



VICTORIA UNIVERSITY
MELBOURNE AUSTRALIA

Something, everything, and anything more than nothing: stories of school-based prevention of body image concerns and eating disorders in young people

This is the Published version of the following publication

Yager, Karen (Zali) K (2024) Something, everything, and anything more than nothing: stories of school-based prevention of body image concerns and eating disorders in young people. *Eating Disorders*, 32 (6). pp. 727-745. ISSN 1064-0266

The publisher's official version can be found at
<https://www.tandfonline.com/doi/full/10.1080/10640266.2024.2364523>
Note that access to this version may require subscription.

Downloaded from VU Research Repository <https://vuir.vu.edu.au/49061/>



Eating Disorders

The Journal of Treatment & Prevention

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/uedi20

Something, everything, and anything more than nothing: stories of school-based prevention of body image concerns and eating disorders in young people

Zali Yager

To cite this article: Zali Yager (2024) Something, everything, and anything more than nothing: stories of school-based prevention of body image concerns and eating disorders in young people, *Eating Disorders*, 32:6, 727-745, DOI: [10.1080/10640266.2024.2364523](https://doi.org/10.1080/10640266.2024.2364523)

To link to this article: <https://doi.org/10.1080/10640266.2024.2364523>



© 2024 The Author(s). Published with license by Taylor & Francis Group, LLC.



Published online: 23 Jun 2024.



Submit your article to this journal [↗](#)



Article views: 1698



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 2 View citing articles [↗](#)

Something, everything, and anything more than nothing: stories of school-based prevention of body image concerns and eating disorders in young people

Zali Yager ^{a,b}

^aThe Embrace Collective; ^bInstitute for Health and Sport, Victoria University, Melbourne, Australia

ABSTRACT

Much work has been done to promote the development of positive body image in schools. This paper aims to tell some stories from the past 35 years of work in this field that illuminate important issues in developing, evaluating, and disseminating programs, and in removing policies and practices that could trigger weight stigma and body shame or disordered eating attitudes and behaviours. The need for, goals of, and approaches to body image programs, problematic activities we have ‘good enough’ evidence to avoid, and next steps for advocacy, research, and action are explored as we celebrate how far we’ve come and have hope for the future.

Clinical Implications

- Clinicians can advocate for research-backed recommendations to remove problematic food and nutrition content from school curricula
- Clinicians can recommend school-based eating disorder prevention programs to educators and schools.

“I am only one, but I am one. I cannot do everything, but I can do something. And because I cannot do everything, I will not refuse to do the something that I can do.” - Edward Everett Hale

In 2003 I wrote this down on the front page of my notebook of “Ideas for Honours Projects”. After 3 years studying Health and Physical Education, I had spent the summer reading more widely and found *Fat is a Feminist Issue* by Orbach (1978), p. I remember not understanding very much of it at the time, but over time, I slowly started to notice the immense societal pressures for women around weight, shape, and appearance that had always been there. After more than 5 years of dieting, disordered eating, and excessive exercise (all subclinical, and, like many people, my efforts were praised rather than diagnosed), it was like a light had been switched on.

CONTACT Zali Yager  zali.yager@gmail.com  1 Mulberry rd, Glenside, SA 5065, Australia

© 2024 The Author(s). Published with license by Taylor & Francis Group, LLC.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

I turned towards the literature on the prevention of eating disorders, and used it to understand myself and my world. I read the work of Niva Piran, Michael Levine, Tracey Wade, Marika Tiggemann, Gail McVey, Lina Ricciardelli, Bryn Austin (see this issue), Tracey Tylka, and Dianne Neumark-Sztainer (see this issue). At my first International Conference on Eating Disorders, I was shocked to see my reference list on the dance floor—and, damn, they could dance.

Once the light was switched on, I couldn't unsee all the sociocultural pressures and the resulting damage. Now, after 20 years of research trying to figure out what works to improve body image and prevent eating disorders in young people, I feel the need to have more impact through research translation. I've moved away from my academic role to run a health promotion charity, where my day-to-day work looks a bit different, but the mission is the same: To change the things in and about the world that make us feel shame about our bodies, so that people don't have to feel like they are held back in life.

Given my health education background, my early research focused on schools as the setting for prevention. The path seemed straightforward, even easy. I was determined to figure out “the one program that would be the most effective and fix everything” (see, e.g., Yager, Diedrichs, & Drummond, 2013). If we could find that program and then get every school to implement it, all our problems would be solved. Now, 20 years after I started, I've learned a lot. First, there is no “easy”. Second, there is no one program that “works” for everyone. So it remains a legitimate question to ask: have we as a “field” of eating disorders prevention actually gotten anywhere?

This paper is not a systematic review. It's not a meta-anything. There is a place for that rigorous process, but what is sometimes missed in all the prevention science are the stories of this work. In a small field the conversations and connections we have with our colleagues are the foundation of everything. All too often, in the course of our increasingly busy lives (and especially through a global pandemic) we miss the opportunity to pass on these stories and the information “between the lines” of our peer-reviewed papers. I've always found the *conversations* at conferences so much more informative than the *presentations*. The connections and chats in the coffee break, walking to the next session, or at a social function are where we share the things that were unexpected, we share the things we would change if we had the chance to do it all again, and we share our informed opinions about things that are happening in the field.

This paper aims to share some of the most important conversations I've had in regard to school-based prevention. Many of these conversations were with my prevention research idols, many of whom are now retired, and some of whom are no longer with us. I want to continue to share their wisdom with the next generation of prevention researchers and will be citing some classic

papers (some of which might not appear in your searches limited to the last 10 years). I encourage you to read these still very relevant works.

We need prevention now, more than ever

The statistics used to emphasise the importance of prevention have grown more convincing over time. Between 24% and 46% of adolescent girls, and 12% to 26% of adolescent boys report marked dissatisfaction with their bodies (Wang et al., 2019), and 75% of adolescents and young adults are in body image distress (Milton et al., 2021). According to recent Australian research, 22% of the adolescent population (33% of girls, and 13% of boys) ages 11–19 meet the criteria for an eating disorder (Mitchison et al., 2020). Moreover, the incidence of eating disorders among children aged 5–12 has doubled (Morris et al., 2022). Yes, you read that right, 5-year-olds. Further, body image concerns, depression, anxiety, and eating disorder symptoms were reported to increase by more than 50% during the COVID-19 pandemic (Khraisat et al., 2022; Schafer et al., 2022).

Although that paragraph sounded all neat and tidy, it took a long time to write. Prevalence statistics in the body image space are *very hard to find*, but *very necessary* when trying to convince people (e.g., policy makers, school boards) that this is an important issue. It would be remiss of me to move on without pleading with readers to please publish your prevalence data, as often as you can. If you can take a moment to create clinical cutoffs, or even report on the proportion of young people who ‘agree or strongly agree’ with relevant items, this can help us to advocate for more funding, more programs, and more change.

People asked to “picture someone with an eating disorder” are likely to imagine a thin, White, cisgender, heterosexual, affluent young woman. Yet, gender diverse and sexual minority young people are more likely to experience body image concerns due to rigid societal stereotypes, discrimination, trauma, and the complex interplay of identity and self-acceptance (A. R. Gordon et al., 2021; Parker & Harriger, 2020; Romano et al., 2022). And this is particularly the case for those in larger bodies who are also more likely to experience body dissatisfaction and shame due weight bias and stigma (A. R. Gordon et al., 2023; Romano et al., 2021). In fact, eating disorder symptoms are associated with weight stigma across the weight spectrum (Romano et al., 2021), across all cultures and genders, and across the lifespan. Moreover, genetic risk for young people is higher in disadvantaged areas (Huckins et al., 2022; Mikhail et al., 2021), particularly among multiply marginalised groups (Beccia et al., 2021). Along this line, and adding complexity, research now shows that food insecurity is associated with eating disorders (Hazzard et al., 2020). You definitely can’t tell if someone has body image concerns or an eating disorder by looking at them.

There is now a substantial body of evidence indicating that body image concerns are related to almost every other negative physical and mental health behaviour and outcome for young people. Adolescents concerned about weight and appearance are more likely to engage in risk-taking behaviours such as smoking and vaping, alcohol use, suicide and self-harm, as well as to develop depression, anxiety, and eating disorders (Bornioli et al., 2019, 2021; Hochgraf et al., 2023; S. A. McLean et al., 2022; Muehlenkamp & Brausch, 2012). Improving body image is not a ‘nice to have’, it’s essential to the promotion of physical and mental health.

We need to know what we’re aiming for

In the beginning, preventing or reducing risk factors for eating disorders was the end goal. However, over the past 20 years, there has been a movement to a focus on body image, and over the past 10 years the focus has shifted from reducing body dissatisfaction to increasing protective factors in order to promote positive body image (Halliwell, 2015; Levine & Smolak, 2016). While work in the academic space articulated the distinction between these constructs (Tylka & Wood-Barcalow, 2015), as the popularity of body positivity movement has grown on social media, it has been confusing to the general public that slight variations of the word “positive” communicate slightly different things. Rather than focusing on positive or negative valences, body image flexibility, which is associated with lower body dissatisfaction and reduced disordered eating (Sandoz et al., 2013), has emerged as a construct describing the ability to experience thoughts or feelings about the body without trying to change the body as a result of those thoughts (Linardon et al., 2021). However, body image flexibility is also a complicated construct to communicate to people—particularly younger audiences. The latest goal is body neutrality, defined as a mindful, neutral attitude towards the body, where self-worth is not based on appearance, and where, regardless of whether our feelings toward particular aspects of our body are negative or positive, we are determined to care for, respect, and appreciate our body and what it does for us (Pellizzer & Wade, 2023). Aiming for body neutrality is seen as being healthier and more realistic, inclusive, and flexible as we age (Pellizzer & Wade, 2023). People also seem to understand it more easily: let’s accept and appreciate our bodies, but focus more on who we are being and what we are doing than what we look like.

Starting in schools

In the quest for prevention, schools are a natural place to start. Schools offer sustained interactions with young people, and the opportunity to intervene and educate in developmentally appropriate ways (Levine & Smolak, 2006).

Schools are also settings where many risk factors for the development of body dissatisfaction come together, including the influence of peers, weight-based teasing, and media use. However, there are also many challenges in working within schools; at the very least, a crowded curriculum, layers of policy, and teacher education stand in the way of program dissemination and implementation (Pursey et al., 2022; Yager & O’Dea, 2005).

After so many years of trying to do work in the school space, I was exhausted by my efforts, and those of my colleagues, to overcome these challenges and resistance to change. And then I received an email from Kylie, a parent of a young girl with an eating disorder. Although she had been in recovery, on her return to school, the first mathematics lesson, and indeed an entire 6-week math unit, was focused on measurement. Specifically, measurement in terms of height, weight, body parts, BMI, and calories. As she watched the slow relapse of her daughter in response to these lessons and activities, this parent posted on the Eating Disorder Families Australia [EDFA] Facebook page to ask whether anyone else’s kids had been impacted by their health education lessons. She was inundated with examples from all over Australia: lessons, worksheets, and tasks from design and technology, science, mathematics, and Health and PE classes. “What can we do about this?”, she asked in her email to me. It was all of the things I’d been trying to change for so long, but this time was different.

Kylie’s desperation and desire for change reignited my passion to try again. We embarked on a year-long collaborative advocacy project, writing to the textbook publisher, meeting with representatives from the Australian Curriculum, Assessment, and Reporting Authority [ACARA], and with curriculum managers in different states of Australia to revise the guidance for teachers in relation to teaching about weight across all subject areas. Revisions have now been made to the supporting materials that underpin the Australian Curriculum Version 9, released in late 2023. As an example, a search for ‘BMI’ in the Australian Curriculum used to yield more than 340 results. Now, it finds one, a link to the Curriculum Connection where our “safety consideration” explains the sensitivities necessary for teaching about bodies, food, and weight, and where teachers are asked specifically not to teach about BMI. Media attention on the ‘Bye Bye BMI’ campaign was swift. We published an Instagram post that led to 31 news stories and 17 social posts from news outlets to a combined reach of more than 10 million people (Publicity Report, 2024, Personal Communication). This experience has taught me many things: (1) sometimes, no matter how much you want to push for change, the timing has to be right for it to actually happen; (2) in order to wait for that right timing, it’s important to rest instead of quitting; and (3) having other people around you to stop you from quitting is essential.

“Prevention” work in schools is just as much about taking out the problematic and triggering content as it is about building in new programs. It’s about

what is taken out as much as it is about what is added in. The challenge is that, as a field, we don't have a lot of empirical evidence to guide the removal of harmful curricular activities in schools, but we do have some. It can be challenging to gather evidence that demonstrates that school-based activities and educational approaches are directly harmful, because conducting controlled outcome studies would be very challenging from an ethical perspective if we strongly suspected these activities to cause harm (i.e., to be "iatrogenic"). However, two separate studies that reviewed admission charts of patients in treatment for anorexia nervosa have recently found that 14% specified nutrition and health education as triggers for eating disorders (Chen & Couturier, 2019; Lin et al., 2023). We have enough evidence. For each of the nine potentially iatrogenic activities listed in Table 1, there is enough evidence to suggest that the educational benefit of using these pedagogical strategies does not outweigh the potential harm they may cause. The approaches outlined in Table 1 are drawn from years of experience in the prevention field, and engagement with many different schools, teachers, parents, and clinicians, who all report these activities as problematic. In general, anything that moves us away from an intuitive experience of food and bodies, anything that introduces numbers, judgement, and a sense of 'right' and 'wrong' around bodies, weight, and food, no matter how well meaning, can have a negative impact.

Approaches to school-based body image prevention programs

Ten years ago, my colleagues and I completed a systematic review of school-based body image programs and found that 7 out of 16 universal-selective, classroom-based programs conducted with adolescents since the year 2000 were effective in improving body image (Yager, Diedrichs, Ricciardelli, et al., 2013). *Happy Being Me* (S. McLean et al., 2013) and *Media Smart* (Wilksch & Wade, 2009) emerged as the programs with the greatest positive impact on body image. Professor Phillipa Diedrichs then worked with the Dove Self Esteem Project to adapt *Happy Being Me* into *Dove Confident Me*, available as single-session and 5-session programs. Large, rigorous trials confirmed that this program was effective in the UK (Diedrichs et al., 2015, 2021), and it has now been adapted and implemented by that research team in Indonesia and India (Craddock et al., 2021; Garbett et al., 2021; Lewis-Smith et al., 2023). However, independent replications in Portugal have found mixed results (Torres et al., 2018, 2021), and a replication in an all-girls school in Australia did not find any significant improvements on target outcomes (Forbes et al., 2023).

Media literacy and cognitive dissonance approaches are the most common prevention programs used in schools. *Media Smart* and *The Body Project* remain some of the most effective and well-tested interventions

Table 1. Curriculum-based activities to avoid in schools.

Activity	Evidence
Weighing students	Being weighed at school, or being asked to discuss what they weigh in classroom settings, is often mentioned as a triggering activity by young people in treatment for an eating disorder (Chen & Couturier, 2019). BMI screening and reporting is potentially harmful (Thompson & Madsen, 2017) and has not been found to be an effective tool in changing weight or improving health behaviour engagement (Poole et al., 2023; Richmond et al., 2021).
Calculating and comparing weight, height, and BMI	There is evidence that calculating BMI and categorising people into weight categories of 'underweight', 'healthy weight,' etc., leads to shame and weight gain over time, and there is no evidence that this leads to the adoption of health behaviours (Hahn et al., 2018).
Recording food intake, counting calories, and keeping 'food diaries'	Approaches to nutrition education that involve the categorisation of foods into 'good and bad', 'healthy and unhealthy' or 'sometimes and everyday' foods, are problematic as they introduce a moral judgement around food intake that can lead to shame (Faw et al., 2021). Tracking food intake, and counting calories is also not recommended, as this can lead to disordered behaviour (Plateau et al., 2018; Simpson & Mazzeo, 2017). For example, 73% of participants with an eating disorder reported that tracking food intake on apps like My Fitness Pal contributed to their eating disorder (Levinson et al., 2017).
Teaching directly about eating disorders	Teaching about the 'symptoms' of eating disorders or the behaviours associated with eating disorders is not recommended in the classroom setting as this may appear as 'instructions' to young people who might want to lose weight (Yager, 2007).
Accounts of eating disorder experiences	Some research has found that eating disorder memoirs do not have any impact on disordered eating behaviour engagement (Thomas et al., 2006), while others show that memoirs could do harm (Rennick-Egglestone et al., 2019). Variations in <i>how</i> stories are told would make a big difference in the impact of the resource.
Showing emotive films about food	Film is a powerful medium. However, films like <i>Super Size Me</i> and <i>That Sugar Film</i> may be potentially triggering to young people who are vulnerable to, experiencing, or recovering from eating disorders, and there are case reports of films like these triggering eating disorders (Ray & Eddy, 2017).
Using popular media and magazines	Many studies have confirmed that viewing media images of ideal bodies contributes to body dissatisfaction (de Valle et al., 2021). Viewing such images in the classroom setting (including images shown in videos, PowerPoint presentations, or cutting out magazine images for collages) is not recommended.
Showing images of thin people	There is no evidence that the 'shock value' of images of people in thin bodies helps young people avoid disordered eating behaviours. In fact, these images replicate dangerous 'pro-ana' content that people with eating disorders often seek out online (Mento et al., 2021). Showing only images of thin people perpetuates misinformation about the range of eating disorders that are problematic and may prevent people reaching out for help if they don't think they look like the images they have seen.
Fitness testing	Fitness testing can increase social anxiety and reduce self-esteem, and encourages social comparison on a range of levels (Yager et al., 2021). Completing tasks in smaller groups is preferable, but fitness education should always provide the context for fitness testing in order to ensure that there is an educative purpose (Alfrey, 2023). Results of fitness tests should not be used as grades in Physical Education.

(e.g., Stice & Presnell, 2007; Wilksch & Wade, 2009). Newer programs taking these approaches have shown promise. Pilot trials of *Free to Be* among Year 7 students in Canada reported improvements in body image coping strategies among the intervention group (Regehr et al., 2020).

A peer-led program called *ReBEL* was found to reduce eating disorder risk factors among high school students in the USA (Eickman et al., 2018).

Given the impact of social media on young people's body image and mental health, and the demand for programs to address social media, researchers have started to focus on building social media literacy, with mixed success. While *Digital Bodies* was found to improve body satisfaction among adolescents in the UK (Bell et al., 2022), a large Australian trial of *SoME* (A. R. Gordon et al., 2021) did not report significant improvements on outcome measures.

Universal programs often look like they have 'failed' by scientific standards, but in my opinion, we shouldn't be letting non-significant p values stop us from sharing theoretically informed programs with teachers. In the early 2010s, I interviewed teachers about how they decided what to teach in regard to body image (and many other related topics). They often told me about, or showed me, the textbooks, You Tube videos, or activities they had created that logically seemed like good ideas, but were still potentially problematic (see Table 1). Thus, when our programs have been through evaluation, and results indicate that they have not caused any harm, they might still be better than the alternative.

Recently there has been a shift toward "third wave" intervention components to improve body image and prevent eating disorders, such as self-compassion. Theoretically, this approach has been suggested because negative body image is among the psychological problems driven by self-criticism, perfectionism, and shame (Gilbert & Procter, 2006). Many trials among adult women show that self-compassion improves body image (Albertson et al., 2014; Toole et al., 2021). For example, a self-compassion intervention had positive effects similar to those of dissonance-based interventions in one trial (Torres et al., 2021) and positive effects with a 3-minute writing exercise in another study (Gobin et al., 2022). Trials of these programs for adolescents in school settings look promising, for example, the *Be Real* program (Mahon & Hevey, 2023; Mahon et al., 2023; Seekis et al., 2023). We still have a ways to go in understanding developmentally appropriate ways of teaching this material in terms of young people's capacity for more abstract thinking, but further exploration is definitely warranted.

Reframing towards a focus on body functionality is also an approach that could be helpful. Theoretically, a focus on what the body can do, rather than what it looks like, could improve body image by reducing self-objectification (Alleva et al., 2015). This has been suggested as a useful approach in moving towards the promotion of body neutrality, as body positivity and positive body image are still focused largely on appearance, and a reframe towards body functionality may address this (Pellizzer & Wade, 2023). Strategies to promote body image flexibility, body functionality, and body neutrality have been effective with adult women (Alleva et al., 2015), and trials among adults

indicate that focusing on functionality may also improve acceptance of others' body size and shape, reducing weight stigma (Alleva et al., 2021). Body neutrality approaches have been suggested to be particularly useful for trans and gender diverse young people experiencing body dysphoria (Perry et al., 2019). Activities that encourage appreciation of body functionality have been incorporated into the *Butterfly Body Bright* for students ages 5–12 and the *Embrace Kids Classroom Program* for students ages 10–14, both of which have demonstrated positive effects in pilot research in Australia (Foundation, 2022; Granfield et al., [under review](#)).

What to do with boys

In the late 2000's, once we began to ask right questions and use appropriate measures, we discovered that boys and men were just as dissatisfied with their appearance as females, but their desired body size and shape varied, as 40% of adolescent boys want to be thinner while 33% wanted to be bigger or to gain weight (Nagata et al., 2019). The sociocultural pressures are still there for boys, but they are different, requiring different messages to combat them.

In our 2013 review of school-based programs, none of the co-ed programs were effective for boys and girls. *Media Smart* led to improvements among boys, but none of the programs designed specifically for boys generated improved body image (Yager, Diedrichs, & Drummond, 2013). Since then, some co-ed programs have reported improvements among boys (Regehr et al., 2020; Svantorp-Tveiten et al., 2021). Interestingly, *Media Smart*, which was the one of the programs that had the most impact for male participants, also had an expert male facilitator of the program. We've never quite gotten there in terms of determining whether male or female facilitators would change outcomes of body image and eating disorder prevention programs in a convincing way, but what we hear in our research with boys suggests that having a male facilitator they can relate to could be important (Doley et al., 2021; Yager, Diedrichs, & Drummond, 2013).

For a while, I thought that we should develop programs that induced cognitive dissonance about the muscular 'ideal' for boys and men, to reflect the effective strategy of reducing internalisation of the thin ideal in women. In the trial of the *Goodform* program, our research team followed initial promising evidence of the impact of the *Athletes Training and Learning to Avoid Steroids* [ATLAS] program (Goldberg et al., 1996) and combined this with elements from *The Body Project: More than Muscles* (Brown & Keel, 2015), which had been effective among college men. The idea was to focus on critiquing muscle building supplement use as a way to induce cognitive dissonance in regard to the hypermuscular ideal without requiring boys to sit around chatting about their feelings and insecurities about their bodies, which our initial research suggested might be more appropriate for boys

(Doley et al., 2021). Nevertheless, we did not observe improvements on outcome measures in this universal group when we conducted a trial of the *Goodform* program with boys (Yager et al., 2022). Co-educational attempts at interventions with this content, such as the Norwegian *Healthy Body Image* program (Svantorp-Tveiten et al., 2021), which used a media literacy approach and the elaboration likelihood model, did see an increase in weekly reported protein and creatine supplement use among control group boys while the intervention group boys remained stable, a difference that became significant at 3-month follow up. In the conversations we had (all through tracked changes and comments) during the review process for this paper, in his role as Editor of this special issue Michael Levine suggested that the multiple options for achievement, control, and power open to males that are not based on appearance still makes appearance less central, in general, to the male identity, which may affect the application of dissonance-based and social resistance models to universal prevention with boys and men—a point I wish we could chat about in person at a conference!

Exactly what might be effective for body image improvement and eating disorder prevention among boys remains a complex mystery. In the time that I've been doing research on adolescent boys and young men there have also been broader cultural shifts around the rigidity of gender stereotypes, and our societal understandings of gender, that also impact body image. The multi-directional appearance ideals for boys, the complex intersection of those ideals with masculinity, and lack of clear research directions for interventions, mean that there is still much work to be done to provide strategies that boys find useful in resisting pressures around their appearance.

Whole school approaches

While curricular content focusing on individual behaviour change is recognised as being necessary, classroom lessons are unlikely to be all that is required to reverse the extensive and long-term exposure to the media, peers, and other factors that are known to contribute to body dissatisfaction. Whole-school approaches to prevention are based on the premise that multiple layers of programming and other changes within schools are required to support young people in developing a positive body image. These programs usually incorporate some sort of grade-appropriate curricula, alongside initiatives such as educating parents and educators and changing the school's social and physical environments, alongside modifications to school policy that support wellbeing (Levine & Smolak, 2006; O'Dea & Maloney, 2000).

Two early trials revealed that, surprisingly, whole school programs that were everything that everyone would recommend didn't have strong effects over time (McVey et al., 2007; Smolak et al., 1998). Nonetheless, I still think that an ecological, Health Promoting Schools", or "Whole-School Approach",

is the way to go when schools are open to the broad application of this paradigm. My own work with schools over the past 15–20 years has revealed that school administrators and staff often perceive a whole school approach specific to body image and eating disorders, or even specific to food, as an onerous task. The problem is not the health-promoting paradigm per se, but the fact that it is the recommended approach for all of the major problems plaguing schools, such as vaping, relationships and sexuality, and violence. The need for a ‘whole school’ approach on each of these topics quickly becomes overwhelming for everyone. In reality, recommendations for a whole school approach to improving body image have a lot of overlap with those for reducing bullying or improving mental health more generally. Combining the suggestions from our field with whole school health promotion of wellbeing and wellness may make these changes seem more feasible.

The ultimate goal

How do we move towards the ultimate goals of prevention? The traditional answers can be stated in terms of four “wheres.” We can progress *where* we have programs that have been through the efficacy, effectiveness, and dissemination pipeline, and are embedded throughout all systems and settings *where* young people already are. *Where* these programs are feasible, acceptable, and straightforward for endogenous providers to implement and sustain. And *where* programs are supported by policy and practice changes to reduce triggering activity.

The problem is that all of the research required to satisfy these requirements is time-consuming and costly to undertake. Thus, another important question is: how can we move to our ultimate goal fast enough that the programs developed aren’t out of date by the time our research demonstrates they are safe and effective? While I am a fan of the theory of implementation science (see, e.g., Nilsen, 2015), the “wheres” and “how” can sometimes make this goal seem like a massive and ultimately insurmountable mountain to climb. In order to avoid being overwhelmed and paralyzed, we might need to put aside our quest for the ‘perfect’ and work with what we’ve got in order to make things better than what they are.

You see, we are in such a different situation now than we were 35 years ago. We have so much evidence regarding what has been effective and what hasn’t. So, in developing programs for specific groups, we can potentially release programs to early adopters to implement and provide the sort of feedback that informs feasibility and acceptability in ways that improve programs before we invest in the larger trials. We can simultaneously release programs and conduct pilot trials, because the activities are based on things that have been found to be effective before, and we can adapt existing programs for specific audiences to make content feel more relevant and relatable.

Table 2. Standards for prevention in Australia’s National Eating Disorder Strategy (National Eating Disorders Collaboration NEDC, 2023).

Standard	Details
Standard 1	The principle of ‘do no harm’ in relation to eating disorder risk is applied to public policy and practice.
Standard 2	The principle of ‘do no harm’ in relation to eating disorder risk is applied to research activities.
Standard 3	There is increased community capacity and expertise to prevent eating disorders through a ‘do no harm’ approach which acts to reduce risk and bolster protective factors.
Standard 4	Home and family, school, work, health, online, and sports, fitness and performance environments bolster protective factors and reduce risk factors.
Standard 5	Prevention programs are evidence-based and accessible, meeting the needs of people from different ages and backgrounds.
Standard 6	Weight stigma is challenged and reduced, working towards elimination.

And then along the way, wherever possible, we can come together to advocate for change and in the process to educate policy-makers and professionals about the unintended harmful consequences of practices (e.g., weighing children, calculating BMI, and talking about weight loss), weight bias and body shaming, racism, sexism, and other forms of social injustice (Austin, 2016). The Strategic Training and Research Initiative for the Prevention of Eating Disorders [STRIPED] *Advocacy Playbook* (2021; see <https://www.hsph.harvard.edu/striped/welcome-to-the-striped-advocacy-playbook/>) sets out the ways to do this. But sometimes, the opportunities for change come at times when we aren’t completely prepared, and that’s ok too. Atkinson et al. (2020, p. 24) capture this perfectly with the following: “We encourage researchers to make the leap and leave the academic comfort blankets behind more often, to broaden the focus of our field to engage with the ‘big picture’; maximising our chances of success in stemming the tidal wave of body and appearance dissatisfaction and creating a world where all may flourish.”

In Australia we now have a National Eating Disorders Strategy 2023–2033 (National Eating Disorders Collaboration NEDC, 2023). The prevention section of this document, the first of its kind in the world, lays out six standards to achieve effective prevention, developed through extensive consultation with clinicians, researchers, and people with lived experience. These standards are reproduced in Table 2, below.

What’s next?

Even as we have made inspiring progress in the prevention of body image problems and eating disorders, especially in the past 20 years, so many things have happened and are continuing to happen that have thwarted our efforts. The invention of smartphones, social media, a global pandemic, rising health inequalities and food insecurity, and other complex societal forces make our work challenging.

But we should take a good long moment to appreciate that, as this special issue demonstrates, the main thing we have now is so many more

people who are dedicated to working in this field. The dance floor of creative and productive prevention researchers has grown so much, across the world, and there are strengths in our numbers and in our diversity. There are many, many committed leaders, teams of dedicated researchers, and enthusiastic new research students and advocates—all working to help the next generation to challenge and change the things about the world that made us, and others, feel shame about our bodies and do so many unhealthy, even deadly things in the name of rejecting them. Looking at the reference list of this paper makes me smile because I think about the wonderful researchers represented, many of whom I have met, worked with, and maybe even danced alongside at a conference or two. After 40 years of research trying to prevent body image issues and eating disorders in schools, after all of this time and work, we still haven't done everything. But we have done something.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The author(s) reported there is no funding associated with the work featured in this article.

ORCID

Zali Yager  <http://orcid.org/0000-0002-2503-7374>

References

- Albertson, E. R., Neff, K. D., & Dill-Shackleford, K. E. (2014). Self-compassion and body dissatisfaction in women: A randomized controlled trial of a brief meditation intervention. *Mindfulness*, 6(3), 444–454. <https://doi.org/10.1007/s12671-014-0277-3>
- Alfrey, L. (2023). An expansive learning approach to transforming traditional fitness testing in health and physical education: Student voice, feelings and hopes. *Curriculum Studies in Health and Physical Education*. Advance online publication. <https://doi.org/10.1080/25742981.2023.2183477>
- Alleva, J. M., Karos, K., Meadows, A., Waldén, M. I., Stutterheim, S. E., Lissandrello, F., Atkinson, M. J., & Evans, W. D. (2021). “What can her body do?” reducing weight stigma by appreciating another person’s body functionality. *Public Library of Science ONE*, 16(5), e0251507. <https://doi.org/10.1371/journal.pone.0251507>
- Alleva, J. M., Martijn, C., Van Breukelen, G. J., Jansen, A., & Karos, K. (2015). Expand your horizon: A programme that improves body image and reduces self-objectification by training women to focus on body functionality. *Body Image*, 15, 81–89. <https://doi.org/10.1016/j.bodyim.2015.07.001>

- Atkinson, M. J., Stock, N. M., Alleva, J. M., Jankowski, G. S., Piran, N., Riley, S. Calogero, R., Clarke, A., Rumsey, N., Slater, A. and Diedrichs, P.C. Williamson, H. (2020). Looking to the future: Priorities for translating research to impact in the field of appearance and body image. *Body Image*, 32, 53–61. <https://doi.org/10.1016/j.bodyim.2019.10.006>
- Austin, S. B. (2016). Accelerating progress in eating disorders prevention: A call for policy translation research and training. *Eating Disorders*, 24(1), 6–19. <https://doi.org/10.1080/10640266.2015.1034056>
- Beccia, A. L., Baek, J., Austin, S. B., Jesdale, W. M., & Lapane, K. L. (2021). Eating-related pathology at the intersection of gender identity and expression, sexual orientation, and weight status: An intersectional multilevel analysis of individual heterogeneity and discriminatory accuracy (MAIHDA) of the growing up today study cohorts. *Social Science & Medicine*, 281, 114092. <https://doi.org/10.1016/j.socscimed.2021.114092>.
- Bell, B. T., Taylor, C., Paddock, D., & Bates, A. (2022). Digital bodies: A controlled evaluation of a brief classroom-based intervention for reducing negative body image among adolescents in the digital age. *British Journal of Educational Psychology*, 92(1), 280–298. <https://doi.org/10.1111/bjep.12449>
- Bornioli, A., Lewis-Smith, H., Slater, A., & Bray, I. (2021). Body dissatisfaction predicts the onset of depression among adolescent females and males: A prospective study. *Journal of Epidemiology and Community Health*, 75(4), 343–348. <https://doi.org/10.1136/jech-2019-213033>
- Bornioli, A., Lewis-Smith, H., Smith, A., Slater, A., & Bray, I. (2019). Adolescent body dissatisfaction and disordered eating: Predictors of later risky health behaviours. *Social Science & Medicine*, 238, 112458. <https://doi.org/10.1016/j.socscimed.2019.112458>
- 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. <https://doi.org/10.1016/j.brat.2015.08.008>
- Chen, A., & Couturier, J. (2019). Triggers for children and adolescents with anorexia nervosa: A retrospective chart review. *Journal of the Canadian Academy of Child and Adolescent Psychiatry = Journal de l'Academie Canadienne de Psychiatrie de l'enfant Et de l'adolescent*, 28(3), 134. <https://doi.org/10.1542/peds.2014-0194>
- Craddock, N., Garbett, K. M., Haywood, S., Nasution, K., White, P., Saraswati, L. A. izkiah, C., Medise, B.E. Diedrichs, P. C. (2021). 'Dove confident me Indonesia: Single session': Study protocol for a randomised controlled trial to evaluate a school-based body image intervention among Indonesian adolescents. *BMC Public Health*, 21(1), 2102. <https://doi.org/10.1186/s12889-021-11770-0>
- de Valle, M. K., Gallego-Garcia, M., Williamson, P., & Wade, T. D. (2021). Social media, body image, and the question of causation: Meta-analyses of experimental and longitudinal evidence. *Body Image*, 39, 276–292. <https://doi.org/10.1016/j.bodyim.2021.10.001>
- Diedrichs, P. C., Atkinson, M. J., Garbett, K. M., & Leckie, G. (2021). Evaluating the 'dove confident me' five-session body image intervention delivered by teachers in schools: A cluster randomized controlled effectiveness trial. *Journal of Adolescent Health*, 68(2), 331–341. <https://doi.org/10.1016/j.jadohealth.2020.10.001>
- Diedrichs, P. C., Atkinson, M. J., Steer, R. J., Garbett, K. M., Rumsey, N., & Halliwell, E. (2015). Effectiveness of a brief school-based body image intervention 'dove confident me: Single session' when delivered by teachers and researchers: Results from a cluster randomised controlled trial. *Behaviour Research and Therapy*, 74, 94–104. <https://doi.org/10.1016/j.brat.2015.09.004>
- Doley, J., McLean, S. A., Griffiths, S., & Yager, Z. (2021). Designing body image and eating disorder prevention programs for boys and men: Theoretical, practical and logistical

- considerations from boys, parents, teachers, and experts. *Psychology of Men & Masculinities*, 22(1), 124–134. <https://doi.org/10.1037/men0000263>
- 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. <https://doi.org/10.1080/10640266.2017.1349005>
- Faw, M. H., Davidson, K., Hogan, L., & Thomas, K. (2021). Corumination, diet culture, intuitive eating, and body dissatisfaction among young adult women. *Personal Relationships*, 28(2), 406–426. <https://doi.org/10.1111/per.12364>
- Forbes, J., Paxton, S., & Yager, Z. (2023). Independent pragmatic replication of the dove confident me body image program in an Australian girls independent secondary school. *Body Image*, 46, 152–167. <https://doi.org/10.1016/j.bodyim.2023.06.001>
- Foundation, B. (2022). *New primary school program proven to support positive body image in pupils*. <https://butterfly.org.au/news/new-primary-school-program-proven-to-support-positive-body-image-in-pupils/#:~:text=A%20pilot%20evaluation%20of%20Butterfly,improvements%20after%20just%20one%20lesson>
- Garbett, K. M., Lewis-Smith, H., Chaudhry, A., Shroff, H., Dhillon, M., White, P., & Diedrichs, P. C. (2021). Acceptability and preliminary efficacy of a school-based body image intervention in urban India: A pilot randomised controlled trial. *Body Image*, 37, 282–290. <https://doi.org/10.1016/j.bodyim.2021.02.011>
- Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology & Psychotherapy*, 13(6), 353–379. <https://doi.org/10.1002/cpp.507>
- Gobin, K. C., McComb, S. E., & Mills, J. S. (2022). Testing a self-compassion micro-intervention before appearance-based social media use: Implications for body image. *Body Image*, 40, 200–206. <https://doi.org/10.1016/j.bodyim.2021.12.011>
- Goldberg, L., Elliot, D., Clarke, G. N., MacKinnon, D. P., Moe, E., Zoref, L. Green, C., Wolf, S. L., Greffrath, E., Miller, D.J. Lapin, A. (1996). Effects of a multidimensional anabolic steroid prevention intervention: The adolescents training and learning to avoid steroids (ATLAS) program. *Journal of the American Medical Association*, 276(19), 1555–1562. <https://doi.org/10.1001/jama.1996.03540190027025>
- Gordon, A. R., Egan, K. A., Wang, M. L., Ziyadeh, N. J., Kenney, E. L., Rosario, M., & Austin, S. B. (2023). Weight-based discrimination and disordered eating behaviors in a cohort of US sexual minority young adults. *International Journal of Eating Disorders*, 56(10), 1983–1990. <https://doi.org/10.1002/eat.24015>
- Gordon, C. S., Jarman, H. K., Rodgers, R. F., McLean, S. A., Slater, A., Fuller-Tyszkiewicz, M., & Paxton, S. J. (2021). Outcomes of a cluster randomized controlled trial of the SoMe social media literacy program for improving body image-related outcomes in adolescent boys and girls. *Nutrients*, 13(11), 3825. <https://doi.org/10.3390/nu13113825>
- Gordon, A. R., Moore, L. B., & Guss, C. (2021). Eating disorders among transgender and gender non-binary people. In J. M. Nagata, T. A. Brown, S. B. Murray, & J. M. Lavender (Eds.), *Eating disorders in boys and men* (pp. 265–281). Springer. https://doi.org/10.1007/978-3-030-67127-3_18
- Granfield, P., Kemps, E., & Prichard, I. (under review). *Embracing early intervention: A pilot study assessing the acceptability, feasibility, and impact of the embrace kids classroom program among Australian pre-adolescents*.
- Hahn, S. L., Borton, K. A., & Sonnevile, K. R. (2018). Cross-sectional associations between weight-related health behaviors and weight misperception among US adolescents with overweight/obesity. *BMC Public Health*, 18(1), 1–8. <https://doi.org/10.1186/s12889-018-5394-9>

- Halliwell, E. (2015). Future directions for positive body image research. *Body Image, 14*, 177–189. <https://doi.org/10.1016/j.bodyim.2015.03.003>
- Hazzard, V. M., Loth, K. A., Hooper, L., & Becker, C. B. (2020). Food insecurity and eating disorders: A review of emerging evidence. *Current Psychiatry Reports, 22*(12), 74. <https://doi.org/10.1007/s11920-020-01200-0>
- Hochgraf, A. K., Fosco, G. M., & Lanza, S. T. (2023). Age-varying associations between attempts to lose weight and nicotine vaping across adolescence: Results from a nationally representative sample. *Journal of Adolescent Health, 72*(3), 352–358. <https://doi.org/10.1016/j.jadohealth.2022.10.009>
- Huckins, L. M., Signer, R., Johnson, J., Wu, Y. K., Mitchell, K. S., & Bulik, C. M. (2022). What next for eating disorder genetics? Replacing myths with facts to sharpen our understanding. *Molecular Psychiatry, 27*(10), 3929–3938. <https://doi.org/10.1038/s41380-022-01601-y>
- Khraisat, B. R., Al-Jeady, A. M., Alqatawneh, D. A., Toubasi, A. A., & AlRyalat, S. A. (2022). The prevalence of mental health outcomes among eating disorder patients during the COVID-19 pandemic: A meta-analysis. *Clinical Nutrition ESPEN, 48*, 141–147. <https://doi.org/10.1016/j.clnesp.2022.01.033>
- Levine, M. P., & Smolak, L. (2006). *The prevention of eating problems and eating disorders: Theory, research, and practice*. Lawrence Erlbaum Associates.
- Levine, M. P., & Smolak, L. (2016). The role of protective factors in the prevention of negative body image and disordered eating. *Eating Disorders, 24*(1), 39–46. <https://doi.org/10.1080/10640266.2015.1113826>
- Levinson, C. A., Fewell, L., & Brosof, L. C. (2017). My fitness pal calorie tracker usage in the eating disorders. *Eating Behaviors, 27*, 14–16. <https://doi.org/10.1016/j.eatbeh.2017.08.003>
- Lewis-Smith, H., Garbett, K. M., Chaudhry, A., Dhillon, M., Shroff, H., White, P., & Diedrichs, P. C. (2023). Evaluating a body image school-based intervention in India: A randomized controlled trial. *Body Image, 44*, 148–156. <https://doi.org/10.1016/j.bodyim.2022.12.006>
- Linardon, J., Anderson, C., Messer, M., Rodgers, R. F., & Fuller-Tyszkiewicz, M. (2021). Body image flexibility and its correlates: A meta-analysis. *Body Image, 37*, 188–203. <https://doi.org/10.1016/j.bodyim.2021.02.005>
- Lin, J. A., Jhe, G., Adhikari, R., Vitagliano, J. A., Rose, K. L., Freizinger, M., & Richmond, T. K. (2023). Triggers for eating disorder onset in youth with anorexia nervosa across the weight spectrum. *Eating Disorders, 31*(6), 553–572. <https://doi.org/10.1080/10640266.2023.2201988>
- Mahon, C., Hamburger, D., Yager, Z., Almaraz, M., Mooney, J., Tran, T. O'Dowd, O., Bauert, L., Smith, K.G., Gomez-Trejo, V. Webb, J. (2023). Pilot feasibility and acceptability trial of BE REAL's BodyKind: A universal school-based body image intervention for adolescents. *Body Image, 47* Advance online publication. 101636. <https://doi.org/10.1016/j.bodyim.2023.101636>
- Mahon, C., & Hevey, D. (2023). Pilot trial of a self-compassion intervention to address adolescents' social media-related body image concerns. *Clinical Child Psychology and Psychiatry, 28*(1), 307–322. <https://doi.org/10.1177/13591045221099215>
- McLean, S., Paxton, S., & Wertheim, E. (2013). Happy being me: Outcomes of a peer-based body dissatisfaction prevention intervention in young adolescent girls. *Journal of Eating Disorders, 1*(Suppl 1), O33. <https://doi.org/10.1186/2050-2974-1-S1-O33>
- McLean, S. A., Rodgers, R. F., Slater, A., Jarman, H. K., Gordon, C. S., & Paxton, S. J. (2022). Clinically significant body dissatisfaction: Prevalence and association with depressive symptoms in adolescent boys and girls. *European Child & Adolescent Psychiatry, 31*(12), 1921–1932. <https://doi.org/10.1007/s00787-021-01824-4>

- McVey, G., Tweed, S., & Blackmore, E. (2007). Healthy schools-healthy kids: A controlled evaluation of a comprehensive universal eating disorder prevention program. *Body Image, 4*(2), 115–136. <https://doi.org/10.1016/j.bodyim.2007.01.004>
- Mento, C., Silvestri, M. C., Muscatello, M. R. A., Rizzo, A., Celebre, L., Praticò, M. Zoccali, R.A. Bruno, A. (2021). Psychological impact of pro-anorexia and pro-eating disorder websites on adolescent females: A systematic review. *International Journal of Environmental Research and Public Health, 18*(4), 2186. <https://doi.org/10.3390/ijerph18042186>
- Mikhail, M. E., Carroll, S. L., Clark, D. A., O'Connor, S., Burt, S. A., & Klump, K. L. (2021). Context matters: Neighbourhood disadvantage is associated with increased disordered eating and earlier activation of genetic influences in girls. *Journal of Abnormal Psychology, 130*(8), 875–885. <https://doi.org/10.1037/abn0000719>
- Milton, A., Hambleton, A., Roberts, A., Davenport, T., Flego, A., Burns, J., & Hickie, I. (2021). Body image distress and its associations from an international sample of men and women across the adult life span: Web-based survey study. *JMIR Formative Research, 5*(11), e25329. <https://doi.org/10.2196/25329>
- Mitchison, D., Mond, J., Bussey, K., Griffiths, S., Trompeter, N., Lonergan, A. Pike KM, Murray SB Hay, P. (2020). DSM-5 full syndrome, other specified, and unspecified eating disorders in Australian adolescents: Prevalence and clinical significance. *Psychological Medicine, 50*(6), 981–990. <https://doi.org/10.1017/S0033291719000898>
- Morris, A., Elliott, E., & Madden, S. (2022). Early-onset eating disorders in Australian children: A national surveillance study showing increased incidence. *International Journal of Eating Disorders, 55*(12), 1838–1842. <https://doi.org/10.1002/eat.23794>
- Muehlenkamp, J. J., & Brausch, A. M. (2012). Body image as a mediator of non-suicidal self-injury in adolescents. *Journal of Adolescence, 35*(1), 1–9. <https://doi.org/10.1016/j.adolescence.2011.06.010>
- Nagata, J. M., Bibbins-Domingo, K., Garber, A. K., Griffiths, S., Vittinghoff, E., & Murray, S. B. (2019). Boys, bulk, and body ideals: Sex differences in weight-gain attempts among adolescents in the United States. *Journal of Adolescent Health, 64*(4), 450–453. <https://doi.org/10.1016/j.jadohealth.2018.09.002>
- National Eating Disorders Collaboration (NEDC). (2023). *National eating disorder strategy*. Published by the NEDC and available at <https://nedc.com.au/downloads/nedc-national-eating-disorders-strategy-20233-2033.pdf>
- Nilsen, P. (2015). Making sense of implementation theories, models and frameworks. *Implementation Science, 10*(1), 53. <https://doi.org/10.1186/s13012-015-0242-0>
- O'Dea, J., & Maloney, D. (2000). Preventing eating and body image problems in children and adolescents using the health promoting schools framework. *Journal of School Health, 70*(1), 18–21. <https://doi.org/10.1111/j.1746-1561.2000.tb06441.x>
- Orbach, S. (1978). *Fat is a feminist issue: The anti-diet guide to permanent weight loss*. Paddington Press.
- Parker, L. L., & Harriger, J. A. (2020). Eating disorders and disordered eating behaviors in the LGBT population: A review of the literature. *Journal of Eating Disorders, 8*(1), 51. <https://doi.org/10.1186/s40337-020-00327-y>
- Pellizzer, M. L., & Wade, T. D. (2023). Developing a definition of body neutrality and strategies for an intervention. *Body Image, 46*, 434–442. <https://doi.org/10.1016/j.bodyim.2023.07.006>
- Perry, M., Watson, L., Hayden, L., & Inwards-Breland, D. (2019). Using body neutrality to inform eating disorder management in a gender diverse world. *The Lancet Child & Adolescent Health, 3*(9), 597–598. [https://doi.org/10.1016/S2352-4642\(19\)30237-8](https://doi.org/10.1016/S2352-4642(19)30237-8)
- Plateau, C. R., Bone, S., Lanning, E., & Meyer, C. (2018). Monitoring eating and activity: Links with disordered eating, compulsive exercise, and general wellbeing among young adults.

- International Journal of Eating Disorders*, 51(11), 1270–1276. <https://doi.org/10.1002/eat.22966>
- Poole, M. K., Lee, R. M., Kinderknecht, K. L., & Kenney, E. L. (2023). De-implementing public health policies: A qualitative study of the process of implementing and then removing body mass index (BMI) report cards in Massachusetts public schools. *Implementation Science Communications*, 4(1), 63. <https://doi.org/10.1186/s43058-023-00443-1>
- Publicity Report. 2024. *Bye Bye BMI campaign*. Personal communication.
- Pursey, K. M., Hart, M., Hure, A., Cheung, H. M., Ong, L., Burrows, T. L., & Yager, Z. (2022). The needs of school professionals for eating disorder prevention in Australian schools: A mixed-methods survey. *Children*, 9(12), 1979. <https://doi.org/10.3390/children9121979>
- Ray, E., & Eddy, K. (2017). Pediatric eating disorders. In L. K. Anderson, S. B. Murray, & W. H. Kaye (Eds.), *Clinical handbook of complex and atypical eating disorders* (pp. 293–308). Oxford University Press. <https://doi.org/10.1093/med-psych/9780190630409.003.0017>
- Regehr, R. Y., Owens, R. L., Cox, D. W., & Clayton, C. C. (2020). Piloting free to Be: A positive body image program for adolescents. *The Counseling Psychologist*, 48(6), 774–800. <https://doi.org/10.1177/0011000020922216>
- Rennick-Egglestone, S., Morgan, K., Llewellyn-Beardsley, J., Ramsay, A., McGranahan, R., Gillard, S. Hui, A., Ng, F., Schneider, J., Booth, S. Arbour, Simone Slade, M. (2019). Mental health recovery narratives and their impact on recipients: Systematic review and narrative synthesis. *The Canadian Journal of Psychiatry*, 64(10), 669–679. <https://doi.org/10.1177/0706743719846108>
- Richmond, T. K., Thurston, I. B., & Sonnevile, K. R. (2021). Weight-focused public health interventions—no benefit, some harm. *JAMA Pediatrics*, 175(3), 238–239. <https://doi.org/10.1001/jamapediatrics.2020.4777>
- Romano, K. A., Heron, K. E., & Henson, J. M. (2021). Examining associations among weight stigma, weight bias internalization, body dissatisfaction, and eating disorder symptoms: Does weight status matter? *Body Image*, 37, 38–49. <https://doi.org/10.1016/j.bodyim.2021.01.006>
- Romano, K. A., Lipson, S. K., Beccia, A. L., Quatromoni, P. A., Gordon, A. R., & Murgueitio, J. (2022). Changes in the prevalence and sociodemographic correlates of eating disorder symptoms from 2013 to 2020 among a large national sample of US young adults: A repeated cross-sectional study. *International Journal of Eating Disorders*, 55(6), 776–789. <https://doi.org/10.1002/eat.23709>
- Sandoz, E. K., Wilson, K. G., Merwin, R. M., & Kellum, K. K. (2013). Assessment of body image flexibility: The body image-acceptance and action questionnaire. *Journal of Contextual Behavioral Science*, 2(1–2), 39–48. <https://doi.org/10.1016/j.jcbs.2013.03.002>
- Schafer, K. M., Lieberman, A., Sever, A. C., & Joiner, T. (2022). Prevalence rates of anxiety, depressive, and eating pathology symptoms between the pre-and peri-COVID-19 eras: A meta-analysis. *Journal of Affective Disorders*, 298, Part A, 364–372.
- Seekis, V., Farrell, L., & Zimmer-Gembeck, M. (2023). A classroom-based pilot of a self-compassion intervention to increase wellbeing in early adolescents. *EXPLORE*, 19(2), 267–270. <https://doi.org/10.1016/j.explore.2022.06.003>
- Simpson, C. C., & Mazzeo, S. E. (2017). Calorie counting and fitness tracking technology: Associations with eating disorder symptomatology. *Eating Behaviors*, 26, 89–92. <https://doi.org/10.1016/j.eatbeh.2017.02.002>
- Smolak, L., Levine, M. P., & Schermer, F. (1998). Lessons from lessons: An evaluation of an elementary school prevention program. In W. Vandereycken & G. Noordenbos (Eds.), *The prevention of eating disorders* (pp. 137–172). New York University Press.
- Stice, E., & Presnell, K. (2007). *The body project: Promoting body acceptance and preventing eating disorders*. Oxford University Press.

- Svantorp-Tveiten, K. M. E., Torstveit, M. K., Rosenvinge, J. H., Sundgot-Borgen, C., Friborg, O., Bratland-Sanda, S., Pettersen, G., Sundgot-Borgen, J. (2021). Effect of a healthy body image intervention on risk-and protective factors for eating disorders: A cluster randomized controlled trial. *Mental Health & Prevention, 24*, 200225. <https://doi.org/10.1016/j.mhp.2021.200225>
- Thomas, J. J., Judge, A. M., Brownell, K. D., & Vartanian, L. R. (2006). Evaluating the effects of eating disorder memoirs on readers' eating attitudes and behaviors. *International Journal of Eating Disorders, 39*(5), 418–425. <https://doi.org/10.1002/eat.20239>
- Thompson, H. R., & Madsen, K. A. (2017). The report card on BMI report cards. *Current Obesity Reports, 6*(2), 163–167. <https://doi.org/10.1007/s13679-017-0259-6>
- Toole, A. M., LoParo, D., & Craighead, L. W. (2021). Self-compassion and dissonance-based interventions for body image distress in young adult women. *Body Image, 38*, 191–200. <https://doi.org/10.1016/j.bodyim.2021.04.001>
- Torres, S., Barbosa, R., & Vieira, F. M. (2021, July 13–15). *The “Dove Confident Me” programme: Gender and year-level differential effects on outcomes* [Oral presentation]. Centre for Appearance Research's Appearance Matters 9 On-line Conference, Bath, England.
- Torres, S., Vieira, F. M., Magalhaes, C., Campos, M., & Barbosa, R. (2018). *Expanding the evidence-base of “Dove Confident Me” programme: Preliminary results of an effectiveness trial in Portugal* [Oral presentation]. Centre for Appearance Research's Appearance Matters 9 On-line Conference, Bath, England.
- Tylka, T. L., & Wood-Barcalow, N. L. (2015). What is and what is not positive body image? Conceptual foundations and construct definition. *Body Image, 14*, 118–129. <https://doi.org/10.1016/j.bodyim.2015.04.001>
- Wang, S. B., Haynos, A. F., Wall, M. M., Chen, C., Eisenberg, M. E., & Neumark-Sztainer, D. (2019). Fifteen-year prevalence, trajectories, and predictors of body dissatisfaction from adolescence to middle adulthood. *Clinical Psychological Science, 7*(6), 1403–1415. <https://doi.org/10.1177/2167702619859331>
- Wilksch, S. M., & Wade, T. D. (2009). Reduction of shape and weight concern in young adolescents: A 30-month controlled evaluation of a media literacy program. *Journal of the American Academy of Child & Adolescent Psychiatry, 48*(6), 652–661. <https://doi.org/10.1097/CHI.0b013e3181a1f559>
- Yager, Z. (2007). What not to do when teaching about eating disorders. *Journal of the Home Economics Institute of Australia, 14*(1), 28–33.
- Yager, Z., Alfrey, L., & Young, L. (2021). The psychological impact of fitness testing in physical education: A pilot experimental study among Australian adolescents. *Journal of Teaching in Physical Education, 42*(1), 77–85. <https://doi.org/10.1123/jtpe.2021-0166>
- Yager, Z., Diedrichs, P. C., & Drummond, M. (2013). Understanding the role of gender in body image research settings: Participant gender preferences for researchers and co-participants in interviews, focus groups and interventions. *Body Image, 10*(4), 574–582. <https://doi.org/10.1016/j.bodyim.2013.06.004>
- Yager, Z., Diedrichs, P. C., Ricciardelli, L. A., & Halliwell, E. (2013). What works in secondary schools? A systematic review of classroom-based body image programs. *Body Image, 10*(3), 271–281. <https://doi.org/10.1016/j.bodyim.2013.04.001>
- Yager, Z., Doley, J. R., McLean, S. A., & Griffiths, S. (2022). Goodform: A cluster randomised controlled trial of a school-based program to prevent body dissatisfaction and muscle building supplement use among adolescent boys. *Body Image, 44*, 24–35. <https://doi.org/10.1016/j.bodyim.2022.11.003>
- Yager, Z., & O'Dea, J. A. (2005). The role of teachers and other educators in the prevention of eating disorders and child obesity: What are the issues? *Eating Disorders, 13*(3), 261–278. <https://doi.org/10.1080/10640260590932878>