā Kōrero Hauora o Ngā Taiohi, a 2018 youth wellbeing report on 12- to 24-year-old New Zealanders, found that almost half (46%) of participants identified body image as being one of their biggest concerns (O'Connell Rapira, 2018), ranking higher than getting good grades. It is important to clarify that body image concern or body dissatisfaction will not always result in an ED, so it is not a definitive cause on its own (Rosewall et al., 2018). Research suggests that disordered eating behaviours tend to arise in adolescence to reduce body dissatisfaction and weight-based stigma, including bullying or teasing from peers (Babbott et al., 2023). Therefore, it would be beneficial to target prevention programmes towards adolescents and young adults.

Linking closely with body dissatisfaction is the concept of thin-ideal internalisation (adopting the view that a thinner body is the ideal body type that females should strive to achieve). When an individual strives to reach this thin ideal but falls short, it can lead to body dissatisfaction. Society's portrayal of thin bodies can be seen everywhere, from magazines to television and social media. Some have suggested that the rate of EDs started rising in the late 20th Century, as magazines started promoting weight loss techniques and thin women were increasingly idolised (Kabakuş Aykut & Bilici, 2022). Today, engagement with fit inspiration or "fitspo" content on social media, which normalises excessive exercise and time spent preparing healthy meals, is increasing (Marks et al., 2020). A scoping review by Dane and Bhatia (2023) has shown that social media usage is closely linked to body image concerns and increased risk of disordered eating through social comparison. However, the above research did acknowledge that most studies were cross-sectional, and therefore, it cannot be certain whether the body image concerns arose because of social media, or whether the issues already existed but were exacerbated with increased social media usage. Dane and Bhatia (2023) suggest that it is individual risk factors (such as poor body image) in combination with the purpose for social media use (such as gratification from peers or search for body inspiration content) that strengthen the effects of any negative impacts of social media. Therefore, it is the thin idealisation and body dissatisfaction that may need to be targeted to reduce the risk of ED onset rather than the media *per se*.

2.6 Prevention of eating disorders

Many ED prevention programmes are designed to target young females (see Table 2.1), and they commonly target body image as a modifiable risk factor.

Table 2.1 Worldwide eating disorder prevention studies in the past 20 years.

Programme	Participants	Intervention	Results	Critique
Body Bright (Butterfly Body Bright, 2021)	Year 4-6 students (n=127) enrolled in Australian primary schools.	School staff education, culture guidelines and lesson plans that covered appearance-related teasing, unhelpful media messages, body inclusivity and appreciation, joyful movement, and thoughtful eating. Aimed to improve body image early and equip students with skills to help them build resilience to risk factors for body dissatisfaction and disordered eating patterns.	Statistically significant improvements in body image, body appreciation, and confidence to deal with appearance-related teasing.	Report was not in a peer-reviewed publication. Therefore, full methodology cannot be examined. Specific measure for body image was not stated. There was no control group. Participants were all from one school.
BodyKind (Mahon et al., 2023)	High school aged students aged 14+ (n=147)	Teachers delivered four lessons over four weeks, which were developed to create cognitive dissonance by encouraging students to think about costs associated with pursuing appearance ideals, and challenge diet culture myths. The lessons covered appearance bias, self-compassion, compassion for others and social media.	After completing the four lessons, 65.1% of participants (n=83) agreed that the curriculum helped them understand more about their own body image. Furthermore, 77% of participants reported that they have, or intended to apply lessons learnt from the programme in their personal lives.	Sample included ethnically diverse students from a low-socioeconomic area, who are not typically included in body image research. Researchers were unable to link individual pre-versus-post intervention results due to participant error in remembering personalised identification codes. There was also no control group. This meant effectiveness could not be established, only acceptance and feasibility. RCT data is yet to be published.
ProYouth (Bauer et al., 2013)	Aged 18+	An online programme that offered psycho-educative material, psychologist-led group sessions, and optional private counselling to enhance mental health literacy and awareness of EDs. Participants filled out a weekly questionnaire for automated feedback on ED risk and symptoms. If symptoms worsen, they were directed to an online counsellor	Within three months of participating, 9.5% of participants took up ED treatment, 7.8% intended to start treatment, and 43.1% reported they would seek help when in need. Of these potential help-seekers, 41.4% said this decision was directly related	The programme was not designed to be a treatment for those with high ED symptoms, but rather early intervention in directing them to seek help. Less of a prevention programme, more early intervention focus.

Programme	Participants	Intervention	Results	Critique
		or, if at severe risk, were advised to seek traditional healthcare treatment.	to their participation in ProYouth (Moessner et al., 2016)	
REbel (Eickman et al., 2018)	Middle to high school aged students, self-selected (n=71)	Peer educator led programme based on cognitive dissonance theory. REbel was run as a continuous programme all year, typically in 30 to 60-minute sessions, like an extracurricular club. Peer educators or "sponsors" were trained, and then had to score at least 70% on an exam that tested their training. They worked with a director to plan weekly content unique to their school. Students were given psycho-educational material to review each week, which was solidified in the sessions with the sponsor. Modules covered body image, eating disorders, mindful eating and exercise, self-worth, self-esteem, weight bias, bullying, appreciation of others and media literacy.	Students that went through REbel (n=48) had statistically significantly lower scores in eating restraint, eating concern, shape concern, weight concern and body checking measures compared to control students (n=23). Participation did not result in a reduction in weight bias.	RCT was conducted across two different schools. The control school had higher ED symptomatology at baseline. REbel was a continuous extra-curricular commitment which meant busier students may not be able to participate. Furthermore, there was a loss of students mid-year due to moving schools or graduating. Engagement in the programme would depend on how well the sponsor advertises and supports their students.
Student Bodies (Taylor et al., 2006)	18–25-year-old females considered to be at high risk for ED onset based on a Weight Concerns Scale (n=990).	Eight-week internet-based programme, with one session per week. Sessions were designed to reduce body weight/shape concerns through cognitive-behavioural therapy and journal prompts. The programme aimed to improve eating, sleeping, and exercise patterns to improve mental health and therefore body satisfaction. Sessions covered topics such as self-esteem, body image, exercise and basic nutrition information.	Meta-analyses found that taking part in Student Bodies resulted in mild-to-moderate improvement in ED-related attitudes, reduced negative body image and reduced desire for thinness at post-intervention and follow-up measures (between 12 weeks to 12 months). Participation also increased knowledge around healthy weight regulation, eating, and exercise, both post-intervention and at follow-up. (Beintner et al., 2012).	Six US and four German based RCTs were included from 1998 to 2007. Only two of the German studies provided follow-up data, so no long-term assumptions can be made about difference in efficacy in both countries.

Programme	Participants	Intervention	Results	Critique
The Body Project (Stice et al., 2019)	Females considered to be at high risk of ED development due to elevated body image concerns (n=7808)	Cognitive-dissonance based ED prevention programme that aimed to reduce thin-ideal internalisation. The programme got participants to challenge their perception of the ideal body through verbal, written and behavioural exercises. The programme ran over 4 sessions in total, and explored the origin of the thin-ideal, using role-play, letter writing and mirror-based exercises to reinforce ideas discussed in the sessions.	Significantly larger reductions in thin ideal internalisation, body dissatisfaction, dieting, negative affect and ED symptoms in dissonance-based group compared to minimal intervention group and alternative interventions. Greatest effect sizes were obtained when at least 4 sessions of the Body Project were completed, with a group size of ten participants.	Comparing to other interventions gives more meaningful reductions than comparing to an assessment-only group. The Body Project did not produce significantly larger reductions in ED related outcomes when compared to a mindfulness ED prevention programme. Some participants with body image concerns will have sub-threshold or threshold EDs prior to the programme, which blurs the line of prevention (Stice, Rohde, et al., 2017). Therefore, reductions in ED symptoms may be larger in these threshold ED populations compared to the general population.
Media Smart (Wilksch et al., 2018)	18–25-year-old females (n=316) seeking to improve body image	Media Smart originally comprised of school-based lessons that aimed to reduce media internalisation (the belief that you must look like those presented in the media). Media Smart – Targeted is the online adaptation of the programme, designed to be an interactive nine-module programme for young adults. New content included social media pressure, emotional regulation, and regular eating modules.	Participants from Australia and NZ who took part in Media Smart - Targeted (n=122) were 66% less likely than the control group (n=194) to develop an ED at 12-month follow up.	In this study, 69.6% (n=220) of participants already met ED criteria at baseline. Participants self-report their ED symptoms rather than be assessed through interview. Low implementation cost and fully online means the programme is suitable for rural areas or where there is a lack of availability for face-to-face services.

Note: Eating disorder (ED), randomised control trial (RCT), New Zealand (NZ)

Various approaches have been used in ED prevention work (see Table 2.1). For example, ProYouth aims to prevent ED onset by encouraging participants to seek early treatment if they are displaying ED symptoms (Bauer et al., 2013). Whilst early treatment seeking is beneficial for increasing the likelihood of ED recovery (Austin et al., 2021), it relies on healthcare systems having the capacity to see patients quickly. Other programmes take a cognitive-behavioural (Beintner et al., 2012) or cognitive dissonance-based approach to ED prevention, such as REbel (Eickman et al., 2018), BodyKind (Mahon et al., 2023) and the Body Project (Stice et al., 2019). Whilst REbel and BodyKind have both shown beneficial effects on reducing ED risk factors (see Table 2), neither have demonstrated longer-term efficacy yet.

The Body Project is the only ED prevention programme that has reproduced success in multiple efficacy trials (see Table 2.2) conducted by different independent research teams (Stice et al., 2023). Participation in the Body Project has been proven to produce significantly larger effects in reduction in ED risk factors and symptoms when compared to an educational video, expressive writing task, media-based prevention programme, psychoeducation-based prevention programme, healthy weight-based prevention programme and modified versions of the Body Project (low dissonance adaptation and internet-based adaption) (Stice, Rohde, et al., 2017). Long-term results have been demonstrated, with peer-led Body Project participants having a significant 54% reduction in ED onset compared to the educational video control group at four-year follow-up (Stice et al., 2020). It should be noted that the programme's effect on body dissatisfaction diminished over time. According to Stice et al. (2020), the Body Project is the first ED prevention programme that has evaluated the impacts on participants after four years. Therefore, long-term reduction of ED onset through alternative ED prevention programmes is currently unknown.

The Body Project is based on cognitive dissonance theory, which suggests that when presented with ideas that go against one's beliefs or values, they will do what it takes to reduce that dissonance to reduce discomfort (Yahya & Sukmayadi, 2020). In the Body Project, cognitive dissonance is being applied to thin idealisation—the idea that the ideal body is a thin one. Participants must challenge what their idea of the ideal body is, in their own words, through activities designed to reduce thin-ideal internalisation and improve body satisfaction. Through engaging in these activities, it is hoped that participants' attitudes around their bodies will change—and therefore, so will eating-related behaviours, as they will attempt to reduce the dissonance between their new perspectives and their actions.

When using cognitive dissonance theory in a psychotherapy context, behaviour change was highest when decision freedom was also high (Axsom, 1989). Entering the Body Project is completely voluntary, which maximises decision freedom. Critique of the thin ideal is also voluntary, as participants are encouraged to come up with their own reasoning rather than be told by peer educators. Research has shown that forced compliance to ease cognitive dissonance may produce short-term effects but not long-term changes (Yahya & Sukmayadi, 2020). Perhaps the voluntary nature of the Body Project is therefore one of the reasons the peer-led programme has been able to show reductions in thin-ideal internalisation compared to controls at four-year follow-up (Stice et al., 2020).

It is important to acknowledge that cognitions will differ between cultures and therefore dissonance may be experienced differently between cultural groups (Yahya & Sukmayadi, 2020). If some cultural groups do not value a thin body, then the concept of thin-ideal internalisation may not be entirely relevant, and therefore, cognitive dissonance may not occur. For example, a qualitative study that aimed to review Body Project exercises from a cultural perspective found that Black and Latina women had negative connotations of thinness and instead emphasised the curvy ideal rather than the thin ideal (Simpson et al., 2023). Trials of the Body Project involving a variety of ethnic groups (see Table 2.2) and qualitative responses (see Table 2.3) were therefore needed to establish cultural efficacy.

Table 2.2 Worldwide adaptations of the Body Project

Author / Country	Participants	Adaptations	Outcome measures	Result	Critique
AlShebali et al. (2021) Saudi Arabia	Females, mean age 19.16 years (n=48).	Adapted for Saudi culture, translated to Arabic. Exercises altered to avoid cultural violations, e.g., exercise on wearing shorts to the swimming pool was adapted to be slim fitting clothes, and posting a video was changed to posting a text.	EDE-Q 6.0, BSQ-8C, BFNE, PHQ-9	Large effect size for reduction in eating pathology, medium effect size for reduction in body dissatisfaction, depression, and social anxiety.	Study confirms feasibility in a non-Western culture, with appropriate adaptations made. Lack of control group means reductions in ED pathology cannot be definitively attributed to the intervention alone.
Brown et al. (2017) USA	18–30-year-old males (n=112). Caucasian (55.9%), Hispanic/Latino (17.2%), African American (9.7%), Asian (7.5%), and Other (9.7%).	The Body Project: More than Muscles consisted of two group sessions, each two hours long. Involved discussion, written and verbal exercises around the cultural ideal male body, facilitating verbal exercises and letter writing to help resist future pressure to thin, muscular ideals.	SATAQ-3, EDE-Q, MBAS, DMS, MDDI	The intervention group (n=52) showed greater post intervention reduction in body-ideal internalisation, bulimic symptoms, muscle dysmorphia and dietary restraint compared to the control group (n=60). Effects also persisted at one month follow up.	High retention rate and acceptability ratings suggested that muscularity concern was relevant to this population. African American men were more likely to drop out, suggesting more cultural adaptation needed. Unknown efficacy post one-month follow up. Further research necessary, as there is a lack of empirically supported muscle dysmorphia interventions for men. Active treatment control group needed to rule out placebo effects.

Author / Country	Participants	Adaptations	Outcome measures	Result	Critique
Brown and Keel (2015) USA	18–30-year-old gay males (n=87). Caucasian (56.9%), Hispanic/ Latino (22.2%), African American (16.7%), Native American (2.8%), and Other (1.4%).	The PRIDE Body Project consisted of two group sessions, each two hours long. Involved defining the ideal body type within the gay community, exploring how it is perpetuated and what the costs of following this ideal are.	BSQ, DMS, SATAQ-3, EDE-Q, SOQ	The intervention group (n=47) showed greater post intervention reduction in body dissatisfaction, bulimic symptoms, self-objectification, drive for muscularity and dietary restraint compared to the control group (n=40) at one-month follow up.	Ethnically diverse sample demonstrates the programme had effects for gay men of varying cultures. No difference in body ideal internalisation in intervention versus control group. This has raised concern over the long-term efficacy of the intervention. Two sessions may not be sufficient to establish long lasting effects on reducing body ideal internalisation. Active treatment control group needed to rule out placebo effects.
Ergut and Keser (2022) Turkey	18–25-year-old females (n=147).	Translated to Turkish. Virtual Body Project versus expressive writing placebo group.	BSI, EDE-Q, BIQLI, RSES	Reduced EDE-Q and psychological symptom scores. Increased quality of life (QoL) and self-esteem scores.	High drop-out rate (~50% for both groups) might suggest high burden, or low compensation. Further examination behind reasoning for drop-out needed. No follow-up performed.
Hazzard et al. (2022) USA	18–65-year-olds, mixed gender (n=11,620). White (75.2%), Black (6.7%), Hispanic (4.0%), Asian	None.	SATAQ-4, BIQLI, Body Surveillance subscale of the OBCS, Appearance Evaluation and Overweight	Found strong invariance for all body image measures across age, gender, sexual orientation, race, and weight demographic groups.	Large sample size with participants from across 50 US states, including variety of ethnic groups, with both males and females. Unable to measure invariance in those who identified as multiracial.

Author / Country	Participants	Adaptations	Outcome measures	Result	Critique
	(6.1%) and Other (7.9%).		Preoccupation subscales of the MBSRQ		
Hudson et al. (2021) Brazil	13–30-year-old females (n=141).	Translated to Portuguese. Assessment only control group.	BSQ, SATAQ-3, EAT-26, EDDS, BAS, BDI, PANAS.	Significantly greater reductions in body dissatisfaction, sociocultural influence, disordered eating, ED symptoms, negative affect and depressive symptoms in the Body Project group compared to the control group.	Significant reduction in ED symptoms was not maintained at six-month follow up. Suggests that self-report measures (as per EDDS) are less sensitive in detecting changes in symptoms. Active treatment control group needed to rule out placebo effects.
Luo et al. (2021) China	14–22-year-old females (n=372).	Six-week eBody Project, 35–45-minute modules. Translated to Mandarin, images and videos changed to depict Asian women, names changed to common Chinese names. Education brochure control group.	BDS, IBSSR, CES-D, RSES, BAS-2, DRES, EDDS.	Those in the eBody Project had significant reductions in body dissatisfaction, thin ideal internalisation, restrained eating and ED symptoms, and significant improvements in self-esteem and body appreciation from baseline to post-treatment. Significant reductions remained at six-month follow up. The brochure control group showed no significant change in body dissatisfaction, thin ideal internalisation and self-esteem. They showed changes in body appreciation, restrained eating and ED symptoms.	Note that the eBody Project has slightly different content and layout to the original Body Project and virtually delivered Body Project. Six-45-minute modules that focus more on media literacy. The Body Project originated in the US, where personal expression of opinion is more culturally normative compared to the traditionally collectivist communication in Chinese culture. Nonetheless, participants were able to challenge the thin ideal and reduce ED symptoms, showing that the programme is effective even with differing cultural communication styles. One third of participants dropped out by the six-month follow up, which may have caused biased effect sizes.

Author / Country	Participants	Adaptations	Outcome measures	Result	Critique
					Suggest "booster" sessions be tested to enhance long-term effects.

Note. EDE-Q = Eating Disorder Examination Questionnaire, BSQ = Body Shape Questionnaire, BFNE = Brief Version of the Fear of Negative Evaluation Scale, PHQ = Patient Health Questionnaire, ED = eating disorder, SATAQ = Sociocultural Attitudes Towards Appearance Questionnaire, MBAS = Male Body Attitudes Scale, DMS = Drive for Muscularity Scale, MDDI = Muscle Dysmorphia Disorder Inventory, SOQ = Self-Objectification Questionnaire, BSI = Brief Symptom Inventory, BIQLI = Body Image Quality of Life, RSES = Rosenberg Self-Esteem Scale, QoL = quality of life, OBCS = Objectified Body Consciousness Scale, MBSRQ = Multidimensional Body-Self Relations Questionnaire, EAT = Eating Attitudes Test, EDDS = Eating Disorder Diagnostic Scale, BAS = Body Appreciation Scale, BDI = Beck Depression Inventory, PANAS = Positive Affect and Negative Affect Scale, BDS = Body Dissatisfaction Scale, IBSSR = Ideal Body Stereotype Scale – Revised, CES-D = Center for Epidemiologic Studies Depression Scale, DRES = Dutch Restrained Eating Scale, The Body Project has been implemented worldwide (see Table 2.2), from the United States (Stice et al., 2021) to Saudi Arabia (AlShebali et al., 2021). Successful ED prevention as a result of the Body Project has been shown in a range of ethnic groups, including Asian, Hispanic, Native American and Pacific Islander populations (D'Adamo et al., 2023). The fact that the programme has shown efficacy in various ethnic groups suggests that the Body Project may also be effective in the NZ context. However, there is not yet any research that demonstrates that the programme will also be effective in NZ.

Qualitative research is important for an in-depth understanding of the factors that hinder or promote engagement with the Body Project, particularly in minority groups. It is also important to gather cultural perspectives on what the ideal body is, as one cannot assume that thin idealisation is relevant for everyone. There is only a limited pool of research that explores qualitative feedback for the Body Project (see Table 2.3). Currently, there is no published qualitative research that investigates the efficacy of the Body Project in NZ specifically.

Table 2.3 Qualitative experiences of the Body Project

Study/ Country	Methodology	Results	Critique
(Arkin, 2018) USA	Both pre- and post-intervention interviews (n=12). Participants were purposefully selected to represent varying levels of body dissatisfaction and thin ideal internalisation.	• Participants described increased ability to acknowledge body image concerns, increased confidence in navigating body acceptance and weight gain, and less pressure to look thin. • One participant identified that the intervention made her feel more insecure about her body. • 82% (n=9) of participants perceived the group format of the intervention as positive and an emotionally connected experience. • 45% of participants reflected that they had overestimated their level of body dissatisfaction in the pre-intervention interview.	• Population was not representative of wider US, study was based at a predominantly white institution. • Race-specific beauty concerns were not discussed in results due to small sample that meant information would be easily identifiable.
(Ross, 2022) USA	Semi-structured interviews with key stakeholders (n=6) in the Body Project across five different universities. Also included fieldnotes from the author's experience of being involved in implementation of the Body Project at Illinois State University.	• Author believed the script was outdated e.g., discussion around photoshop in magazines would now be more relevant to social media and how participants now have access to smartphone editing tools themselves. • Facilitators had to adapt the script to suit their university e.g., discussing appearance at upcoming events. • When asked who benefits from the Body Project, interviewees overwhelmingly answered that the peer educators did. • One interviewee was unhappy with inconsistent messaging from the Body Project, being ED prevention programme that also claims to prevent obesity e.g., role-play where facilitators had to complain about how 'fat' they were. • One interviewee believed weight stigma and fat phobia was not adequately addressed in the programme.	• Author experienced facilitating the Body Project after conducting the interviews. Self-reflected this knowledge would have been useful in knowing what questions to ask. • Four out of six interviewees were not peer educators. Had to therefore rely on

Study/ Country	Methodology	Results	Critique
		• Difficult to amend the script to use gender-neutral terms, as it is directed at females, using she/her pronouns throughout the script. • No different appearance-ideals were explicitly mentioned in the script for different racial/ethnic groups.	second-hand information.

(Shaw et al., 2016)
 	
USA
	Participants (n=680) randomised into either clinician-led, peer educator-led or internet-based variations of the Body Project, or to an educational video control group. Participants then completed a written exist survey consisting of four open-ended questions.	Interned-based Body Project group results:
		• Most valuable aspect of the programme: letters (19%), thin idealisation learnings (12%), increased body image awareness (8%), mirror exercises (7%), role-plays (7%), convenience of being online (6%), community nature (5%), photoshop exercise (5%) and reflections (5%).
		• Least valuable aspect of the programme: videogames (35%), repetitive information (9%), letters (8%), nothing (6%).
		• Aspects that made the programme better/worse
		  ○ Better: being online (18%), letters (13%), and videogames (7%).
		  ○ Worse: being online (28%), repetitive (6%).
		• Suggested changes to the programme: more support (20%), addition of videos (13%), more ED facts (6%) and having more engaging videogames and modules (5%).
			• Conducted as written questionnaires. Could have got more detailed responses as interviews.

(Vanderkruik et al., 2017)
 	
USA
	Focus groups conducted with peer educators (n=14) that conducted the Body Project at a college campus.	• Strengths of training
		  ○ Peer educators reported feeling well-prepared to create a safe, expressive environment.
		  ○ Training helped them to become good listeners.
		  ○ They were given opportunities to practice the role-play in mock groups and repeat the script.
		• Areas for improvement
			• Small sample size, determined by logistical constraint rather than data saturation.
			• Not all peer educators that were trained were in the focus groups.
			• Majority of the peer educators that

Study/ Country	Methodology	Results	Critique
		○ Found it hard to respond to certain comments about fat-talk, as there were not phrases in the script to use as a prompt, and peer educators did not want to say the wrong thing. ○ Did not feel prepared to manage difficult participants, or those who talked too much. ○ Struggled to find balance between sticking exactly to script and being natural. ○ Preferred training that was spread out, rather than crammed into two days. ○ Unsure how to address cultural considerations that were brought up.	demographic information was collected for were Caucasian (100%) and heterosexual (91%), which may influence experience for ethnic or sexual minority participants.
(Vanderkruik et al., 2020) USA	Post-intervention, participants completed a Client Satisfaction Questionnaire (n=131), rated sessions and facilitators from 1-10 (n=131) and completed a final reflection survey (n=115) that consisted of open-ended questions.	• Average rating for Body Project sessions was highly satisfactory (M = 8.63, SD = 1.46 and M =9.10, SD =1.30) for both study groups (intervention at two different high schools in the US). • 74% of participants responded positively to having female, college-aged peer educators ○ Pros: more in common, good experience for high school students. ○ Cons: not as comfortable, not as respected, too young, not as knowledgeable, fear of being judged. • What differences did participants notice in their life since completion of the Body Project? ○ Positive: increased positive behaviour towards self and others, increased awareness of issues, decreased negative behaviours, improved mood. ○ Negative: no changes (n=10) or negative changes (n=3).	• Need for more representative sample in terms of ethnicity, race and income level.

Study/ Country	Methodology	Results	Critique
		• What would participants change about the programme? Programme structure to have less rigidity and more variety, extending programme, more real-life examples, make it more inclusive.	

Note: ED = eating disorder

2.7 Strengths, limitations and future direction

The Body Project is designed to be run as a group session rather than one-on-one. Not only are there economic advantages to group treatment, but it can also benefit participants in that they feel a sense of connectedness to their group members (Barkowski et al., 2020). Meta-analyses by Stice et al. (2019) found that the greatest effect sizes were found when Body Project groups contained 10 participants. This aligns with clinical practice guidelines, which state that the size of a group for group-based therapy should generally be between seven and 10 participants (Bernard et al., 2008). Whilst the group-based setting can be beneficial, there are also limitations. Advertising the Body Project as a group programme may dissuade anxious individuals from participating. Those with anxiety disorders may perceive the group setting as so challenging that they will seek to avoid it (Barkowski et al., 2020). The setting can also be problematic when it comes to personality type. If all participants are avoidant and submissive, then there is a risk of not much conversation being generated (Bernard et al., 2008). There is also a risk of dominant individuals taking over group conversations. However, peer educators are trained to call on participants one by one to ensure that everyone gets the chance to share their opinions (Stice et al., n.d.). Group-based versions of the Body Project showed greater reductions in body dissatisfaction and thin-ideal internalisation compared to the eBody Project group, which involved individual modules (Stice, Rohde, et al., 2017). This demonstrates that the group setting is optimal for the Body Project.

The programme is designed to be run by peer educators. A peer refers to someone who shares a similar age, demographic or social characteristic, and has shown to be particularly important in youth or adolescent-based interventions, as peers recognise the challenges of this stage of life (Shalaby & Agyapong, 2020). It should be noted that in the Body Project script, peer educators are instructed to refrain from sharing any personal experiences about a history of an ED, and to keep any self-disclosure to a minimum (Stice et al., n.d.). This is important to distinguish whether any improvements in ED symptoms were a direct result of the programme, or whether they were confounded by unique peer educator approaches. However, this is hard to avoid and not entirely desirable, given that peer educators will always have differing personalities and styles, and reading a script *verbatim* can be robotic and ingenuine. Peer education has proven to be beneficial in the context of eating disorder recovery (Hanly et al., 2020), and is more cost effective compared to clinicians (Tomfohr-Madsen et al., 2022). Four weeks of a peer-led Body Project was estimated to cost US$80 (NZ$136.31) per participant, accounting for clinician and peer educator pay based on median salary for higher education employees (Akers et al., 2021). Cost would vary based on median salary of the time, inflation, and sessions that run overtime for example. Nonetheless, cost of the Body Project would be substantially lower than cost for ED treatment (Streatfeild et al., 2021).

Intervention effects were similar for peer educator-led sessions versus clinician-led sessions, with only a difference of d=0.4 for effect size (Stice, Rohde, et al., 2017). Furthermore, fidelity (adherence to the script), competency and acceptability (based on attendance rate and completion of homework) were only slightly lower for peer educators compared to clinicians (Stice, Rohde, et al., 2017). Interestingly, the incidence of ED onset was lower in the peer-led group compared to clinician-led Body Project groups at four-year follow-up (Stice et al., 2020). This shows that with appropriate training, peer educators are fully capable of running the intervention despite not having clinician-level credentials.

The Body Project has been run both in-person and online. Stice et al. (2023) found that there was a 49% larger effect size (in terms of reduced thin-ideal internalisation, body dissatisfaction, dieting behaviours, negative affect, and ED symptoms pre- versus post-intervention) in an online-delivered Body Project compared to the average effect size previously observed for in-person delivered groups by Stice, Rohde, et al. (2017). It was noted that this larger effect size was partially due to the use of different control conditions (waitlist group versus educational video) and a 21% higher baseline ED rate in the 2023 study (Stice et al., 2023). Hypotheses for the larger effect size were that virtual sessions were easier to attend, and that participants feel greater accountability when their name pops onto the screen or when they are notified that the session is recorded, which increases dissonance (Stice et al., 2023). Offering sessions virtually is particularly beneficial for students who study via distance, as it means they do not have to travel to attend sessions.

Trials of the Body Project have been run using females only, males only, and mixed gender. A mixed-gender trial of the Body Project in university students found that there were more successful results in the male sample and less in the female sample (Kilpela et al., 2016). It was hypothesised that this might be because the females were less willing to talk with males present in the group settings, which therefore meant less cognitive dissonance was occurring. Therefore, a single-gender Body Project may be seen as more beneficial. However, this creates an ambiguous situation for individuals who identify as gender fluid. Perhaps future research could investigate how to include all individuals in sessions, regardless of their identified gender.

A common theme in qualitative responses (see Table 4) was that there was room for improvement in addressing race-specific beauty ideals, identified by both participants (Arkin, 2018) and peer educators (Vanderkruik et al., 2017). This demonstrates the need for future direction in which adaptations for all cultures and races are considered throughout the Body Project script. It also highlights the importance of gathering qualitative responses from all parties involved in the Body Project, as it provides information about the relevance of sessions that might otherwise not be heard.

2.8 Conclusion

Other ED prevention studies have demonstrated success in reducing ED risk factors or symptoms, but none as successful as the Body Project—which has shown efficacy in long-term follow-up (Stice et al., 2020) and in multiple ethnic groups (see Table 3). While there is some research already (see Table 4), there is a need for further qualitative exploration of the efficacy of the Body Project within academic literature. No published literature explores the implementation process of the Body Project in the unique, multicultural environment of New Zealand. Trials of the Body Project have shown to have the most significant effect on reducing body dissatisfaction and ED onset when they are run online (Stice et al., 2023) by peer educators (Stice et al., 2020), with females only (Kilpela et al., 2016). This study therefore aimed to implement the Body Project in NZ with these conditions, before exploring qualitative opinions from the participants, peer educators and counsellors involved.

CHAPTER THREE: MANUSCRIPT

3.1 Abstract

Background: The Body Project is an eating disorder (ED) prevention programme that has been shown to reduce the risk of eating disorder through targeting thin-ideal internalisation. The programme has shown efficacy worldwide, but not yet in New Zealand (NZ). This study aimed to gather qualitative responses from participants, peer educators and counsellors involved in the pilot study of the Body Project, to explore experiences, barriers and facilitators to engagement in the programme.

Methods: Online semi-structured interviews were conducted with six Body Project participants, three peer educators and three counsellors who were involved in the implementation of the Body Project in a New Zealand (NZ) tertiary environment.

Results: Interview participants (n=12) were all female, with the majority (50%) identifying as New Zealand European/Pakeha ethnicity. Three key themes emerged from analysis: *Programme structure and delivery* including subthemes training and session logistics; *Influences on engagement in the Body Project* including subthemes relatability, inclusivity, group dynamics, and personal concerns or perceptions as influencing factors; *Impact of the Body Project* including subthemes changes participants made since completing the programme and perceived value. Interview participants reported improved body satisfaction (66%) since completing the Body Project and all would recommend the programme to a friend. To improve the Body Project implementation in NZ, peer educators should have further training on group management, and opportunity to practice all sessions to avoid confusion between behavioural and body activism tasks. Counsellors should offer opportunity for peer educators to check-in regarding mental health and questions that may arise.

Conclusion: The Body Project demonstrated success in reducing body dissatisfaction for two-thirds of participants. To enhance delivery of the programme, peer educator training could be more thorough in terms of managing groups and clarifying exercises, and more counsellor support would be beneficial for peer educators. Relevance of the Body Project should be further explored from different cultural perspectives, particularly Māori.

Key words: Body Project, eating disorder, prevention programme, body dissatisfaction, thin ideal, New Zealand

3.2 Introduction

Early intervention has been established as an important indicator of outcomes for many different conditions, from cancer to eating disorders (EDs) (Austin et al., 2021). Eating disorders have one of the highest mortality rates of all mental disorders (Santomauro et al., 2021), and affect all aspects of health, including psychological (Hambleton et al., 2022; Udo & Grilo, 2019), physical (Cass et al., 2020; da Silva et al., 2020; Dalle Grave et al., 2021; Hambleton et al., 2022; Udo & Grilo, 2019) and social (Surgenor et al., 2022; van Hoeken & Hoek, 2020) wellbeing.

While some risk factors for EDs are non-modifiable, such as genetics (Culbert et al., 2021; Watson et al., 2019), others can be manipulated. Body dissatisfaction and thin-ideal internalisation have been significantly linked to eating pathology and future ED onset (Cleland et al., 2023; Rosewall et al., 2018; Stice, Gau, et al., 2017; Yamamiya & Stice, 2023). The thin ideal refers to the social construct of a thinner body being a more attractive one (Stice & Presnell, 2007). Striving to meet such an unattainable ideal may ultimately lead to body dissatisfaction for many.

Body dissatisfaction is one of the primary risk factors targeted in ED prevention work (Beintner et al., 2012; Eickman et al., 2018; Stice et al., 2019). Prevention programmes are often directed at young females, likely because the median age for ED onset is around 18 years old (Solmi et al., 2022), and lifetime ED prevalence is higher in females (8.4%) compared to males (2.2%) (Galmiche et al., 2019). The need for preventative work is being called for in New Zealand (NZ), with the COVID-19 pandemic increasing the demand for ED services in the Waikato region (Hansen et al., 2021) and elsewhere in the country, as per anecdotal reports (Wilson, 2020). Wait times for accessing publicly funded ED treatment can be up to 114 days long (Christchurch District Health Board, March 2022), which may be problematic as earlier intervention may improve clinical outcomes (Austin et al., 2021) and reduce economic burden (Mills et al., 2023).

Several ED prevention programmes have shown promise in reducing body image issues, eating restraint, weight/shape concerns and desire for thinness (Beintner et al., 2012; Eickman et al., 2018; Mahon et al., 2023; Wilksch et al., 2018). The desire for thinness, or thin-ideal internalisation, is the risk factor that is targeted in ED programmes such as Student Bodies (Taylor et al., 2006) and the Body Project (Stice & Presnell, 2007), for example. The Body Project is one of the most successful ED prevention programmes due to its long-term efficacy (reduction in ED onset up to four years post-intervention), which other ED prevention programmes have not yet proven (Stice et al., 2020). The Body Project involves group-based sessions run by peer educators, using cognitive dissonance theory to reduce thin-ideal internalisation, and therefore, the risk of ED development. Successful reduction in ED risk factors and onset due to the Body Project has been demonstrated in multiple countries worldwide, including Saudi Arabia (AlShebali et al., 2021), Turkey (Ergut & Keser, 2022), Brazil (Hudson et al., 2021), China (Luo et al., 2021) and the US (Hazzard et al., 2022; Stice et al., 2021) but not yet in NZ.

International education has been a large export industry for NZ (New Zealand National Party, 2024), meaning NZ youth are particularly varied in cultural backgrounds. In the US, the Body Project has demonstrated efficacy in Asian, Hispanic, Native American, African American, Pacific and multiracial participants (D'Adamo et al., 2023), suggesting wide cultural efficacy, but no studies have explored efficacy in Māori, the indigenous people of NZ.

This study aimed to gather qualitative responses from participants, peer educators and counsellors involved in the pilot study of the Body Project to explore experiences, barriers and facilitators to engagement in the programme.

3.3 Methods

3.3.1 Study design

This study reports on one component of a larger evaluation study implementing the Body Project in the NZ tertiary setting, using a target group of 18-to-30-year-old females. This study focuses only on qualitative data that was gathered by the researcher. The Body Project is a four-session ED prevention programme that targets reduction in thin-ideal internalisation through group exercises and discussions. The wider study was a randomised control trial of the Body Project, with participants either entering the Body Project (intervention group) or only watching a documentary entitled *Dying to Be Thin* (control group) (McPhee, 2000). Both groups were asked to complete pre- and post-intervention surveys (Inventory of Psychosocial Function, World Health Organisation (WHO) 5 Wellbeing Index, Healthcare Access and Utilisation, Thin-ideal Internalisation Scale, Dutch Restrained Eating Scale, Satisfaction and Dissatisfaction with Body Parts Scale and Positive and Negative Affect Scale) to provide quantitative results, which will be explored in future research.

Qualitative data was collected at the end of the first round of programme implementation (after four weeks) in October 2024. The decision was made to cease data collection at this time due to the student exam period and summer break. Body Project groups and data collection for quantitative analysis will therefore resume in January 2025.

Qualitative research methods should be used when trying to answer questions about experiences and perspectives (Hammarberg et al., 2016) and improve interventions (Busetto et al., 2020). The researcher analyses data to determine themes or meanings and examine reasons for certain outcomes (Harris et al., 2009). In this study, qualitative research was the most appropriate type of research to provide perspectives from the research participant's point of view. Pragmatism was the underpinning paradigm, in acknowledgment that experiences differ depending on social context, and answers to real-world problems are best sought from a real-world population (Patton, 2014). This allowed research to shift from focusing on effectiveness to focusing deeper on why an intervention was or was not effective.

Semi-structured interviews were conducted by the researcher to seek personal opinions on a particular topic, in this case, experience of the Body Project (Hammarberg et al., 2016). A semi-structured format of interview is important because it is versatile and flexible through use of open-ended questions (Busetto et al., 2020), and it allows the researcher to follow-up with questions depending on participants' responses (Kallio et al., 2016). Semi-structured interviews require some structure, guided by literature (Busetto et al., 2020; Kallio et al., 2016), so previous qualitative research on the Body Project was explored before the interview guide was created for this study. For example, other studies asked participants what they thought about the sessions being run by peers and explored participant feelings of belonging within the group (Ross, 2022;

Vanderkruik et al., 2017). Shaw et al. (2016) found that there were mixed opinions as to whether the online setting was an aspect that made the programme better or worse. The researcher deemed it important to ask about the practicalities of the sessions, such as online setting or group size, to identify barriers or facilitators to participation in the Body Project.

3.3.2 Ethical considerations

This project was approved by the Massey University Human Ethics Committee (MUHEC) (OM1 24/11) (Appendix B). The study was also registered with the Australian New Zealand Clinical Trial Registry (ACTRN12624001190594). All data was kept anonymous, with participants being assigned ID numbers for survey data collection and codes for interviews. There was no data matching between survey results and interviews. In the information sheet (Appendix C), participants were informed that they could decline to answer a question at any time and had the right to withdraw from the study.

3.3.3 Participants and Recruitment

Students were recruited for the Body Project through flyers that were placed around Massey University campuses and posted on social media sites (e.g., Facebook groups) and via communication through a volunteer database. Posters advertised the Body Project as a programme for those who identified as women (of all backgrounds, cultures, and identities) who wanted to work on their body image and improve body acceptance (Appendix D). Participants were informed that they would receive \$20 to \$40 as koha (gift) for their participation. All Massey University students were invited to take part in the Body Project, given that they met the inclusion criteria (see Table 3.1).

Table 3.1 Inclusion criteria

	Inclusion criteria	**Justification**
Student participants	Identify as female	ED rates higher for females (Galmiche et al., 2019), so need for prevention is greater. Body Project sessions were most effective with females only present (Kilpela et al., 2016).
	Aged 18-30 years old	Median ED onset is at 18 years old (Solmi et al., 2022)

	Inclusion criteria	Justification
		University students are typically not younger than 18 years old. Up to 30 years old was considered the maximum age to ensure that participants could relate to each other, being in similar stages of life.
	Enrolled at Massey University	Support from Massey University Student Health and Counselling team.
	Never been diagnosed with an ED	The Body Project is designed for ED prevention rather than treatment (Stice et al., 2008).
Peer educators	Identify as female Aged 18-35 years old	Peer educators needed to be of similar demographic to participants in order to be considered 'peers' (Shalaby & Agyapong, 2020). It was decided that five years between peer educators and participants (18-30 years) was sufficient to still be considered a 'peer'.
	Enrolled at Massey University	Meant they could be trained and supported by Massey University Student Health and Counselling team.

Note: Eating disorder (ED)

Peer educators were recruited through a poster sent out to Massey University School of Health Sciences students, advertising a paid role to facilitate a body acceptance group (Appendix E). A total of ten peer educators were selected based on their availability and experience within healthcare or group facilitation, given that they met inclusion criteria (Table 3.1).

A statistical software package (G*Power) was used to calculate the required sample size. Using a medium effect size (d=0.5), an alpha level of 0.05, and a power level of 0.80, approximately 34 participants were required in each group (control versus intervention group). Therefore, a total of 68 participants were needed to detect statistical significance. However, to account for 10%

participant dropout, we aimed to recruit 75 participants for the wider project, in line with the sample size calculated by Stice et al. (2023). Note that this was the sample size for the randomized control trial, not the qualitative research that this study focused on.

All participants and peer educators who had completed four sessions of the Body Project, plus counsellors from Massey University Student Health and Counselling, were invited via email to take part in interviews to discuss their experience in the Body Project (see Figure 3.1). When the study population is relatively homogenous, data saturation (no new themes established) should be reached within 9–17 interviews (Hennink & Kaiser, 2022). This would require at least nine participants, nine peer educators and nine counsellors. However, this could not be done as there were only nine participants, four peer educators and six counsellors that were involved in the implementation of the Body Project. Therefore, the researcher aimed to interview as many as possible, whilst acknowledging that data saturation would not be necessarily met.

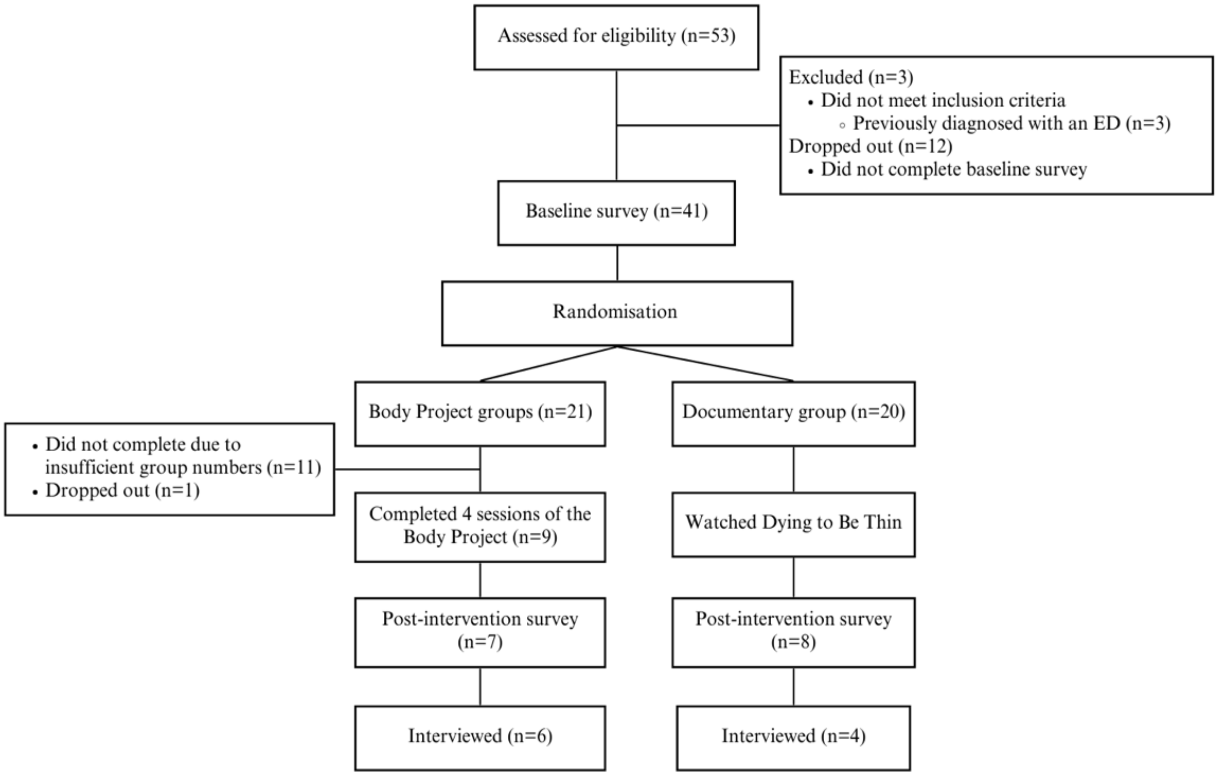


Figure 3.1 Participant flow diagram

Note: Documentary participants were interviewed by the researcher, but results were not reported in this study as objectives were to explore experiences of the Body Project specifically.

3.3.4 Procedure

Six counsellors from the Massey University Student Health and Counselling team volunteered to take part in Body Project training with Professor Eric Stice from Stanford University, who developed the Body Project. Training sessions were conducted online as counsellors were across three geographically different Massey University campuses. The training was eight hours long, spread across two days during December 2023. Following a train-the-trainer format, Prof Stice took counsellors through exemplar sessions, answered questions and directed them to additional helpful resources. The counsellors re-watched the training recordings in August/September 2024, one week before they trained the peer educators.

Peer educators were paired by age to reduce the facilitator burden and allow for sickness or emergency. Eight hours of peer educator training was also conducted over two days, one week before the first session was executed. During this training, counsellors guided the peer educators through exemplars of the first two sessions, practiced role-plays and provided live feedback. Peer educators were also given a fact sheet along with the script, giving them background information relating to session content and the thin ideal (Stice et al., n.d.). The researcher was in contact with peer educators via email for administrative purposes (organisation of session time, Zoom links, and answering questions).

All students who volunteered to take part in Body Project sessions and self-reported meeting inclusion criteria (Table 5) were accepted. They were given identification numbers based on the order of their recruitment, which were then entered into a randomisation website. Even numbers were allocated to the documentary control group, and odd numbers were allocated to the Body Project intervention group. Everyone who signed up was sent an email before beginning their first session, instructing them to complete the required surveys before the first session commenced. Pre-intervention surveys were distributed using online software (Qualtrics, October 2024). Once participants responded to the pre-intervention survey, they were notified of being allocated to either the 1-session group (i.e., control group) or the 4-session group (i.e., the Body Project group). This wording was used to blind the participants to whether they had been allocated to the intervention or control. The control group was sent a link to the documentary, and the intervention group was sent a schedule of session times to choose from.

Control group

Participants allocated to the control group were sent an email link to watch the 55-minute documentary *Dying to Be Thin* (McPhee, 2000). This documentary discussed risks that contribute to the development of EDs and the costs associated with pursuing thin ideals. Two reminder emails were sent to participants to encourage them to watch the video.

Intervention group

Four 60-minute sessions of the Body Project were conducted online (Zoom, Version 6.1.11). The first session introduced the thin ideal and involved discussion around how this ideal body image originated. The second session took participants through role play and mirror-based exercises designed to make them think about the costs associated with pursuing the thin ideal. Session three helped participants to come up with responses to appearance-related comments. The final session involved letter-writing and self-affirmation exercises. If participants could not make their weekly session slot, they were told to email their peer educators to organise a catch-up session. These were usually conducted with one or two participants per session, at a time agreed by both the participant and peer educators. Six out of nine participants attended at least one catch-up session.

All sessions (excluding catch-up sessions) were recorded and watched by members of the research team for fidelity rating to ensure fidelity/adherence (following of the Body Project script) and competence of peer educators. Three members of the research team were trained by Prof Heather Shaw of Stanford University, by comparing fidelity and competency measures (Stice, Rohde, et al., 2017) and discussing any discrepancies over email. The fidelity form (Appendix F) required evaluators to rate how well peer educators adhered each aspect of the script, using a scale from 10-100 for each session component. The competence form (Appendix G) rated peer educators on aspects such as their pace, organisation, enthusiasm, and communication skills, again using a scale from 10–100 per competency. The first round of Body Project sessions were rated by Prof Shaw and three members of the research team. The same three members rated the next round of Body Project sessions (different set of peer educators) without Prof Shaw. Additionally, peer educators were emailed with positive reinforcement and constructive feedback after their first session.

The day after all Body Project sessions finished, both the control and intervention groups were sent post-intervention surveys via Qualtrics. At the same time, participants, peer educators and counsellors were invited via email to take part in an interview with the researcher to discuss their experience within the Body Project. All participants (n=6) and peer educators (n=3) who responded were interviewed (convenience sampling). The first three counsellors to respond were interviewed. This meant that 66% of participants, 75% of peer educators, and 50% of counsellors involved in the Body Project were interviewed. Interviews took place at the earliest convenience, ranging from 4 days to 2 weeks after the final Body Project session.

Interviews

The purpose of conducting exploratory interviews among the three groups was to gather qualitative responses from those involved in either the implementation, conducting or overseeing of the Body Project, to identify facilitators and barriers to engagement. Up to 30 minutes were allowed per interview to ensure sufficient time for participants to share their thoughts.

When participants entered the Zoom meeting, a notification pop-up appeared to let them know that the session was being recorded. At the start of each interview, the researcher introduced herself, her qualification (Master of Science in Nutrition and Dietetics student), her role in the study, and opened with a karakia (Māori prayer) before asking each participant to introduce themselves. No further detail was revealed about the researcher and her interest in the topic. Participants only knew the researcher through receiving administrative emails. It was important to build rapport at the beginning of each interview (Liamputtong, 2020) and make each participant feel safe, so that there was a sense of trust with the researcher before they shared their personal experiences. The researcher additionally obtained verbal consent for the interview to be audio-recorded and used for data analysis at this point. Note that only the researcher and the participant were present in interviews.

Semi-structured interviews should consist of questions that follow main themes, and follow-up questions (Kallio et al., 2016). The researcher created an interview guide based on various themes including the practicalities of sessions, cultural appropriateness, and content of the Body Project (Appendix H). Prior qualitative research on the Body Project was considered, particularly around the cultural relevance of the thin ideal (Arkin, 2018), relatability of peer educators (Vanderkruik et al., 2020) and sufficiency of peer educator training (Vanderkruik et al., 2017). Questions were worded clearly and left open-ended to achieve the richest possible data (Kallio et al., 2016). To refine the interview questions, internal pilot testing was used (Kallio et al., 2016) with a member of the research team, confirming that the questions were not ambiguous or leading. A final question, asking if participants had anything else to share, was used to allow interviewees to share anything on their minds (Liamputtong, 2020).

3.3.6 Data Analysis

This study analysed data from the semi-structured interviews, using an inductive approach to data analysis, where the researcher used raw data to derive concepts and themes (Braun & Clarke, 2012; Thomas, 2006), rather than letting existing theory drive data analysis. Interview data were coded into themes for thematic analysis. Thematic analysis refers to the identification of repeated patterns (themes) within data, which allows the researcher to make sense of collective shared meanings or experiences (Braun & Clarke, 2012).

Data analyses were conducted using the six phases of thematic analysis by Braun and Clarke (2012), which involves familiarisation of data, generation of an initial code, theme search, theme naming/definition, review of potential themes, and production of a report. Immediately after the interviews, the researcher proofread transcripts to correct any errors. No field notes were taken. Through both conducting and proofreading each interview, the researcher became very familiar with the data and had two opportunities to make notes when something of particular interest was said (Braun & Clarke, 2012; Kiger & Varpio, 2020). Transcripts were deidentified to keep participant confidentiality, then imported into qualitative data analysis software (NVivo Version 15, Lumivero, 2024) for coding. An initial round of coding was generated by reading the transcripts and highlighting sections of text that represented a 'code'. The node function of NVivo allowed the researcher to code specific sections of the transcript. The researcher then searched for where codes overlapped and could be grouped and categorised to create themes, based on similarities (see Table 3.2). Themes and subthemes were named and defined by the primary researcher, and reviewed and refined with the wider research team as part of reflexivity

Table 3.2 Grouping codes into themes

Code	Code Definition	Sub-theme	Theme
Training material	How counsellors and peer educators felt about the content of training sessions.	Training	Programme structure and delivery
Training amount	How counsellors and peer educators felt about the number of training sessions.		
Training regime	Counsellor opinion on the format of the training.		
Peer educator ability	How counsellors and peer educators felt about peer educator ability to run group sessions.		
Peer educator support	How counsellors felt about the groups being run without counsellors present.		

Code	Code Definition	Sub-theme	Theme
Group size	Opinion on ideal group size.	Session logistics	
Session setting	How participants felt about online versus in-person setting.		
Session length	How participants and peer educators felt about one-hour sessions.		
Number of sessions	Whether participants wanted more than 4 sessions.		
Organisation of the programme.	How peer educators and counsellors felt about administrative aspects and organisation of the Body Project.		
Script clarity	How clear the script was to follow.		
Relatability of thin ideal	Whether participants and peer educators felt they could personally relate to the thin ideal.	Relatability	Influences on engagement in the Body Project
Relatability of peer educators	How well participants felt they could relate to their peer educators.		
Relatability of role play	How well participants felt they were able to relate to the role play activities.		
Appearance	How appearance affected relatability within the group.		
Inclusivity of group	How well participants felt included within their group.	Inclusivity	
Inclusivity of the programme	How participants felt the programme might be experienced by people of different genders, ages and sexualities.		
Cultural appropriateness	Participant opinion on cultural relevance of the thin ideal.		
Applicability to NZ	Participant, peer educator and counsellor feedback on whether the script would need to be altered for NZ women.		
Age	How age affected participation within the group.	Group dynamics	
Neurodivergence	How neurodivergence affected group participation.		
Homework barriers	Barriers to completing session homework.	Participant concerns and perceptions	
Mixed gender groups	Opinion on having groups with males/females/transgender identities together.		
Role of media	Participant view on social media perpetuating the thin ideal.		

Code	Code Definition	Sub-theme	Theme
Body satisfaction	Changes in body satisfaction since completing the Body Project.	Changes since the Body Project	Impact of the Body Project
Behavioural changes	Behavioural changes since completing the Body Project.		
Overall opinion	General opinion of the Body Project.	Perceived value of the Body Project	
Value of homework	Perceived value of the homework.		
Recommendation to a friend	Would participants recommend the Body Project to a friend who was struggling with body image.		

3.4.1 Credibility of research

Credibility refers to the evaluation of the internal validity of the research through processes such as reflexivity (Hammarberg et al., 2016), which involves the researcher reflecting on their biases. The primary researcher was a female student dietitian of NZ European ethnicity with a background in undergraduate psychology. The primary researcher also watched all sessions for fidelity rating, before interviews were conducted. As part of reflexivity, the researcher practiced interview questions with a fellow student and discussed potential themes from the interviews with the research team to confirm results were being interpreted accurately. A separate member of the research team individually coded one of the participant interviews to ensure accuracy of data coding. Note that transcripts were not returned to participants for comment, nor did participants provide feedback on the findings. No repeat interviews were required. The Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist was used to guide qualitative reporting (Appendix A) (Tong et al., 2007). Data was enumerated and reported as the percentage or number of interviewees who discussed each theme. Major and minor discussion points were reported as themes and subthemes.

3.4.2 Data Storage

Participant names were separated from the data, and data was therefore labelled with an anonymous identification code. All interview video and audio recordings, transcripts and records that link participants to their code were stored in a password-protected electronic database that was only accessible to the research team. Participant information will be disposed of at the end of the study. All raw data that was used will be retained in secure storage for ten years, after which it will be destroyed.

3.4 Results

3.4.1 Participant characteristics

All interviewees (n=12) identified as females. Student participants were aged between 19-29 years old, peer educators between 22-32 years old, and counsellors between 37-61 years old.

Table 3.3 Interview participant characteristics

Variable	Descriptive Statistics
Age (years)	19-61
Ethnicity (n (%))	
NZ European	8 (66)
Pacific	2 (17)
Chinese	1 (8)
Other	3 (25)

Note: 'Other' ethnicities included Welsh, Russian and Cambodian. Percentage adds to above 100% as participants could identify with more than one ethnicity.

3.4.3 Quality of programme delivery

Because two Body Project groups were run (by different peer educators), fidelity ratings were calculated separately for accuracy. Group one had a mean competency rating of 78.53 (*SD* 5.95) with an intraclass correlation coefficient (ICC) (level of interrater agreement) of .63 between the four raters. This ICC represented the research team being fidelity trained whilst they rated sessions, as they discussed discrepancies as they arose. Group one received an average fidelity rating of 84.48 (*SD* 10.51) with an ICC rating of .87. Group two had a mean competency rating of 80.16 (*SD* 14.58) with an ICC of .96 and a mean fidelity rating of 87.93 (*SD* 13.34) with ICC of .95.

3.4.3 Themes of interview results

Three main themes were established from the interviews, with various subthemes.

Theme One: Programme structure and delivery

Theme One reflected the practical aspects of the implementation of the Body Project, including training of counsellors and peer educators, organisation from an administrative point of view, and logistics of running the sessions themselves.

Subtheme One: Training

All counsellors interviewed found that their training was sufficient through watching recorded exemplar sessions, asking Prof Stice questions, reading the script, and being directed to the Body Project website, where they could find additional resources. Counsellors, therefore reported that they felt their own training was sufficient to then go on to train the peer educators.

> "I thought it was brilliant… the website that he gave us at the end had all of the information that was needed. That was really sufficient. It was well done." (Counsellor 1)

One of the issues that all three counsellors had with training was the time gap between their initial training and leading their own training with the peer educators. Their original training happened at the end of 2023, and peer educator training took part in August 2024 due to delays in obtaining ethics approval and recruitment.

> "The only downside to the training really was that it was so long ago. We kind of had to re-familiarise ourselves with it by the time it actually came to being time for us." (Counsellor 3)

Two of three counsellors were actively involved in the training of the peer educators. They reported that the peer educator training was adequate in terms of session content because "the booklet was very self-explanatory," and "the programme is so well designed, and it's quite prescriptive… pretty foolproof." (Counsellor 3).

One counsellor recommended having a streamlined training regime to follow for the training of the peer educators, as there were no clear guidelines on what must be discussed. They decided between themselves how they would run the sessions. It was considered that different training content would influence the reliability of research data.

> "You should have guidance for how to train the facilitators so that everyone does it the same… if you gave this to a different group of counsellors, you might end up with facilitators doing things slightly differently." (Counsellor 2)

All counsellors and most peer educators (n=2) felt that peer educators needed an extra training session to explore group management and how to navigate difficult situations, including talkative or triggered participants.

> "It would have been great if we could have just got all that done first and said, 'This is how you run a group,' and done some role-playing around some difficult situations. How do you handle someone who doesn't shut up? How do you handle someone who talks too much? How do you handle someone who's triggered? What do you do in those situations?... We could have done it in an hour." (Counsellor 3)

Extra training to learn to navigate conversations around food and eating habits was requested by one of the peer educators. There was some concern around knowing if a participant had an ED because of their "focus on food" (Peer educator 3).

> "With a subject like this, food is always going to come up as a topic…I'd probably like a little bit more training on that." (Peer educator 3)

One peer educator would have particularly appreciated some sort of ongoing support from counsellors to debrief and ensure her wellbeing.

> "Maybe the counsellors could do a weekly check-in… I've just listened to girls talk for an hour about how horrible their experiences are in life, which is fine, but you take that on yourself." (Peer educator 2)

In addition to extra training, two counsellors would have preferred the presence of an experienced counsellor at the sessions from both a group management and safety point of view.

> "I think it's about student safety. People talk about things that are worrying if there's not somebody there who knows how to manage that." (Counsellor 1)

<u>Subtheme Two: Session logistics</u>

The ideal group size was generally considered by interviewees as being between four and six participants. Groups larger than six participants was considered to be a barrier to completing sessions in time by counsellors (n=2), peer educators (n=2) and participants (n= 3).

> "I think four to six is the ideal, especially given the amount of homework and the requirement to read out letters and talk about stuff like that. You don't want people to feel rushed." (Counsellor 3)

Counsellors "didn't mind" sessions being online, but "in an ideal world, it's great to be able to offer both options" (Counsellor 3). Two participants and one peer educator mentioned that an in-person opportunity might have been nice to offer, saying "it would have been cool to see it done in person" (Peer educator 2). All participants and most peer educators liked that the sessions were online, commonly because of convenience (n=6) and not having to worry about appearance (n=2).

> "I hate doing things in person because I've got to find the right outfit. I've got to make sure I look okay. Whereas when it's online, it's just kind of more accessible, and then I can stay at home... I feel like I'm more comfortable, more willing to share things when I'm in that situation." (Participant 6)

Two of the peer educators found it hard to stick to the one-hour time limit, as they did not want to rush or interrupt the participants. One peer educator suggested more training to mitigate this. One peer educator and one participant suggested increasing session times to 1.5 hours so that people did not feel rushed.

> "I didn't want to cut people off as well, we had a really talkative group.... Maybe if we had more training on how to handle those situations as they come up and just keep the room kind of flowing." (Peer educator 2)

Two participants reported initial thoughts of scepticism that four sessions might not be enough but noted they got a lot of benefit out of the programme.

> "I haven't had great self-esteem when it comes to my body. So, when I read about it, I was kind of sceptical. I was like four sessions, that's not enough time…and it wasn't until

the last session that I realised. Actually, this has worked like I'm doing a lot more things for myself." (Participant 4)

One participant recommended having an extra session to be used as a catch-up session. Another participant mentioned that if there were more sessions offered, they would attend.

> "Maybe have more than four. Or like, have four, and then, maybe in a month's time, just have a check-in and see how everyone's going." (Participant 4)

Feedback from one counsellor and one peer educator was that there needed to be more clarity for the peer educators from an administrative point of view. Examples were "Who's going to send the participants the workbook?" (Counsellor 3) or "Who's going to send them the Zoom link?" (Counsellor 3). This was resolved by a group email, that in future could be sent earlier to ease anxiety.

There also needed to be some more clarity in the script about completing two forms of body activism, as there was confusion around the similarity between the body activism activity and disrupting the thin ideal activity from the previous session.

> "There were three pieces of homework, and two of them were quite similar...thin ideal behaviour challenging... and body activism. Having those two together... some of the examples were kind of similar... I think that kind of confused everyone." (Peer educator 1)

Theme Two: Influences on engagement in the Body Project

Theme Two reflected influencing factors that might have acted as facilitators or barriers to participant engagement with the programme.

Subtheme One: Relatability

All peer educators and participants felt they could personally relate to the concept of the thin ideal, having "been surrounded by very skinny images," (Peer educator 2) and reporting they "used to idolise that," (Peer educator 2).

> "I wanted to be thin, skinny, toned." (Participant 4).

Interviewees (n=5) believed the thin ideal was a universal concept, particularly in terms of age. Three participants specifically mentioned that they believed their mother followed the thin ideal, saying, "my mum is always making comments," (Participant 3), and "she feels like she needs to be this thin, fit woman," (Participant 5).

All participants found the role-play exercises to be relatable. Four participants said they have heard people in their lives make some of the comments that were explored during the role-play exercises.

> "Definitely relatable and relevant, the role play that we did where we had to like question the other person's intent. Like if they said, like, 'I'm not going to eat because I want to be skinnier when we go out later' kind of thing. A lot of my friends have said that." (Participant 5)

The majority of participants (n=5) found the peer educators to be relatable and appreciated the peer educators sharing their own experiences and contributing to conversations, making it feel "like we were all Facetiming friends," (Participant 4).

> "They had the same understanding, like they were able to contribute … sometimes when people teach these kinds of topics, they can be quite out of touch…they were completely in it, with us." (Participant 3)

Only one participant found that the peer educators were not relatable to them personally. They found that the appearance of other group members and peer educators influenced their relatability and feelings of inclusivity within the group.

> "They seem to all have that thin ideal, whereas I feel like I don't. So, it kind of almost felt like I was explaining my experiences, but I was kind of thinking to myself, like, how can you kind of, like, understand or relate to me?" (Participant 1)

Two other participants also reported being surprised that other group members also suffered from body image issues, based on their appearance.

> “You’d look at them and you’d be like, oh my God, you’d never guess that they would be struggling.” (Participant 3)

Subtheme Two: Inclusivity

Five of six participants reported feeling included or like they belonged within their group.

> “You're all there for the same reason. So, there's no like, I guess, judgment. I didn't feel any judgment from people or like towards people. I kind of felt like we were all on an even playing field because we all felt the same…I didn't feel too scared to say anything.” (Participant 6)

When asked about how participants of different genders, sexualities or cultures might experience the Body Project, most participants (n=5) felt that they would feel included since everyone shared their own unique experiences and contributed to the sessions.

> “I felt like my group was quite diverse. So obviously, no one was picked based on, you know, what they looked like, or their gender, or their race, or anything… no one's really left out anyways, because if you don't say something they ask you like straight up, ‘Do you have anything to say?’” (Participant 6)

One participant of NZ European/Other ethnicity acknowledged the Body Project came from a very “Western lens,” which seemed to work for most participants as they “came across as Western”. Whilst they did not think participants would feel left out on a surface level, they believed the relevance of the thin ideal should have been further explored “to be more relevant to Māori and Pacific cultures who have a different view of the thin ideal” (Participant 1).

All participants reported that the Body Project applied to their own culture.

> “The *[thin ideal]* idea was really perpetuated in my culture. So, I'm half Russian, and so the like, my Russian side, like, that very, like, European, and that's I feel like that the idea was even more so there than it is in New Zealand. And there's, like, a certain way of looking, in that kind of, like, European culture. So, that was really applicable to me because that's all I've, like, grown up hearing and seeing.” (Participant 1)

Five of six participants did not think anything would need to be changed about the script to make it more applicable to women in NZ. Four participants specifically mentioned that this was because they believed that NZ culture was very similar to Western or American culture.

> "Everything was relevant. I don't think New Zealand girls necessarily are that different in terms of body image to Americans. I think it's all pretty much the same because we're still that like Western society." (Participant 3)

To make the Body Project more applicable to NZ, it would be important to check "that the references in it are not just American based references" (Counsellor 2). Another counsellor mentioned that it would be important to consider that food and eating practices differ between cultures.

> "If you're doing different ethnic groups, I think there needs to be some cultural sensitivity to their information, to what is important in relation to eating in that culture." (Counsellor 1)

<u>Subtheme Three: Group dynamic</u>

Two participants mentioned that at the beginning of the programme, they feared they would not fit in with the group due to their age. They were aged 19 and 29 years old (Participant 5; Participant 6).

> "I was the youngest, which I was a bit anxious about 'cause I don't know. It's just like, you know, like it kind of felt like hanging out with my sisters like older friends, and I was a bit intimidated at first. But no, after the first call, it was really good, it was lovely." (Participant 5)

Two participants also reported that they were neurodivergent. One participant believed it affected feelings of fitting in within group situations.

> "I have ADHD, and two years ago I got diagnosed with autism as well, so I find it hard fitting or feeling like I fit in, anyway. But, as the groups went on, I felt more comfortable sharing and everything. I guess, because I felt like I related to them, and they did, they understood we were all there for the same reason, so we all understood why we were there." (Participant 4)

Subtheme Four: Participant concerns and perceptions

One concern that arose was the ability to complete several homework tasks after sessions. Only one participant reported that time was a barrier to homework completion but found that the homework was valuable.

> "I struggled doing the homework sometimes because I was so stressed about my other uni work…I felt the homework was, it was actually very good. After I got over my stress of having to do it. But yeah, I found it quite helpful." (Participant 6)

Two participants reported that if males were present in the group, it would impact their ability to openly share experiences with the group.

> "I feel like if there were men who were like straight in the group. I would feel a bit a bit like anxious to like, speak up, and open up." (Participant 5)

Two participants and all counsellors (n=3) specifically mentioned that they would recommend having separate groups for males and females, if males were to be included in the NZ implementation of the Body Project in the future. Other interviewees did not comment on this.

> "I feel like if you guys were to do it again, but kind of separate the men and women that would be. That sounds a bit bad, but like it just like it would be a bit easier than having like a co-ed group...women go through so much different things than men do. And it doesn't even matter what sexuality, race, age you are. It's just like there's always going to be a difference between what men and women go through." (Participant 5)

A common perception that arose from the participants (n=3) and peer educators (n=3) was that social media plays a role in contributing to the thin ideal. One participant pointed out that this was what made the peer educators effective—they were being exposed to the same media messages, and "If it was like an older, like lecturer like who wasn't familiar with the social media," (Participant 5) they would "feel a lot less comfortable." (Participant 5)

> "I went back and watched, like, old *[editions of]* America's Next Top Model. And it's horrible like that. And I can't believe how young I was, and just thought that that was normal." (Peer educator 2)

Theme Three: Impact of the Body Project

Theme Three reflected the outcomes reported by participants during interviews, since completing the Body Programme.

Subtheme One: Changes since the Body Project

Four of participants reported that their body satisfaction had improved since completion of the Body Project. Two participants reported no change to body satisfaction. However, one of these participants did acknowledge that whilst their body image had not improved, their level of care about the way they looked had improved.

> "I'm still really unhappy, but I think maybe my level of care has changed a little bit where I'm like, oh, I'm just going to go to work like, who cares? I'm sitting in an office with a middle-aged man like, does it really matter what I look like?" (Participant 6)

Five out of six participants reported changes in behaviour since completing the Body Project. This included being less critical of themselves, combatting negative thoughts with positive ones, wearing different clothes and being more confident to go certain places.

> "I'm a lot happier with the way that I look. I don't really overthink anything anymore like coming into summer. I was dreading it, because I guess I didn't really accept my body and the way that it looked, or anything. And I've got so *[many]* leggings and Skims sets and everything that have had for a while that my partner's bought me, and I just haven't worn them, and I've noticed that I've been wearing them a lot more. I'm not afraid to like. I was wearing a singlet the other day. And I don't think I would ever done have done that prior to this it would just put a T-shirt on kind of thing." (Participant 4)

Subtheme Two: Perceived value of the Body Project

"The Body Project made me realise that I'm perfect the way I am," said Participant 4.

Positive feedback was generally given about homework tasks, with two participants particularly finding the letter-writing task useful – as something they could look back on or even compare from start to end of the Body Project. This task included writing a letter to a young girl struggling with her body image in session one and writing a letter to your younger self in session three. One participant found the letter-writing tasks “cringey” (Participant 1).

> “The homework was really good, especially the last one that I did like the letter to my younger self was very, I found that very confronting. But like in a good way, so yeah, I felt like the content of everything was really good, especially in the long run. So now I can go back and like, look at that letter whenever I feel bad about myself and be like, oh, but this is what I've said to me.” (Participant 6)

Two participants (33%) found the mirror exercise to be useful. This task required participants to stand in front of a mirror in as little clothing possible and write down 15 positive qualities about themselves (physical, emotional, intellectual and social included).

> “I loved the homework. My favourite homework was an exercise where you stood in front of the mirror and found 20 or so things about yourself, physically or mentally… I definitely loved the homework like the calls and stuff were fun but it was really nice having something to do afterwards to kind of reflect on the call.” (Participant 5)

All participants reported that they would recommend the Body Project to a friend, if they noticed they were struggling with their body image.

> “I've just been like bragging about it to all my friends. So, yeah, like, it's, I think everyone should do it.” (Participant 3)

3.5 Discussion

The main aim of this study was to implement and evaluate the effectiveness of the Body Project in the NZ tertiary environment. Objectives were to explore experiences of the programme, determine adjustments needed to suit NZ, and identify barriers and facilitators to engagement in the Body Project.

3.5.1 Fidelity ratings

Stice, Gau, et al. (2017) had an ICC of .84 for competency, which was higher than that of group one (.64) but lower than the ICC found for group two (.96) in this study. The study by Stice, Gau, et al. (2017) had an ICC of .78 for fidelity, which was lower than that of both groups one and two (.87 and .95). Stice, Gau, et al. (2017) also found a mean fidelity rating of M=65.1 for peer educators, and M=75.2 for clinician-led sessions. Given that fidelity ratings were higher in this study, it demonstrated that peer educators stuck to the script well. Notably, competency in this study was rated higher than both the peer educators and clinicians in the aforementioned study too (Stice, Gau, et al. (2017). This suggests that the training of peer educators in this study was sufficient. It demonstrates that the Body Project can be run as designed in NZ. It also shows that peer educators are perhaps just as (if not more) effective that clinician-run Body Project sessions, which is a cost-effective form of ED prevention work (Akers et al., 2021).

3.5.2 Training

Training was perceived by counsellors and peer educators as being sufficient in terms of content relating to the Body Project due to the prescriptive nature of the script, recorded exemplar sessions, and provision of additional resources. Training sufficiency was not commented on by clinicians involved in other qualitative research into the Body Project overseas (Ross, 2022).

In this study, peer educator training was considered insufficient from a group management perspective, as both peer educators and counsellors expressed concern about managing talkative participants or those they suspect might need more support. Interviews conducted by Vanderkruik et al. (2017) also found that Body Project peer educators reported feeling underprepared to manage participants who monopolised group discussions or changed the group dynamic. They suggested that peer educators needed more guidance and opportunities for structured role-plays. Perhaps with extra training and practice, peer educators would become more confident in managing these sorts of participants. This support could also be helpful for managing pro-thin discussion, or conversations that tend to steer towards food and eating habits, as mentioned by one of the peer educators. Preoccupation with food has been associated with various EDs (Lydecker et al., 2022), and therefore peer educators should be communicating with counsellors about these concerns, who can refer or direct to ED services if needed.

From a safety point of view, regular consultation with supervising clinicians would be important. Given that the peer educators have not had formal counselling training or experience, they did not necessarily have the tools to maintain mental health when running a group, where sometimes heavy topics may be discussed. Whilst peer educators received administrative support from the researcher via email, counsellors were not involved in ongoing psychological support. Debriefing in a safe environment with an experienced educator or facilitator to address emotions and evaluate areas for improvement has been proven to be beneficial in a healthcare context (Toews et al., 2021). Regular discussion with a supervisor or co-worker is recommended in clinical practice guidelines for group therapy (Bernard et al., 2008). Although the Body Project is different to group therapy (the Body Project is a highly scripted programme that is process oriented), the concept of debriefing is still relevant and important.

Vanderkruik et al. (2017) also suggested “booster” training sessions throughout the Body Project implementation to address emerging questions or challenges. Extra support sessions for peer educators may also address counsellor concerns about not having clinicians present at the Body Project sessions themselves. While this may ease their concerns around student safety, introducing clinicians who are not peers, in terms of age or gender, may take away the strong relatability benefit identified by participants. Peer educators have proven to be just as, if not slightly more, effective than clinician-run Body Project sessions (Stice et al., 2020). The benefits of peer-led education have also been proven in other areas outside of ED prevention, such as in university science and mathematics courses, where positive effects on grades and class retention were demonstrated with the addition of peer-led support (Drane et al., 2014). A systematic review by Yip et al. (2016) found that incorporating a peer-led component into the activities of several nutrition promotion programmes in schools led to more significant outcomes. Therefore, with extra counsellor support, having the Body Project run by peer educators (as designed) would be preferred over being clinician-led.

3.5.3 Session logistics

The consensus from interviewees was that the ideal group size was somewhere between four and six participants, which was slightly smaller than the recommended group size of seven to ten participants for group therapy (Bernard et al., 2008). The suggestion of extending sessions to 1.5 hours might pose an additional burden on peer educators and participants, given that these sessions were conducted in the evenings to work around university/work commitments. It also suggests that training around managing time and participant pace might not have been sufficient.

Perhaps additional training from counsellors would help peer educators feel more comfortable to combat this issue of talkative participants. In that case, six participants would likely be an ideal number—closer to the seven-to-ten-participant mark, the recommended number where the Body Project has shown the greatest effect size (Stice et al., 2019), whilst still allowing for ample discussion time for each individual. Six participants would also account for participant absence whilst avoiding small group sizes.

The majority of participants and peer educators stated that the online setting was beneficial from a convenience point of view. Stice, Rohde, et al. (2017) found that the completion rate was higher for online-delivered Body Project sessions compared to in-person sessions, perhaps suggesting that convenience was a facilitator of participation. Interestingly, this does not align with previous research conducted by Shaw et al. (2016) which found that 28% of participants thought the online setting made the programme worse, with only 18% stating it made the programme better. Online learning became normalised during the COVID-19 pandemic (Li et al., 2023), so perhaps this explains why participants in this study preferred the online format of sessions. Furthermore, two of the interview participants reported being neurodivergent, and research has suggested that virtual access to sessions can be helpful for therapy clients with neurodivergence, as they may not like to travel to unknown locations (Stark et al., 2021).

3.5.4 Relatability and inclusivity

Simpson et al. (2023) found that the thin ideal did not apply to all Black and Latina participants—instead, thinness had a negative connotation in their cultures. Although participants noted that some cultures correlated a higher weight with wealth, none seemed to identify with this cultural perspective. Perhaps this was due to the small sample size or the lack of broad cultural representation of this study. According to 2023 Census data, NZ had an ethnic breakdown of 67.8% NZ European, 17.8% Māori, 17.3% Asian, 8.9% Pacific, 1.9% Middle Eastern/Latin American/African and 1.1% who identified as 'Other. This study consisted of 66% NZ European (n=8), 17% Pacific (n=2), 8% Asian (n=1) and 25% (n=3) other ethnicities. There were no Māori, Middle Eastern, Latin American or African participants in the study. Therefore, participants in this study were not culturally representative of the wider NZ population.

Research has suggested that whilst not all Māori share the same Western ideal of thinness, they can still be susceptible to it (Houkamau et al., 2021). Relevance of the thin ideal to Māori populations in the context of the Body Project cannot be presumed, given that no interviewees identified as Māori. It would require co-design or conversation with Māori participants themselves, especially given that the researcher did not identify as Māori.

Other applications of the Body Project in different cultural settings found that they had to change some of the exemplar activities (e.g., body activism ideas) to suit the cultural context (AlShebali et al., 2021). Ross (2022) adapted the Body Project script to be more relatable to the specific culture of the university setting by adapting the script to talk about relevant upcoming events. Role-play activities were regarded by participants in this study as realistic and reliable. Simpson et al. (2023) discussed revision of activities and role plays to better represent overall appearance ideals rather than just the thin ideal. This was not mentioned by participants as something they wished for more discussion around. However, the researcher noted that through watching the recordings of sessions for fidelity rating purposes, other appearance ideals were frequently mentioned during discussions around the definition of the thin ideal (such as clear skin, straight teeth, nice hair, etcetera). Perhaps interview questions should have specifically asked if there were other appearance ideals that the participants wished were discussed in the Body Project, in acknowledgment that people may not just value thinness without other beauty ideals.

An aspect that was not mentioned by interviewees in this study, but was found in other qualitative research, was the outdatedness of the script, as Ross (2022), believed that discussion around photoshopping in magazines was no longer relevant. The frequency of self-editing pictures on social media and plastic surgery might be more relevant issues for society today. During fidelity rating, the researcher noted that conversations similar to these points seemed to come up naturally during sessions regardless of the script. The concept of being outdated was not mentioned during interviews, which suggests that the script was relevant to females in NZ.

Almost all (91.6%) participants found their peer educators to be relatable and appreciated their contributions to group conversation. It is important to note that the use of self-disclosure in a group therapy context should be kept to an appropriate level of detail, and avoid shifting the focus onto the therapist (Bernard et al., 2008). Research by Vanderkruik et al. (2020) found that only 74% of their participants responded positively to having peer educators, as some expressed fears that peer educators were too young or inexperienced. No participants mentioned any of these concerns in interviews with the researcher. Notably, the study by Vanderkruik et al. (2020) was conducted in the high school environment, and therefore, peer educators would have been younger than in this current study (aged 22-32 years old). Being slightly older may have increased trust, perhaps through giving the impression of having more life experience. These findings suggest that having the programme run by university-aged peer educators was a well-accepted approach.

Vanderkruik et al. (2020) also found that fear of judgement was perceived as a negative impact of the programme being run by peers. One participant in this study found that peer educators were not relatable due to their appearance of seemingly meeting the thin ideal. Whilst the participant did not express feeling judged *per se,* they did express worry about not being fully understood—hence why empathetic affirmations from peer educators were important. Clinicians working in EDs can face this issue of appearance affecting therapeutic relationships, for example, with some ED clients feeling envious if their clinician is in a thinner body themselves (Yim, 2024). Research suggests that practitioners in ED services should include diverse body types to represent the diverse clientele (Yim, 2024), which would also ideally be applied to the Body Project with a diverse range of peer educators. Clinicians that work in ED services are encouraged to be mindful of personal opinions on body shape/weight, food and eating habits (Heruc et al., 2020), which should also apply to peer educators.

Age and neurodiversity were factors that appeared to impact initial feelings of relatability and inclusivity within the group but faded as participants got to know each other and realise they were all part of the group for similar reasons. It should be noted that neurodivergence was not something asked by the researcher but was freely self-reported, and therefore there may have been more than two participants who were neurodivergent. Some therapy clients with autism have reported finding the group therapy environment triggering, as they had to interact with not only the therapist, but also other group members, with unknown expectations (Stark et al., 2021).

Participants with neurodivergence in this study did not comment on struggling in the group environment. Perhaps this is something that could be explored further with future participants.

There was preference for males and females to be kept separate. This would align with the recommendation from Kilpela et al. (2016), with mixed-gender groups showing less effective results compared to single-gender groups, hypothetically due to females' reduced willingness to talk. Previous research has explored adaptations for a male-targeted Body Project (Brown et al., 2017; Brown & Keel, 2015). Regarding transgender or gender-fluid individuals, it is the researcher's opinion that the script should be amended to include more gender-neutral terms and research into gender-neutral adaptations should be further explored.

3.5.5 Changes since the Body Project

Two-thirds of participants reported improved body satisfaction, which would align with previous quantitative Body Project research in which body dissatisfaction was reduced post-intervention (AlShebali et al., 2021; Hudson et al., 2021; Luo et al., 2021; Stice et al., 2023; Stice et al., 2021). A future planned study will investigate the quantitative results of this participant group to establish exactly how much body satisfaction improved. For the third of participants that experienced no change in body satisfaction, it is important to acknowledge the journey to body satisfaction will look different for everybody, especially if body image beliefs are deep-rooted. Surprisingly, even these participants who reported no changes in body satisfaction noted some positive changes in their lives. Qualitative research by Vanderkruik et al. (2020) found that 42% of participants reported increased positive behaviours towards self after completing the Body Project. This study found that 83.3% of participants had increased positive behaviours (such as having more confidence to wear certain clothing items). Research suggests that women with higher levels of body dissatisfaction tend to choose baggier clothing options (Stolovy, 2021). Therefore, the changes in behaviour around clothing (wearing crop tops or tight-fitting leggings) correlate with participant reports that body image had improved since completing the Body Project.

3.5.6 Perceived value of the Body Project

The letter writing and mirror homework was perceived as valuable by 33% of participants, respectively, for each task. Shaw et al. (2016) found that participants who completed an online-delivered Body Project found the most valuable aspects to be the letters (19%), with the mirror exercise being considered most valuable by 7% of participants. Whilst participants in the current study did not explicitly say these were the most valued aspects of the programme, the participants discussed these activities when asked about the value of the content, likes/dislikes, or recommendations to a friend. Therefore, it might be inferred that these were some of the most valuable aspects of the programme. Notably, they were also likely the easiest tasks to complete, as the behavioural change exercise was designed to challenge participants to do something that they would not normally do. Based on fidelity ratings, the body activism homework was frequently misunderstood. Participants were required to perform two acts that women could do to fight the thin ideal, that would have an impact beyond the individual level. Perhaps if participants understood what the task required, it would have been more valued.

3.5.7 Strengths, Limitations and future direction

A strength of this study included in-depth insights from participants, with one-one-one interviews and up to 30 minutes allowed per participant. The interviewer was also involved in fidelity checking, as was the wider team. The ability to gather qualitative results early on in the study was beneficial, as it gave valuable insight into changes that could benefit future implementation of the programme, as the study progresses.

The sample size was small due to slow recruitment of the wider study, of which interview participants were sourced from. Therefore, data saturation was not able to be obtained. There was also a lack of cultural diversity in interviewees compared to the NZ population. Further research should therefore look to explore qualitative experience for those of different ethnic groups, including Māori and Pacific in NZ.

3.5.8 Conclusion

Four to six participants were considered an ideal number for Body Project groups, and participants preferred the convenience of an online setting. Participants liked the sessions being run by peer educators, as the open conversations made participants feel more comfortable to share. However, the peer educators could benefit from extra training from counsellors to cover group management techniques, clarify confusion around the body activism homework task, ask questions when challenges arise, and debrief for mental health.

CHAPTER FOUR: CONCLUSION

This study aimed to implement and evaluate the effectiveness of the Body Project within a tertiary education system. The first objective was to qualitatively explore counsellor, peer-educator and student impressions and experiences of the Body Project intervention through individual in-depth interviews conducted online. Interviews with the researcher established key themes of programme structure and delivery, influences on engagement and impact of the Body Project. The second objective was to determine if adjustments were needed to adapt the Body Project to the NZ context. All participants related to the thin ideal, although suitability for all New Zealanders was not able to be established, as the majority of interview participants were of NZ European ethnicity. Counsellors suggested consideration of cultural eating practices might be necessary, and to check for any American-based references. The third objective was to explore perceived facilitators and barriers to engagement in the Body Project. Facilitators included relatability to peer educators, convenience of the online setting, and all-female groups. Potential barriers were identified based on factors that influence feelings of belonging within a group (age, appearance or neurodivergence).

Limitations

The sample size for the study was small, and therefore data saturation for interviews could not be reached. Participants in this study were also not representative of the wider NZ population. Particularly, no participants identified as Māori, and only one identified as Pacific. It would be important to consider Māori perspective when discussing applicability to NZ, especially given the literature gaps around Māori experiences of EDs. Qualitative research has suggested that pressure to conform to Western beauty ideals may play a role in contributing to ED development in Māori (Clark et al., 2024). Māori body image ideals are not entirely understood, with research by Talwar et al. (2012) finding that European participants tended to think that Māori woman had a larger ideal body size. More is known about traditional Pacific body ideals and the value of a larger body—although has still been evidence around desire for thinness (whilst still holding a positive view of larger bodies) in Samoan women (Brewis et al., 1998).

A programme such as the Body Project, if applicable, might be valuable given that research has established that early referrals for Māori presenting with disordered eating symptoms are needed (Clark et al., 2023).

A limiting factor in the recruitment of participants was that meeting the inclusion criteria was self-reported. In particular, there was no screening for ED using DSM-5 criteria, and therefore, it cannot be confirmed that no participant had an ED before joining the Body Project. Even though people may not have been formally diagnosed with an ED, they might still meet criteria without being aware of it. One peer educator expressed concern around what to do if a participant appeared to have some ED symptoms.

Multiple sessions were run with just one or two participants and the peer educators as 'catch up' sessions when participants missed the original group session. This was a limitation of the research because not only did it change the group dynamic, but it also meant these extra sessions were not fidelity rated by the research team to assess adherence to the script and competency of the peer educators during those sessions.

Recommendations and future direction

The relatability of the Western ideals, particularly the thin ideal, should be explored further in Māori and Pacific to establish the relevance of the Body Project in this population group.

Screening for EDs before recruitment into the Body Project would be helpful to identify EDs as soon as possible, and ease peer educator concerns around what to do if someone were to present with an ED. It would also be important given that the Body Project was designed as a prevention programme and use of the Body Project as a treatment for an ED has not been proven. Using the Eating Disorder Examination Questionnaire (EDE-Q) would be a simple and effective way to screen for EDs (Berg et al., 2012).

Peer educator training needed to be more thorough in terms of preparing them better for group management. Training should be extended by at least one hour to give counsellors time to run through potentially difficult scenarios with the peer educators. They should practice navigating situations with talkative or distressed participants, and how to steer conversation away from any pro-thin discussion (endorsement of the thin ideal, or strategies to manage weight for example). This supports the peer educators to have a plan in place if a similar situation were to arise in the live sessions. Additionally, to avoid the potential of distressing participants with their own opinions, peer educator training should reinforce the importance of a neutral approach around their own bodies and eating habits. Whilst self-disclosure was important for participants to relate to their peer educators, it is important that acts of self-disclosure aid the conversation, rather than turn the focus to the peer educators themselves. Further training around group management would also be beneficial to help peer educators learn to control the pace of the sessions when there are talkative participants. To help with pace and time, group size should stay between four to six participants. Peer educators should try sticking to one-hour session times but allow for slightly longer if participants have a lot to say so they do not feel rushed. The online setting was preferable for most participants, so should continue to be offered. Perhaps an in-person session time could also be available for those who might prefer or feel safer with face-to-face contact.

The addition of a brief training guide for counsellors could be beneficial for ensuring standardisation of training of peer educators, with a checklist of topics for counsellors to take peer educators through. This guide should cover; role play of sessions one to four, managing group dynamics, managing potential challenges (e.g., what to do when a participant brings up a difficult personal scenario) and a plan for when counsellor drop-in sessions should occur. Thorough role plays and exemplars of all sessions might address confusion around the body activism task. Specifically relating to the body activism task, it would be important to ensure that the counsellors were clear on the instructions for the homework too. In the script, it is stated that the activity is intended to have impact beyond the individual level. If need be, counsellors and peer educators should highlight this statement in the script and check with participants that they understand the task.

Drop-in sessions with counsellors should be planned for the peer educators in advance. Perhaps an opportunity to talk with a supervising counsellor could be offered once weekly or fortnightly. Debriefing is important for looking after mental health. If any personally difficult situations arise, peer educators should be given the opportunity to talk through these feelings or issues.

These drop-in sessions could also serve as a time where peer educators could ask any questions or discuss navigating of unexpected scenarios.

The script could be amended to include more gender-neutral terminology, particularly when considering transgender or gender-fluid individuals. Future research should explore the Body Project applicability for other genders in NZ, in acknowledgement of the fact that EDs do not just occur in females. Future studies should also explore the application of the Body Project in a larger sample size that is more representative of the NZ population. Māori participants should be included, as research has not proven applicability in this unique population.

A recommendation from the researcher's observations during fidelity rating would be to broaden the focus from the thin ideal to a wider appearance ideal, given that participants tended to bring up other beauty ideals such as shapewear, clear skin and straight teeth. The researcher also observed that the script uses imperial units (pounds) when discussing weight. Changing this terminology to metric units (kilograms) would make the script more applicable to NZ.

It would be interesting to implement the Body Project in the NZ secondary schools, given that a large number of ED hospitalisations are occurring in adolescents, younger than university-age students. For example, ED Victoria has implemented a service in which they send trained facilitators to deliver the Body Project in schools that have reached out (Eating Disorders Victoria, n.d.). Perhaps this is something that could be considered in NZ, as the younger peer educators from this implementation (aged 22 years) could extend their scope to implement the Body Project in high school females as well, given that they would be within five years of senior high school students (aged 17–18 years).

During fidelity rating, the researcher noticed that participants discussed skipping meals in attempt to lose weight, which is a pro-thin behaviour. It would be interesting to see if certain food groups were being avoided too, given that people who tend to diet often avoid, fear or restrict certain foods (Gonzalez & Vitousek, 2004). Healthy intake of a variety of food groups and nutritional adequacy could be an additional benefit of Body Project, as it would suggest that the programme has positively impacted eating habits, perhaps because of increased body satisfaction. Future research as part of the wider Body Project study will explore quantitative results around wellbeing, body dissatisfaction, healthcare utilisation, and food intake. Use of a semi-validated food frequency questionnaire (FFQ) is a novel investigation that is not typically explored in Body Project research.

Conflicts of Interest

No conflicts of interest were identified.

References

Akers, L., Rohde, P., Shaw, H., & Stice, E. (2021). Cost-effectiveness comparison of delivery modalities for a dissonance-based eating disorder prevention program over 4-year follow-up. *Prevention Science*, *22*(8), 1086-1095.

Ali, K., Fassnacht, D. B., Farrer, L., Rieger, E., Feldhege, J., Moessner, M., Griffiths, K. M., & Bauer, S. (2020). What prevents young adults from seeking help? Barriers toward help-seeking for eating disorder symptomatology. *International Journal of Eating Disorders*, *53*(6), 894-906.

AlShebali, M., Becker, C., Kellett, S., AlHadi, A., & Waller, G. (2021). Adapting the Body Project to a non-western culture: A dissonance-based eating disorders prevention program for Saudi women. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, 1-10.

American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders (DSM-5®)*. American Psychiatric Publishing. https://books.google.co.nz/books?id=-JivBAAAQBAJ

Arkin, N. M. (2018). *The Body Project: A narrative and social network analysis* [Doctoral dissertation, University of Virginia]. https://libraetd.lib.virginia.edu/downloads/8g84mm683?filename=1_Arkin_Nora_2017_PHD.pdf

Auckland District Health Board. (April 2022). *Eating disorder treatment (ADHB ref-20220223-1162)* [Obtained under Official Information Act 1982 request to Auckland District Health Board]. https://www.adhb.health.nz/assets/Documents/OIA/2022/03/Eating-Disorder-Treatment.pdf

Austin, A., Flynn, M., Richards, K., Hodsoll, J., Duarte, T. A., Robinson, P., Kelly, J., & Schmidt, U. (2021). Duration of untreated eating disorder and relationship to outcomes: A systematic review of the literature. *European Eating Disorders Review*, *29*(3), 329-345.

Axsom, D. (1989). Cognitive dissonance and behavior change in psychotherapy. *Journal of Experimental Social Psychology*, *25*(3), 234-252.

Babbott, K. M., Consedine, N. S., & Roberts, M. (2023). Eating behaviour, body image, and mental health: updated estimates of adolescent health, well-being, and positive functioning in Aotearoa New Zealand. *Journal of Primary Health Care*, *15*(4), 297-307.

Barakat, S., McLean, S. A., Bryant, E., Le, A., Marks, P., Touyz, S., & Maguire, S. (2023). Risk factors for eating disorders: Findings from a rapid review. *Journal of Eating Disorders*, *11*(1), 8.

Barkowski, S., Schwartze, D., Strauss, B., Burlingame, G. M., & Rosendahl, J. (2020). Efficacy of group psychotherapy for anxiety disorders: A systematic review and meta-analysis. *Psychotherapy Research*, *30*(8), 965-982.

Bauer, S., Papezova, H., Chereches, R., Caselli, G., McLoughlin, O., Szumska, I., van Furth, E., Ozer, F., & Moessner, M. (2013). Advances in the prevention and early intervention of eating disorders: The potential of internet-delivered approaches. *Mental Health & Prevention*, *1*(1), 26-32.

Beehive.govt.nz. (2022). *Further support for eating disorder services* Retrieved October 4, 2024 from https://www.beehive.govt.nz/release/further-support-eating-disorder-services#:~:text=People%20battling%20with%20eating%20disorders,as%20part%20of%20Budget%202022

Beintner, I., Jacobi, C., & Taylor, C. B. (2012). Effects of an internet-based prevention programme for eating disorders in the USA and Germany—A meta-analytic review. *European Eating Disorders Review*, *20*(1), 1-8.

Berg, K. C., Peterson, C. B., Frazier, P., & Crow, S. J. (2012). Psychometric evaluation of the eating disorder examination and eating disorder examination-questionnaire: A systematic review of the literature. *International Journal of Eating Disorders*, *45*(3), 428-438.

Bernard, H., Burlingame, G., Flores, P., Greene, L., Joyce, A., Kobos, J. C., Leszcz, M., MacNair-Semands, R. R., Piper, W. E., & McEneaney, A. M. S. (2008). Clinical practice guidelines for group psychotherapy. *International Journal of Group Psychotherapy*, *58*(4), 455-542.

Braun, V., & Clarke, V. (2012). *Thematic analysis*. American Psychological Association.

Brewis, A. A., McGarvey, S. T., Jones, J., & Swinburn, B. A. (1998). Perceptions of body size in Pacific Islanders. *International Journal of Obesity*, *22*(2), 185-189.

Brown, T. A., Forney, K. J., Pinner, D., & Keel, P. K. (2017). A randomized controlled trial of The Body Project: More Than Muscles for men with body dissatisfaction. *International Journal of Eating Disorders*, *50*(8), 873-883.

Brown, T. A., & Keel, P. K. (2015). A randomized controlled trial of a peer co-led dissonance-based eating disorder prevention program for gay men. *Behaviour Research and Therapy*, *74*, 1-10.

Busetto, L., Wick, W., & Gumbinger, C. (2020). How to use and assess qualitative research methods. *Neurological Research and practice*, *2*(1), 14.

Butterfly Body Bright. (2021). *Pilot Evaluation Report*. https://static1.squarespace.com/static/60a212b84e9cf244cb678799/t/62046b51fddc35678fe6fc42/1644456820496/Butterfly+Body+Bright+Pilot+Evaluation+Report+2021

Cass, K., McGuire, C., Bjork, I., Sobotka, N., Walsh, K., & Mehler, P. S. (2020). Medical complications of anorexia nervosa. *Psychosomatics*, *61*(6), 625-631.

Charrat, J.-P., Massoubre, C., Germain, N., Gay, A., & Galusca, B. (2023). Systematic review of prospective studies assessing risk factors to predict anorexia nervosa onset. *Journal of Eating Disorders*, *11*(1), 163.

Christchurch District Health Board. (March 2022). *Official Information Act request (CDHB: 10824)* [Obtained under Official Information Act 1982 request to the Christchurch District Health Board]. https://www.cdhb.health.nz/wp-content/uploads/CDHB-10824-Eating-Disorders-Service-SIED-1.pdf

Clark, M. T. R., Manuel, J., Lacey, C., Pitama, S., Cunningham, R., & Jordan, J. (2023). Reimagining eating disorder spaces: A qualitative study exploring Māori experiences of accessing treatment for eating disorders in Aotearoa New Zealand. *Journal of Eating Disorders*, *11*(1), 22.

Clark, M. T. R., Manuel, J., Lacey, C., Pitama, S., Cunningham, R., & Jordan, J. (2024). 'E koekoe te Tūī, e ketekete te Kākā, e kuku te Kererū, The Tūī chatters, the Kākā cackles, and the Kererū coos': Insights into explanatory factors, treatment experiences and recovery for Māori with eating disorders–A qualitative study. *Australian & New Zealand Journal of Psychiatry*, *58*(4), 365-372.

Cleland, L., Kennedy, H. L., Pettie, M. A., Kennedy, M. A., Bulik, C. M., & Jordan, J. (2023). Eating disorders, disordered eating, and body image research in New Zealand: A scoping review. *Journal of Eating Disorders*, *11*(1), 7.

Culbert, K. M., Sisk, C. L., & Klump, K. L. (2021). A narrative review of sex differences in eating disorders: Is there a biological basis? *Clinical Therapeutics*, *43*(1), 95-111.

D'Adamo, L., Ghaderi, A., Rohde, P., Gau, J. M., Shaw, H., & Stice, E. (2023). Evaluating whether a peer-led dissonance-based eating disorder prevention program prevents onset of each eating disorder type. *Psychological Medicine*, *53*(15), 7214-7221.

da Silva, J. S., Seres, D. S., Sabino, K., Adams, S. C., Berdahl, G. J., Citty, S. W., Cober, M. P., Evans, D. C., Greaves, J. R., & Gura, K. M. (2020). ASPEN consensus recommendations for refeeding syndrome. *Nutrition in Clinical Practice*, *35*(2), 178-195.

Dalle Grave, R., Sartirana, M., & Calugi, S. (2021). Complex cases and comorbidity in eating disorders. *Assessment and Management. Cham, Switzerland: Springer Nature*.

Dane, A., & Bhatia, K. (2023). The social media diet: A scoping review to investigate the association between social media, body image and eating disorders amongst young people. *PLOS Global Public Health*, *3*(3), e0001091.

Del Casale, A., Adriani, B., Modesti, M. N., Virzì, S., Parmigiani, G., Vento, A. E., & Speranza, A. M. (2023). Anorexia nervosa and familial risk factors: A systematic review of the literature. *Current Psychology*, *42*(29), 25476-25484.

Devoe, D. J., Han, A., Anderson, A., Katzman, D. K., Patten, S. B., Soumbasis, A., Flanagan, J., Paslakis, G., Vyver, E., & Marcoux, G. (2023). The impact of the COVID‐19 pandemic on eating disorders: A systematic review. *International Journal of Eating Disorders*, *56*(1), 5-25.

Drane, D., Micari, M., & Light, G. (2014). Students as teachers: Effectiveness of a peer-led STEM learning programme over 10 years. *Educational Research and Evaluation*, *20*(3), 210-230.

Eating Disorder Association of New Zealand. (2018). *Submission to the New Zealand Government Mental Health Inquiry*. https://www.ed.org.nz/files/EDANZ_Submission_to_Mental_Health_Inquiry.pdf

Eating Disorder Association of New Zealand. (2024). *Eating disorder services*. Retrieved October 1, 2024 from https://www.ed.org.nz/getting-help/eating-disorder-services/

Eating Disorders Victoria. (n.d.). *About the Body Project Australia*. Retrieved December 4, 2024 from https://eatingdisorders.org.au/early-intervention-identification-for-professionals/body-project-australia/

Eickman, L., Betts, J., Pollack, L., Bozsik, F., Beauchamp, M., & Lundgren, J. (2018). Randomized controlled trial of REbeL: A peer education program to promote positive body image, healthy eating behavior, and empowerment in teens. *Eating Disorders*, *26*(2), 127-142.

Ergut, N., & Keser, E. (2022). Testing the efficacy of the Virtual Body Project in a sample of Turkish female university students using a randomized controlled trial. *Klinik Psikoloji Dergisi*, *6*(3), 380-391.

Fatt, S. J., Mond, J., Bussey, K., Griffiths, S., Murray, S. B., Lonergan, A., Hay, P., Trompeter, N., & Mitchison, D. (2020). Help-seeking for body image problems among adolescents with eating disorders: Findings from the EveryBODY study. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, *25*, 1267-1275.

Fenton, E., Wild, C., Derraik, J. G., Grant, C., & Anderson, Y. (2023). The need to nurture Aotearoa New Zealand's healthcare workforce. *New Zealand Medical Journal*, *136*(1572).

Fukutomi, A., Austin, A., McClelland, J., Brown, A., Glennon, D., Mountford, V., Grant, N., Allen, K., & Schmidt, U. (2020). First episode rapid early intervention for eating disorders: A two‐year follow‐up. *Early Intervention in Psychiatry*, *14*(1), 137-141.

Galmiche, M., Déchelotte, P., Lambert, G., & Tavolacci, M. P. (2019). Prevalence of eating disorders over the 2000–2018 period: A systematic literature review. *The American Journal of Clinical Nutrition*, *109*(5), 1402-1413.

Gonzalez, V. M., & Vitousek, K. M. (2004). Feared food in dieting and non-dieting young women: a preliminary validation of the Food Phobia Survey. *Appetite*, *43*(2), 155-173.

Hambleton, A., Pepin, G., Le, A., Maloney, D., Touyz, S., & Maguire, S. (2022). Psychiatric and medical comorbidities of eating disorders: Findings from a rapid review of the literature. *Journal of Eating Disorders*, *10*(1), 132.

Hamilton, A., Mitchison, D., Basten, C., Byrne, S., Goldstein, M., Hay, P., Heruc, G., Thornton, C., & Touyz, S. (2022). Understanding treatment delay: Perceived barriers preventing treatment-seeking for eating disorders. *Australian & New Zealand Journal of Psychiatry*, *56*(3), 248-259.

Hammarberg, K., Kirkman, M., & De Lacey, S. (2016). Qualitative research methods: When to use them and how to judge them. *Human Reproduction*, *31*(3), 498-501.

Hanly, F., Torrens-Witherow, B., Warren, N., Castle, D., Phillipou, A., Beveridge, J., Jenkins, Z., Newton, R., & Brennan, L. (2020). Peer mentoring for individuals with an eating disorder: a qualitative evaluation of a pilot program. *Journal of Eating Disorders*, *8*, 1-13.

Hansen, S. J., Stephan, A., & Menkes, D. B. (2021). The impact of COVID-19 on eating disorder referrals and admissions in Waikato, New Zealand. *Journal of Eating Disorders*, *9*(1), 105.

Harrer, M., Adam, S. H., Messner, E. M., Baumeister, H., Cuijpers, P., Bruffaerts, R., Auerbach, R. P., Kessler, R. C., Jacobi, C., & Taylor, C. B. (2020). Prevention of eating disorders at universities: A systematic review and meta‐analysis. *International Journal of Eating Disorders*, *53*(6), 813-833.

Harris, J. E., Gleason, P. M., Sheean, P. M., Boushey, C., Beto, J. A., & Bruemmer, B. (2009). An introduction to qualitative research for food and nutrition professionals. *Journal of the American Dietetic Association*, *109*(1), 80-90.

Hazzard, V. M., Schaefer, L. M., Thompson, J. K., Murray, S. B., & Frederick, D. A. (2022). Measurement invariance of body image measures by age, gender, sexual orientation, race, weight status, and age: The US Body Project I. *Body Image*, *41*, 97-108.

Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Social Science & Medicine*, *292*, 114523.

Heruc, G., Hurst, K., Casey, A., Fleming, K., Freeman, J., Fursland, A., Hart, S., Jeffrey, S., Knight, R., & Roberton, M. (2020). ANZAED eating disorder treatment principles and general clinical practice and training standards. *Journal of Eating Disorders*, *8*, 1-9.

Houkamau, C., Stronge, S., Warbrick, I., Dell, K., Mika, J., Newth, J., Sibley, C., & Kha, K. L. (2021). Cultural efficacy predicts body satisfaction for Māori. *Plos One*, *16*(6).

Hudson, T. A., Amaral, A. C. S., Stice, E., Gau, J., & Ferreira, M. E. C. (2021). Dissonance-based eating disorder prevention among Brazilian young women: A randomized efficacy trial of the Body Project. *Body Image*, *38*, 1-9.

Kabakuş Aykut, M., & Bilici, S. (2022). The relationship between the risk of eating disorder and meal patterns in university students. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, *27*(2), 579-587.

Kallio, H., Pietilä, A. M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, *72*(12), 2954-2965.

Khalsa, S. S., Portnoff, L. C., McCurdy-McKinnon, D., & Feusner, J. D. (2017). What happens after treatment? A systematic review of relapse, remission, and recovery in anorexia nervosa. *Journal of Eating Disorders*, *5*, 1-12.

Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, *42*(8), 846-854.

Kilpela, L. S., Blomquist, K., Verzijl, C., Wilfred, S., Beyl, R., & Becker, C. B. (2016). The Body Project 4 all: A pilot randomized controlled trial of a mixed-gender dissonance-based body image program. *International Journal of Eating Disorders*, *49*(6), 591-602.

Lacey, C., Cunningham, R., Rijnberg, V., Manuel, J., Clark, M. T. R., Keelan, K., Pitama, S., Huria, T., Lawson, R., & Jordan, J. (2020). Eating disorders in New Zealand: Implications for Māori and health service delivery. *International Journal of Eating Disorders*, *53*(12), 1974-1982.

Li, X., Odhiambo, F. A., & Ocansey, D. K. W. (2023). The effect of students' online learning experience on their satisfaction during the COVID-19 pandemic: The mediating role of preference. *Frontiers in Psychology*, *14*, 1095073.

Liamputtong, P. (2020). *Qualitative research methods* (5 ed.). Oxford University Press.

Luo, Y.-J., Jackson, T., Stice, E., & Chen, H. (2021). Effectiveness of an internet dissonance-based eating disorder prevention intervention among body-dissatisfied young Chinese women. *Behavior Therapy*, *52*(1), 221-233.

Lydecker, J. A., Simpson, L., Smith, S. R., White, M. A., & Grilo, C. M. (2022). Preoccupation in bulimia nervosa, b inge-eating disorder, anorexia nervosa, and higher weight. *International Journal of Eating Disorders*, *55*(1), 76-84.

Mahon, C., Hamburger, D., Webb, J. B., Yager, Z., Howard, E., Booth, A., & Fitzgerald, A. (2023). Protocol of a cluster randomised trial of BodyKind: A school-based body image programme for adolescents. *BMC Public Health*, *23*(1), 2246.

Marks, R. J., De Foe, A., & Collett, J. (2020). The pursuit of wellness: Social media, body image and eating disorders. *Children and Youth Services Review*, *119*, 105659.

Marzola, E., Longo, P., Sardella, F., Delsedime, N., & Abbate-Daga, G. (2021). Rehospitalization and "revolving door" in anorexia nervosa: Are there any predictors of time to readmission? *Frontiers in Psychiatry*, *12*, 694223.

McPhee, L. (Director). (2000). *Dying to be thin* [Film]. PBS.

Mills, R., Hyam, L., & Schmidt, U. (2023). A Narrative Review of Early Intervention for Eating Disorders: Barriers and Facilitators. *Adolescent Health, Medicine and Therapeutics*, 217-235.

Moessner, M., Minarik, C., Özer, F., & Bauer, S. (2016). Can an internet-based program for the prevention and early intervention in eating disorders facilitate access to conventional professional healthcare? *Journal of Mental Health*, *25*(5), 441-447.

New Zealand Eating Disorders Clinic. (2024). *The Body Project— Starting 25 October 2022*. Retrieved October 22, 2024 from https://www.nzeatingdisordersclinic.co.nz/the-body-project/

New Zealand National Party. (2024). *Reviving International Education* https://assets.nationbuilder.com/nationalparty/pages/18403/attachments/original/1695241117/Reviving_International_Education.pdf?1695241117

O'Connell Rapira, L. (2018). *Ngā Kōrero Hauora o Ngā Taiohi: Conversations with young people about wellbeing*.

Oakley Browne, M. A., Elisabeth Wells, J., Scott, K. M., McGee, M. A., & Team, N. Z. M. H. S. R. (2006). Lifetime prevalence and projected lifetime risk of DSM-IV disorders in Te Rau Hinengaro: The New Zealand Mental Health Survey. *Australian & New Zealand Journal of Psychiatry*, *40*(10), 865-874.

Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. Sage Publications.

Potterton, R., Austin, A., Flynn, M., Allen, K., Lawrence, V., Mountford, V., Glennon, D., Grant, N., Brown, A., & Franklin-Smith, M. (2021). "I'm truly free from my eating disorder": Emerging adults' experiences of FREED, an early intervention service model and care pathway for eating disorders. *Journal of Eating Disorders*, *9*, 1-14.

Rosewall, J. K., Gleaves, D. H., & Latner, J. D. (2018). An examination of risk factors that moderate the body dissatisfaction-eating pathology relationship among New Zealand adolescent girls. *Journal of Eating Disorders*, *6*, 1-10.

Ross, M. C. (2022). *A qualitative inquiry of the Body Project on college campuses in Illinois* [Master's thesis, Illinois State University]. https://ir.library.illinoisstate.edu/cgi/viewcontent.cgi?article=2572&context=etd

Santomauro, D. F., Melen, S., Mitchison, D., Vos, T., Whiteford, H., & Ferrari, A. J. (2021). The hidden burden of eating disorders: an extension of estimates from the Global Burden of Disease Study 2019. *The Lancet Psychiatry*, *8*(4), 320-328.

Shalaby, R. A. H., & Agyapong, V. I. (2020). Peer support in mental health: Literature review. *JMIR Mental Health*, *7*(6), e15572.

Shaw, H., Rohde, P., & Stice, E. (2016). Participant feedback from peer‐led, clinician‐led, and internet‐delivered eating disorder prevention interventions. *International Journal of Eating Disorders*, *49*(12), 1087-1092.

Simpson, C. C., Boutté, R. L., Burnette, C. B., Weinstock, M., Goel, N., & Mazzeo, S. E. (2023). Cultural adaptation of an integrated eating disorders prevention and healthy weight management program. *Journal of Eating Disorders*, *11*(1), 232.

Smith, L., López Sánchez, G. F., Fernandez-Egea, E., Ford, T., Parris, C., Underwood, B. R., Butler, L., Barnett, Y., Trott, M., & Koyanagi, A. (2023). Eating disorders and physical multimorbidity in the English general population. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, *28*(1), 72.

Solmi, M., Radua, J., Olivola, M., Croce, E., Soardo, L., Salazar de Pablo, G., Il Shin, J., Kirkbride, J. B., Jones, P., & Kim, J. H. (2022). Age at onset of mental disorders worldwide: large-scale meta-analysis of 192 epidemiological studies. *Molecular Psychiatry*, *27*(1), 281-295.

Stark, E., Ali, D., Ayre, A., Schneider, N., Parveen, S., Marais, K., Holmes, N., & Pender, R. (2021). Psychological therapy for autistic adults: A curious approach to making adaptations.

Stefanini, M. C., Troiani, M. R., Caselli, M., Dirindelli, P., Lucarelli, S., Caini, S., & Martinetti, M. G. (2019). Living with someone with an eating disorder: Factors affecting the caregivers' burden. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, *24*, 1209-1214.

Stice, E., Bohon, C., Shaw, H., & Desjardins, C. D. (2023). Efficacy of virtual delivery of a dissonance-based eating disorder prevention program and evaluation of a donation model to support sustained implementation. *Journal of Consulting and Clinical Psychology*, *91*(3), 139.

Stice, E., Gau, J. M., Rohde, P., & Shaw, H. (2017). Risk factors that predict future onset of each DSM–5 eating disorder: Predictive specificity in high-risk adolescent females. *Journal of Abnormal Psychology*, *126*(1), 38.

Stice, E., Marti, C. N., Shaw, H., & Rohde, P. (2019). Meta-analytic review of dissonance-based eating disorder prevention programs: Intervention, participant, and facilitator features that predict larger effects. *Clinical Psychology Review*, *70*, 91-107.

Stice, E., Marti, C. N., Spoor, S., Presnell, K., & Shaw, H. (2008). Dissonance and healthy weight eating disorder prevention programs: Long-term effects from a randomized efficacy trial. *Journal of Consulting and Clinical Psychology*, *76*(2), 329.

Stice, E., Onipede, Z. A., Shaw, H., Rohde, P., & Gau, J. M. (2021). Effectiveness of the Body Project eating disorder prevention program for different racial and ethnic groups and an evaluation of the potential benefits of ethnic matching. *Journal of Consulting and Clinical Psychology*, *89*(12), 1007.

Stice, E., & Presnell, K. (2007). *The Body Project: Promoting body acceptance and preventing eating disorders*. Oxford University Press. https://books.google.co.nz/books?id=IPlC-1UKXDQC

Stice, E., Rohde, P., & Shaw, H. (n.d.). *Peer Body Project Clinician-and Peer-Leader 4-Session Version Script*. https://sticebodyprojectsupport.weebly.com/download-materials.html

Stice, E., Rohde, P., Shaw, H., & Gau, J. M. (2017). Clinician-led, peer-led, and internet-delivered dissonance-based eating disorder prevention programs: Acute effectiveness of these delivery modalities. *Journal of Consulting and Clinical Psychology*, *85*(9), 883.

Stice, E., Rohde, P., Shaw, H., & Gau, J. M. (2020). Clinician-led, peer-led, and internet-delivered dissonance-based eating disorder prevention programs: Effectiveness of these delivery modalities through 4-year follow-up. *Journal of Consulting and Clinical Psychology*, *88*(5), 481.

Stolovy, T. (2021). Styling the self: Clothing practices, personality traits, and body image among Israeli women. *Frontiers in Psychology*, *12*, 719318.

Streatfeild, J., Hickson, J., Austin, S. B., Hutcheson, R., Kandel, J. S., Lampert, J. G., Myers, E. M., Richmond, T. K., Samnaliev, M., & Velasquez, K. (2021). Social and economic cost of eating disorders in the United States: Evidence to inform policy action. *International Journal of Eating Disorders*, *54*(5), 851-868.

Surgenor, L. J., Dhakal, S., Watterson, R., Lim, B., Kennedy, M., Bulik, C., Wilson, N., Keelan, K., Lawson, R., & Jordan, J. (2022). Psychosocial and financial impacts for carers of those with eating disorders in New Zealand. *Journal of Eating Disorders*, *10*(1), 37.

Talwar, R., Carter, J. D., & Gleaves, D. H. (2012). *New Zealand female body image: What roles do ethnicity and body mass play* New Zealand Psychological Society].

Taylor, C. B., Bryson, S., Luce, K. H., Cunning, D., Doyle, A. C., Abascal, L. B., Rockwell, R., Dev, P., Winzelberg, A. J., & Wilfley, D. E. (2006). Prevention of eating disorders in at-risk college-age women. *Archives of General Psychiatry*, *63*(8), 881-888.

Te Whatu Ora - Health New Zealand. (2024). *Publicly funded hospital discharges - 1 July 2021 to 30 June 2022 [Data set]*. https://tewhatuora.shinyapps.io/hospitals-web-tool/

Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation*, *27*(2), 237-246.

Toews, A. J., Martin, D. E., & Chernomas, W. M. (2021). Clinical debriefing: a concept analysis. *Journal of Clinical Nursing*, *30*(11-12), 1491-1501.

Tomfohr-Madsen, L. M., Roos, L. E., Madsen, J. W., Leason, J., Singla, D. R., Charlebois, J., Tomasi, P., & Chaput, K. H. (2022). Peer-led psychotherapy: The time is now. *The Journal of Clinical Psychiatry*, *83*(3), 40703.

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International journal for quality in health care*, *19*(6), 349-357.

Udo, T., & Grilo, C. M. (2019). Psychiatric and medical correlates of DSM-5 eating disorders in a nationally representative sample of adults in the United States. *International Journal of Eating Disorders*, *52*(1), 42-50.

van Hoeken, D., & Hoek, H. W. (2020). Review of the burden of eating disorders: mortality, disability, costs, quality of life, and family burden. *Current Opinion in Psychiatry*, *33*(6), 521-527.

Vanderkruik, R., Gist, D., & Dimidjian, S. (2020). Preventing eating disorders in young women: An RCT and mixed-methods evaluation of the peer-delivered Body Project. *Journal of Consulting and Clinical Psychology*, *88*(12), 1105.

Vanderkruik, R., Strife, S., & Dimidjian, S. (2017). Lessons learned from training peer-leaders to conduct Body Project workshops. *Eating Disorders*, *25*(4), 358-374.

Watson, H. J., Yilmaz, Z., Thornton, L. M., Hübel, C., Coleman, J. R., Gaspar, H. A., Bryois, J., Hinney, A., Leppä, V. M., & Mattheisen, M. (2019). Genome-wide association study identifies eight risk loci and implicates metabo-psychiatric origins for anorexia nervosa. *Nature Genetics*, *51*(8), 1207-1214.

Weissman, R. S., & Rosselli, F. (2017). Reducing the burden of suffering from eating disorders: Unmet treatment needs, cost of illness, and the quest for cost-effectiveness. *Behaviour Research and Therapy*, *88*, 49-64.

Wilksch, S. M., O'Shea, A., & Wade, T. D. (2018). Media Smart-Targeted: Diagnostic outcomes from a two-country pragmatic online eating disorder risk reduction trial for young adults. *International Journal of Eating Disorders*, *51*(3), 270-274.

Wilson, C. (2020). *Covid-19: Number of eating disorder patients soaring since lockdown, experts say*. Stuff.co.nz. Retrieved December 2, 2024 from https://www.stuff.co.nz/national/health/300169261/covid19-number-of-eating-disorder-patients-soaring-since-lockdown-experts-say

Yahya, A. H., & Sukmayadi, V. (2020). A review of cognitive dissonance theory and its relevance to current social issues. *MIMBAR: Jurnal Sosial Dan Pembangunan*, *36*(2), 480-488.

Yamamiya, Y., & Stice, E. (2023). Risk factors that predict future onset of anorexia nervosa, bulimia nervosa, binge eating disorder, and purging disorder in adolescent girls. *Behavior Therapy*.

Yim, S. H. (2024). Clinician bodies in eating disorder services: a commentary. *Eating Disorders*, 1-9.

Yip, C., Gates, M., Gates, A., & Hanning, R. M. (2016). Peer-led nutrition education programs for school-aged youth: a systematic review of the literature. *Health Education Research*, *31*(1), 82-97.

Appendix A: COREQ Checklist

COREQ (COnsolidated criteria for REporting Qualitative research) Checklist

A checklist of items that should be included in reports of qualitative research. You must report the page number in your manuscript where you consider each of the items listed in this checklist. If you have not included this information, either revise your manuscript accordingly before submitting or note N/A.

Topic	Item No.	Guide Questions/Description	Reported on Page No.
Domain 1: Research team and reflexivity			
Personal characteristics			
Interviewer/facilitator	1	Which author/s conducted the interview or focus group?	41
Credentials	2	What were the researcher's credentials? E.g. PhD, MD	41
Occupation	3	What was their occupation at the time of the study?	41
Gender	4	Was the researcher male or female?	45
Experience and training	5	What experience or training did the researcher have?	45
Relationship with participants			
Relationship established	6	Was a relationship established prior to study commencement?	41
Participant knowledge of the interviewer	7	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	41
Interviewer characteristics	8	What characteristics were reported about the inter viewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	45
Domain 2: Study design			
Theoretical framework			
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	34
Participant selection			
Sampling	10	How were participants selected? e.g. purposive, convenience, consecutive, snowball	40
Method of approach	11	How were participants approached? e.g. face-to-face, telephone, mail, email	40
Sample size	12	How many participants were in the study?	40
Non-participation	13	How many people refused to participate or dropped out? Reasons?	38/40
Setting			
Setting of data collection	14	Where was the data collected? e.g. home, clinic, workplace	41
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	41
Description of sample	16	What are the important characteristics of the sample? e.g. demographic data, date	45
Data collection			
Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	41
Repeat interviews	18	Were repeat inter views carried out? If yes, how many?	45
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	45
Field notes	20	Were field notes made during and/or after the inter view or focus group?	42
Duration	21	What was the duration of the inter views or focus group?	41
Data saturation	22	Was data saturation discussed?	37
Transcripts returned	23	Were transcripts returned to participants for comment and/or	45

Topic	Item No.	Guide Questions/Description	Reported on Page No.
		correction?	
Domain 3: analysis and findings			
Data analysis			
Number of data coders	24	How many data coders coded the data?	45
Description of the coding tree	25	Did authors provide a description of the coding tree?	43
Derivation of themes	26	Were themes identified in advance or derived from the data?	42
Software	27	What software, if applicable, was used to manage the data?	42
Participant checking	28	Did participants provide feedback on the findings?	45
Reporting			
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	47-56
Data and findings consistent	30	Was there consistency between the data presented and the findings?	42
Clarity of major themes	31	Were major themes clearly presented in the findings?	47-56
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	47-56

Developed from: Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

Appendix B: Ethical approval

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

20/06/2024

Dear: Prof Aj Ali

Re: Ethics Application - OM1 24/11 - Evaluation of The Body Project

Thank you for the above application that was considered by the Massey University Human Ethics Committee:

Ohu Matatika 1 at their meeting held on **Tuesday, 12 March 2024**

On behalf of the Committee I am pleased to advise you that the ethics of your application are approved.

Approval is for three years. If this project has not been completed within three years from the date of this letter, reapproval must be requested.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely

Professor Tracy Riley,
Acting Chair, Research Ethics Chair's Committee

Research Ethics Office, Research and Enterprise
Massey University, Private Bag 11 222, Palmerston North, 4442, New Zealand T 06 951 6841; 06 95106840
E humanethics@massey.ac.nz; animalethics@massey.ac.nz; gtc@massey.ac.nz

20/06/2024

Dear: Prof Aj Ali

Re: Ethics Application - OM1 24/11 - Evaluation of The Body Project

Thank you for the above application that was considered by the Massey University Human Ethics Committee:

Ohu Matatika 1 at their meeting held on **Tuesday, 14 May 2024**

On behalf of the Committee I am pleased to advise you that the ethics of your application are approved.

Approval is for three years. If this project has not been completed within three years from the date of this letter, reapproval must be requested.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely

Professor Tracy Riley,
Acting Chair, Research Ethics Chair's Committee

Research Ethics Office, Research and Enterprise
Massey University, Private Bag 11 222, Palmerston North, 4442, New Zealand T 06 951 6841; 06 95106840
E humanethics@massey.ac.nz; animalethics@massey.ac.nz; gtc@massey.ac.nz

Appendix C: Participant information sheet

MASSEY UNIVERSITY
COLLEGE OF HEALTH
TE KURA HAUORA TANGATA

Evaluation of The Body Project

PARTICIPANT INFORMATION SHEET (STUDENTS)

Researcher Introduction
We are health and wellbeing researchers from Massey University. Prof Ajmol Ali has expertise in physical activity, Prof Rozanne Kruger and Ms Garalynne Stiles are dietitians and experts in nutrition, and Ms Cate Davis and Ms Maia Cavanagh are completing an MSc in Nutrition and Dietetics.

Invitation to Participate in Research Study
The Body Project is a programme designed for young women with body image concerns. It has been shown to have positive effects on improving body acceptance, with successful results worldwide. The programme helps participants challenge and explore what a healthy body means and looks like to them.

The main outcomes expected through the Body Project are as follows:
1. The Body Project will be successfully implemented at a tertiary institution in New Zealand *(Part A).*
2. Counsellor, peer educator and participant experiences will be collected to produce an informed evaluation of the implementation of the Body Project *(Part B).*

Participant Recruitment
We are collecting data from students enrolled in Massey University. They must identify as females, aged 18 years and over. The Body Project will not be available for those who identify as males, students enrolled in other tertiary institutes, those 17 years or younger, or those currently undergoing treatment for an eating disorder. Please note that this study is open to those who identify as female, and participants may include biological males.

We aim to recruit 80 students for this study, 40 in each group (Part A). We will also invite all students, of which 6-10 individuals will be selected to take part in the interviews (Part B), along with interviews of 3 peer educators and 3 counsellors.

We are collecting data in a variety of ways and will be inviting counsellors and peer educators to take part in different aspects of the evaluation; this information sheet relates to **implementation (students).**

Project Procedures and Participant Involvement

PART A:
If you agree to take part, you will be randomly split into either the 4-session group (n=40), or the 1-session group (n=40). These are just two different forms of implementation of the study.

The 4-session group will be asked to take part in 4 x 1-hour sessions, spread across 4 weeks. Sessions will take place online, over Zoom. As participants will be split into groups of 5-6 people, the timing of these sessions will be agreed upon within the group. Each session will involve a series of verbal, written and behavioural exercises. The sessions will be led by the peer educator, a fellow student trained by the counsellors to lead the discussions.
You will be asked to fill out online questionnaires at the start of session 1 and end of session 4. These questionnaires will be discussing a variety of topics including body satisfaction, quality of life and dietary intake. Participants should allocate up to 30 minutes outside of the sessions to complete the questionnaires (4-session group: total time commitment of ~5 hours.)

The 1-session group will also be asked to fill out these same questionnaires, both before and after watching their session. Data from these questionnaires will be used for data analysis, but no personal, identifying information will be collected to ensure participant confidentiality is maintained throughout.

If you are in the 1-session group, you should allow 55 minutes for the session itself, plus up to 30 minutes for the questionnaires discussed above. If allocated to this group, you will get the opportunity to participate in the extended sessions at a later date, should you wish to do so.

We will provide koha (gift) of a **$20 voucher** for each student participant in Part A (at the end of the trial).

PART B:
We will invite students from the 4-session group to volunteer to be interviewed about taking part in this project; the first 6-10 students that volunteer will be recruited. The number of interviews will depend on when data saturation is reached i.e. when people start repeating the same information. If you agree to take part, you will be asked to join one of the research team members on Zoom for an interview on your experiences of taking part in the Body Project. Each interview will be up to 30 minutes long. The time of the interview will be at a time that suits you and the researcher. The interview will be recorded and transcribed for later data analysis. When reporting the results we will use pseudonyms to maintain confidentiality. (Part B: total time commitment of 30 minutes.)

We will provide **$20 koha** (gift) for each student participant in Part B (at the end of the interviews).

Benefits of participation
International research has shown that taking part in a preventative programme improves body satisfaction, and improves mood, reduces use of unhealthy weight control behaviours, and decreases binge eating and other eating disorder symptoms.

Participant's Rights
You are under no obligation to accept this invitation. Should you choose to participate, you have the right to:

- Decline to answer any particular question.

- Withdraw from the study at any time, even after you have signed a consent form (if you choose to withdraw you cannot withdraw your data from the analysis after the data collection has been completed).
- Ask any questions about the study at any time during participation.
- Be given access to a summary of the project findings when it is concluded.

Good Practice and Cultural Safety for Massey University Research

The study was discussed with Associate Professor Bevan Erueti (Associate Dean – Māori) and Professor Palatasa Havea (Dean Pacific) to ensure that both Māori and Pacific concepts and values are being included. All research will be performed in a culturally safe way that respects participants privacy and confidentiality. The concept of manaakitanga will be acknowledged by providing participants with a space where they can feel safe to share their experiences, knowing they will be respected and supported. The peer educators will be trained to build rapport with participants and perform a karakia at the start and end of each session.

Confidentiality

Data collected will be used for research purposes only. The findings may be submitted for journal publication and/or presentation at a conference. Numbers will be assigned to participants to ensure their identity is kept confidential. No names or identifying information will be available to anyone outside of the research team. Data will be kept confidential, stored on secure Massey OneDrive computers for 5 years. After this time, it will be disposed of by a member of the research team at Massey University.

Project Contacts

If you have any questions regarding this study, please do not hesitate to contact either of the following people:

Principal Researcher
Prof Ajmol Ali (School of Sport, Exercise and Nutrition, Massey University)
a.ali@massey.ac.nz
(09) 213 6414

Student researcher
Cate Davis (School of Sport, Exercise and Nutrition, Massey University)
c.i.davis@massey.ac.nz

Student Researcher
Maia Cavanagh (School of Sport, Exercise and Nutrition, Massey University)
m.cavanagh@massey.ac.nz

Researcher	Contact details	Area of expertise
Prof Rozanne Kruger	r.kruger@massey.ac.nz	Nutrition
Garalynne Stiles	g.stiles@massey.ac.nz	Nutrition

Eric Stice	estice@stanford.edu	Department of Psychiatry and Behavioural Sciences, Stanford University, California.
Heather Shaw	Hshaw2@stanford.edu	Stanford University, Social Science Research Scholar

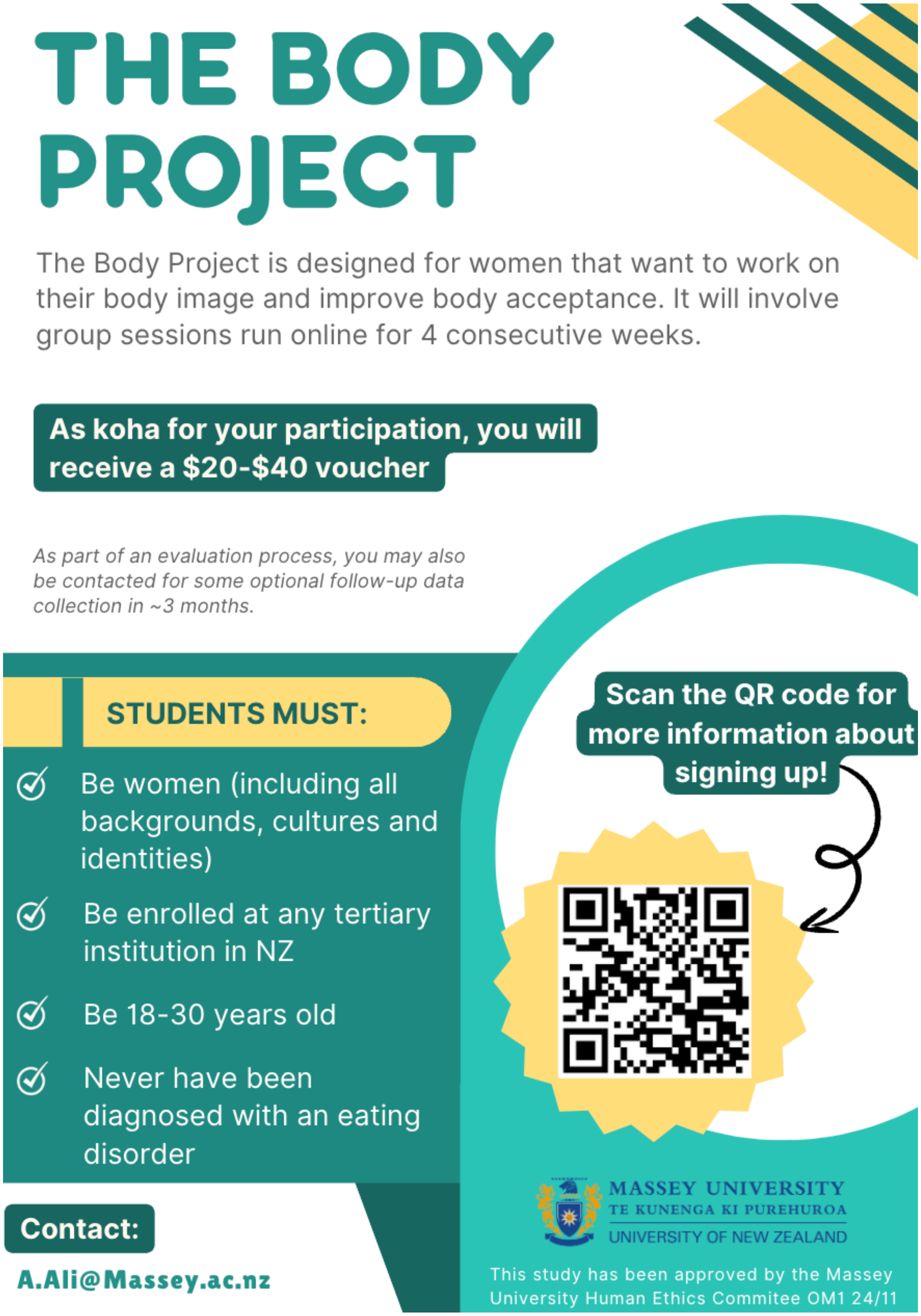
Should involvement in the Body Project bring up any personal struggles around body image and eating, students should not hesitate to contact the Massey University Health and Counselling team. Their contact details, along with other free services available to students, can be found below:

Service	Contact Details	
Massey Health and Counselling Centre	studenthealth@massey.ac.nz	(09) 213 6700
Youthline	TXT 234	0800 376 633
1737	https://1737.org.nz	Call or TXT 1737

Committee Approval Statement

This project has been reviewed and approved by the Massey University Human Ethics Ohu Matatika 1, Application OM1 24/11. If you have any concerns about the conduct of this research, please contact the Chairperson, Massey University Human Ethics Ohu Matatika 1, email humanethics1@massey.ac.nz

Appendix D: Participant recruitment poster



Appendix E: Peer educator recruitment poster

Appendix F: Peer educator fidelity form

PEER BODY PROJECT
Session Adherence
Session 1

School ID:________________________Group #: ___________________

Rater:____________________________ Date of Rating:_________________

100 = Perfect! Absolutely all material in the section was presented exactly as written (100%).
90 = Excellent. All key concepts and almost all material in the section were presented (95%).
80 = Very good. All key concepts were presented but some supporting material skipped (90%).
70 = Good. Most key concepts of the section were presented (8 0%).
60 = Fair. One key concept was not presented (70%).
50 = Mediocre. The majority of key concepts were presented but significant gaps (60%).
40 = Minimal adherence. The majority of key concepts were presented but poorly (50%).
30 = Poor. The majority of the key concepts were not presented (<50%).
20 = Very poor. Material of this section was mentioned only very briefly (10%).
10 = No adherence. The section was skipped entirely.

Rating	**Segment/Content**
_______	Introduction (10 min)
_______	Voluntary commitment and overview (3 min)
_______	Definition and origin of the appearance-ideal (20 min)
_______	Costs associated with pursuing the appearance-ideal (20 min)
_______	Assign home exercises: (1) letter to adolescent girl, and (2) mirror self-affirmation exercise (5 min)

Appendix G: Peer educator competency

GROUP LEADER COMPETENCE ASSESSMENT

School ID:__________________Group #: ____ __________________

Rater:______________________________ Date of Rating:___

Instructions: Review the entire intervention session, first rating for protocol adherence using the appropriate Session Adherence form. Then complete the ratings for general competence.

General Competence Ratings

1. Leaders express ideas clearly and at an appropriate pace SCORE = _______

100	Superior	Leaders are unusually articulate and express ideas in way that all group members understand. Perfect pace.
90		
80	Excellent/Above average	Ideas are expressed in very clear manner. Pace follows needs of group members.
70		
60	Good/Average	Ideas are expressed in a clear manner and at a pace which is easy to follow.
50		
40	Fair/Below Average	Ideas are expressed in clear manner or pace is appropriate but not both.
30		
20	Poor	Leaders are difficult to follow and session proceeds at an uncomfortable pace.
10		

2. Leaders are organized SCORE = _______

100	Superior	Session runs seamlessly.
90		
80	Excellent/Above average	Leaders appear very organized and well-prepared.
70		
60	Good/Average	Leaders appear organized and well-prepared in session.
50		
40	Fair/Below Average	Leaders appear marginally organized or prepared in session.
30		
20	Poor	Leaders appear disorganized or ill-prepared in session.
10		

3. Leaders keep group members on task during session SCORE = ____

100	Superior	Leaders are unusually skillful at keeping group on topic, expertly deflecting several attempts by different members to go off-topic.
90		
80	Excellent/Above average	Leaders very skillfully keep members on task. No off-topic discussion.
70		
60	Good/Average	Leaders keep members on task, tactfully limiting discussions off the topic. Less than 1 minute of off-topic discussion.
50		
40	Fair/Below Average	Leaders occasionally allow discussion to stray from the task at hand, but this is a small problem; 1-2 minutes of off-topic discussion.
30		
20	Poor	Leaders frequently allow discussion to stray from the task at hand, and off-topic discussion is a major problem.
10		

4. Leaders attempt to provide approximately equal speaking time for all members SCORE = _____

100	Superior	Leaders do an unusually skillful job of handling very outspoken and/or very quiet group members.
90		
80	Excellent/Above average	Leaders do an excellent job of promoting equal speaking time for all.
70		
60	Good/Average	Leaders tactfully promote approximately equal speaking time for all group members.
50		
40	Fair/Below Average	Leaders either tactfully draw out quiet individuals or avoid domination of the group by a few outspoken members but not both.
30		
20	Poor	Leaders allow domination of the group by a few outspoken members and fail to draw out quiet members.
10		

5. Leaders solicit feedback SCORE = _____

100	Superior	Leaders do an unusually good job of soliciting feedback from all group members to ensure that material is clearly understood by all.
90		
80	Excellent/Above average	Leaders are especially adept at eliciting and responding to verbal and nonverbal feedback throughout the session.
70		

60	Good/Average	Leaders elicit feedback from all group members and ask enough questions to be sure that members understand the material.
50		
40	Fair/Below Average	Leaders elicit feedback from some members but do not ask enough questions to be sure that all members understand the material.
30		
20	Poor	Leaders do not ask for feedback to determine member's understanding of, and response to, the session.
10		

6. Leaders listen and understand SCORE = ________

100	Superior	Leaders are extremely perceptive and emphatic. Unusually good listening skills.
90		
80	Excellent/Above average	Leaders seem to clearly understand the members and are adept at communicating this understanding through appropriate verbal and nonverbal responses. Excellent listening and empathic skills
70		
60	Good/Average	Good listening skills, as indicated by ability to respond to subtle communications.
50		
40	Fair/Below Average	Leaders are usually able to reflect or rephrase what the members explicitly said but failed to respond to more subtle communication. Limited ability to listen and empathize.
30		
20	Poor	Leaders repeatedly failed to understand what the members explicitly said and thus consistently missed the point. Poor empathic skills
10		

7. Leaders communicate acceptance and respect SCORE = _____

100	Superior	Leaders convey an unusually high level of genuine acceptance and respect of each and every group member.
90		
80	Excellent/Above average	Leaders clearly and consistently communicate acceptance and respect to all group members (acceptance should not be confused with approval of the person's behavior).
70		
60	Good/Average	Leaders communicate acceptance and respect to the group.
50		
40	Fair/Below Average	Leaders are inconsistent in communicating acceptance and respect.

30		
20	Poor	Leaders fail to communicate acceptance and respect and may be perceived as judgmental, harsh, disrespectful, or condescending.
10		

8. Leaders are enthusiastic SCORE = _____

100	Superior	Leaders do an unusually good job of being genuinely enthusiastic about the course. They are infectious in their enthusiasm.
90		
80	Excellent/Above average	Leaders convey a very enthusiastic attitude about course and likelihood of improvement.
70		
60	Good/Average	Leaders convey a positive attitude about course and likelihood of improvement.
50		
40	Fair/Below Average	Leaders either (a) convey neither lively, positive attitude nor a tired, angry, or negative attitude, or (b) leaders vary from a lively, positive attitude to a tired, angry, or negative attitude.
30		
20	Poor	Leaders appear tired, angry, and/or lethargic, or convey a negative attitude about course and likelihood of improvement.
10		

9. Leaders are warm SCORE = ____

100	Superior	Leaders convey a high degree of genuine warmth and interest in all group members.
90		
80	Excellent/Above average	Leaders convey warmth and interest in all group members.
70		
60	Good/Average	Leaders convey warmth and interest in group as a whole.
50		
40	Fair/Below Average	Neutral. Leaders are neither warm nor cold.
30		
20	Poor	Leaders appear detached and aloof, uninterested in group members.
10		

10. Leaders skillfully handled any special problems arising during the session SCORE = ________

100	Superior	Leaders were extremely skillful at handling several unusual problems.
90		
80	Excellent/Above average	Leaders were very skillful at handling a special problem/situation.

70		
60	Good/Average	Leaders were moderately skillful at handling a special problem.
50		
40	Fair/Below Average	Leaders' response to a problem was minimally adequate.
30		
20	Poor	Leaders could not deal adequately with special problems that arose during session.
10		
NA	Not Applicable	No special problems arose during the session.

If problems arose, please explain:

____

11. Overall tone of the session SCORE = __

100	Superior	Tone of session is perfect -- engaged, fun, focused, and productive.
90		
80	Excellent/Above average	Tone of session is very positive.
70		
60	Good/Average	Tone of session is generally "up."
50		
40	Fair/Below Average	Tone of session is neutral or varies considerably
30		
20	Poor	Tone of session is generally "down."
10		

12. Overall Rating of Peer Educator Competence SCORE = __ __

100	Superior, one of the best!
90	
80	Excellent/Above average
70	
60	Good/Average
50	
40	Fair/Below Average
30	
20	Poor
10	

Appendix H: Interview guide

<u>Open each interview with;</u>

1. Self-introduction
2. Karakia (Whakataka te hau)
3. Verbal consent to record session for data analysis. Clarified it would be anonymous.

<u>Students (4-session group)</u>

1. Tell me about your experience with the Body Project
    a. What did you like / dislike?

2. Was the content of the sessions valuable to you? Why/why not?
    a. What was something that stood out to you / what hit home the most?

3. Had you ever heard of the thin ideal before the Body Project?
    a. What is your understanding of the concept now?
    b. Did you personally relate to the thin ideal?
        i. If no – what beauty ideals do you relate to?
    c. Do you think the thin ideal is a universal concept?

4. Was the content of the Body Project applicable to your culture?
    a. If yes/no, how so/not?

i. Did you feel like the script / activities were relatable?
ii. Did you feel represented in role play exercises?

b. Do you think any of the participants felt left out in terms of their age/sexuality/gender/race?

5. What differences (positive or negative) have you noticed in your life since completing the Body Project?
    a. Have you changed anything in your day-to-day life?
    b. Has your level of body satisfaction changed?

6. How did you feel about having the sessions online as opposed to in person?
    a. Would you have preferred it to be in-person?

7. How did you feel about the size of the group you were in?
    a. Would you change it? If so, why?
    b. What do you think the ideal group size would be?

8. How did you feel about the sessions being run by people who were your peers?
    a. Did you feel like you got enough support?
    b. Were they relatable?
    c. Did you feel like you belonged / fit in with the group?

9. Would you change anything about the Body Project sessions? If so, what?

10. Would you recommend the Body Project to a friend if you noticed they were struggling with body image?

11. The Body Project was originally developed overseas. Is there anything you think would make the Body Project more applicable to women in New Zealand?
    a. If so, what?

12. Is there anything else we haven't talked about that you would like to add?

<u>Peer Educators</u>

1. Tell me about your experience with the Body Project.
    a. What worked well?
    b. What didn't work well?

2. How do you feel about the training you received?
    a. Was it sufficient?
    b. Did you feel like you had enough information / skills?
    c. Did you feel supported?
    d. What suggestions would you make to increase support?

3. How did you feel about having the sessions online as opposed to in person?

4. What do you think an appropriate size for the group would be, and why?

5. Had you ever heard of the thin ideal before the Body Project?
    a. What is your understanding of the concept now?
    b. Did you personally relate to the thin ideal?
    c. Do you think the thin ideal is a universal concept?

6. If you could change something about the sessions, what would you change (if anything)?

7. Would you recommend the Body Project to a friend if you noticed they were struggling with body image?

8. DOB and ethnicity

9. Is there anything else we haven't talked about that you would like to say?

Counsellors

1. Tell me about your experience with the Body Project.
    a. What worked well?
    b. What didn't work well?

2. How did you feel about the training you received?
    a. Was it sufficient?
    b. Were there areas you wanted more info?
    c. Did you feel confident enough in your own training to then train the peer educators?

3. How did you feel about having the sessions online as opposed to in person?

4. What do you think an appropriate size for the group would be, and why?

5. Describe the level of trust you felt you had in the peer educators being able to run the sessions.
    a. Do you think their training was sufficient?

6. Have you worked with students who have body image issues? Tell me about your experiences.
    a. What did you try? What was your understanding of the level of success?

7. How do you feel about rolling out the Body Project to the wider student cohort. Do you think changes would need to be made?
    a. at Massey University
    b. within all NZ universities/tertiary education space
    c. with other groups e.g. older students, males, different cultures, sexual minority, etc

8. Collecting demographic info - Birthdate, ethnicity and gender

9. Is there anything else we haven’t talked about that you would like to say?