

EXPANDING THE ROLE OF EDUCATION IN EATING DISORDER PREVENTION: THE ROLE OF A SOCIO-CULTURAL APPROACH

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Abstract. *The research on eating disorder (ED) prevention, evolving since the mid-1990s has primarily focused on medical and psychiatric perspectives, emphasising diagnosis and treatment. At the same, there is a growing recognition that prevention efforts, despite their critical importance, are underrepresented in academic literature. This study aims to promote a more holistic approach, integrating education as a pivotal socio-cultural factor in ED prevention. The study delineates a shift from a predominantly medical model to a more inclusive socio-cultural framework. It stresses the need for interdisciplinary collaboration and emphasises the critical role of educational strategies in the broader context of ED prevention. The aim of this article is to conduct a review of the scientific literature in order to provide a clearer picture of general research trends and paradigms in ED, and to expand the role and relevance of ED prevention in an educational context. While acknowledging that social environments including micro, meso, macro systems influence the development of ED, this paper focuses on the meso environment, highlighting the importance of schools and school professionals in preventing ED.*

Keywords: *eating disorder prevention, education, educational activities, socio-cultural approach, social constructs*

Introduction

Eating disorders (ED) are a complex and often difficult-to-treat mental illness that manifests itself in both emotional and physical symptoms. Despite advances in treatment, mortality rates for anorexia nervosa and bulimia nervosa remain not only very high (van Hoeken & Hoek, 2020), but are the highest of all mental health disorders (Gibson, Workman & Mehler, 2019), with relatively low rates of successful treatment and recovery (Pike & et al., 2023). Various data suggest that the prevalence of anorexia nervosa, bulimia nervosa and binge ED is on the rise (Lindvall Dahlgren, Wisting & Øyvind, 2017). It is also worrying that ED symptoms increased by more than 50% during the COVID-19 pandemic (Schafer, Lieberman, Sever & Joiner, 2022).

And while ED can develop at different ages, research shows that young people, including children and adolescents, are at higher risk of developing them (Saul & Rodgers, 2018). The peak period of onset of ED has been found to be between the ages of 16 and 19 years (Rohde, Stice & Marti, 2015). Middle and

late adolescence is a developmental period when non-weight-related environmental risk factors and weight-related peer bullying have a greater impact on the young person's life (Fairweather-Schmidt & Wade, 2015). A study conducted nearly twenty years ago by German researchers Berger, Schilke, Strauss (2005) with adolescents aged 14-18 in Thuringia showed that 53% of girls and 42% of boys prioritised the ideal of a slim body, 32% of children of normal weight (based on BMI) stated that they wanted to be slimmer, and 17% of children of normal weight believed they were overweight. A decade after the survey data was published, the *German Federal Centre for Health Education* (2015) reported the ominous statistic that more than half of German children aged 13-14 years would like to be slimmer. It found that boys' eating behaviour was most influenced by parental criticism, girls' by peers, and that the media proved to be a strong influence on both genders.

Moreover, a systematic review by Tatangelo, McCabe, Mellor & Mealey (2016) highlighted that around half of the children in studies between the ages of 6 and 12 are dissatisfied with their bodies, and that children as young as five years old experience weight problems and problems with ideal body types. This confirms that increasing the role of education in the prevention and intervention of ED is essential, including both school and pre-school prevention methods, to reduce the prevalence of eating disorders in the population.

The aim of this article is to conduct a review of the scientific literature in order to provide a clearer picture of general research trends and paradigms in ED, and to expand the role and relevance of ED prevention in an educational context. While acknowledging that social environments including micro, meso, macro systems influence the development of ED, this paper focuses on the meso environment, highlighting the importance of schools and school professionals in preventing ED.

Literature review

Medical approach

ED prevention research, developing since the mid-1990s, has focused on medical and psychiatric perspectives, with emphasis on diagnosis and treatment. Historical, retrospective bibliometric analyses of ED studies by Park & Kim (2022), Almenara (2022), Shah, Ahmad, Khan & Sun (2022), covering the last 40 years, highlighted that the diagnosis, epidemiology, course and outcome of ED are the priority components of ED research, and that the majority of the most highly-cited papers were related to either the development of assessment instruments or the course and outcome of ED.

The topic modelling studies carried out by these researchers showed that in the scientific discourse on ED, the majority of citations are in the fields of

psychiatry, psychology, and dietetic nutrition research, while behavioural and social sciences, including social work and education, are still under-represented. There is also an intense interest in treatment outcomes, and it is likely that future studies may use digital interventions and machine learning algorithms to improve treatment planning.

On the other hand, the researchers' topic modelling studies have led to significant changes. Since the early 1970s, research on risk factors for ED has taken on an increasingly prominent role alongside the dominance of clinical group studies. This could therefore be seen as a sign of a growing interest in the prevention of ED, rather than in their treatment alone. According to Levine & Smolak (2020), this result reflects a historical shift that took place in the United States when the *Institute of Medicine (IOM) Committee on the Prevention of Mental Disorders* was established in 1992. And while ED prevention is still critically under-emphasised in comparison to the active dominance of clinical psychiatric approaches, it highlights important socio-cultural attitudes that allow us to discern changes in and expand the scope of ED prevention and interventions.

Socio-cultural approach

The aetiology of EDs, in other words, the causes of their onset, involves a number of factors, among which genetic, psychological and environmental components play a particular role (Mitchison & Hay, 2014). Currently, two approaches dominate in the research on the aetiology of ED: biopsychiatric and sociocultural. The main elements of the biopsychiatric approach are based on the assumption that ED are biologically based mental illnesses, whereas Insel (2009) argues that biological causes are the only reasonable way to explain the debilitating, self-sustaining processes of anorexia nervosa and bulimia nervosa. Kaye, Bailer & Klabunde (2012) complement the biopsychiatric approach with the assumption that character traits are genetically determined forms of temperament, and neurological vulnerabilities together with genetic temperament form the basis of the biopsychiatric aetiological approach.

Meanwhile, sociocultural attitudes focus on multiple social messages about gender, ethnicity, and body shape, which help to explain why certain social groups may be at higher risk of developing ED (Levine & Smolak, 2006, 2010). The sociocultural perspective encompasses a number of theories that emphasise various sociocultural mediating factors. For example, in addition to the internalization of the thin ideal and the social comparison bias (Keery, van den Berg & Thompson, 2004), there are cultural-historical forces that shape women's experiences of power, freedom and sexuality (Nasser & Katzman, 1999), gender roles and developmental changes (Smolak & Murnen, 2004), acculturation and individual identity (Becker et al, 2010), the influence of social development on

the experience and expression of embodiment or non-embodiment (Piran & Teall, 2012), and gender and ethnic differences in ED (Smolak & Piran, 2012). It is important to note that in this context, the media, social media, the fashion industry, peers and other indirect processes can be considered as mediators, which lead to social comparison, the internalisation of the thin ideal and are essential components of sociocultural patterns.

According to Levine & Maine (2010), it is not appropriate to ignore the importance of sociocultural perspectives in research, clinical work and ED prevention. The authors emphasise that a sociocultural approach that includes an interdisciplinary, scientific perspective has a significant empirical basis. Subsequent research by Levine & Smolak (2010) has promoted the recognition that the biopsychiatric perspective shares common ground with the sociocultural perspective and the need to consider combining these perspectives in the field of eating disorders, with careful work on methodology and interdisciplinary collaboration.

We observe the shift from a clinical to a sociocultural understanding of ED by recognising the different levels and signs of risk for ED in relation to sociocultural factors and characteristics such as gender, age, sexual orientation, race, etc. However, there is a clear lack of explanation of these factors and a lack of new concepts that not only address ED and their consequences, but also develop ED education, prevention and intervention. There is a lack of interdisciplinary approaches that would help to develop effective practical approaches.

Role of education in ED prevention

Although the critical importance of educational prevention and intervention for ED is recognised, this approach is underrepresented in the academic literature. It is clear that research on preventive interventions accounts for only a small proportion of published studies in the scientific literature. A study by Austin (2012) found that in the main scientific journals in the field of eating disorders, the *International Journal of Eating Disorders* (IJED) and *Eating Disorders: The Journal of Treatment and Prevention* (EDJTP), of the total number of articles published between 2005 and 2010, research on preventive interventions accounted for only 3% in the IJED and only 8% in the EDJTP. The study reveals that, in both journals, more than half of the articles were devoted to the diagnosis, treatment, and course of the disease. This imbalance suggests that prevention is given very little attention in the field of ED.

Thus, if the focus on ED continues to be on treatment, with little attention to the importance of prevention and interdisciplinary collaboration, according to Cooper & Bailey-Straebl (2015), it is likely that it will be difficult to move towards stemming the tide of eating disorders in the future with a *detect-it/treat-*

it approach. Therefore, if the ED field were to refocus scientific attention and resources on prevention research to promote a holistic approach, integrating education as a key socio-cultural factor in the prevention of ED, it is likely that the effectiveness of tackling ED would be significantly improved.

In the early 20th century, Wade, Davidson & O'Dea (2002) highlighted education as the first and one of the most important steps in contributing to the reduction of risk factors for ED and the increase of protective factors. Bardick et al. (2004) argued that preventive education should not only focus on the signs and symptoms of ED, healthy eating, regular physical activity, but should also focus on critical thinking skills, targeting risk factors such as low self-esteem, self-worth etc. Kater, Roher & Londre (2002) observed in a study that the use of prevention programmes in grammar or secondary schools is rather delayed in achieving effective results. In other words, ED prevention education should start from pre-school age. Otherwise, ED prevention education that starts in adolescence is likely to have less impact on the views and attitudes of an already formed adolescent.

ED prevention and intervention programmes in educational institutions are necessary. There is evidence that educating individuals about ED can have a positive impact on addressing the symptoms of ED, including internalisation of the thin ideal, body dissatisfaction, dieting, and negative affect, etc. Reviews by Stice, Shaw & Marti (2007) found that 51% of the included prevention programmes significantly reduced at least one risk factor for ED, and 29% were successful in reducing eating disorder-related behaviours among participants. For example, the *StudentBodies* online ED prevention programme conducted a cross-cultural comparison of US and German students aged 13-18 years. The prevention programme increased knowledge about eating and ED, and reduced attitudes associated with ED, such as the desire to be thin and negative body image (Beintner, Jacobi & Taylor, 2012).

On the other hand, while effective ED prevention programmes exist, few studies take into account the gender diversity of the participants and the age of the participants under 15 years. This gap is being addressed by the development of early childhood education programmes. For example, *Happy Being Me* (Richardson & Paxton, 2010), *Life Smart* (Wilksch et al., 2015), *MABIC-Project* (Sanchez Carracedo et al., 2016), *MaiStep* (Buerger et al., 2019), among others. These programmes use interactive programme content to protect against ED triggers (overeating, body dissatisfaction, etc.) from an early age. An excellent example is *The Body Image* (Camacho Ruiz et al., 2021), which significantly reduced avoidance of fatty foods, food anxiety, compensatory behaviours, perceived social pressure and the influence of advertising among Mexican boys and girls (aged 10-15 years) in the intervention group. According to Camacho Ruiz et al. (2021), this programme significantly increased participants' feelings of self-esteem, which is clearly a relevant issue in the prevention of ED.

Therefore, the authors of *The Body Image Programme* recommend that the prevention of ED should prioritise strengthening feelings of control, achieving autonomy, increasing self-esteem and self-confidence, reducing perfectionism, and increasing positive experiences of one's body.

To improve ED prevention programmes, it is important to focus on the intersection with obesity prevention. Already in 2002-2003, the Neumark-Sztainer studies argued that there were strong links between disorders, obesity and disordered eating. Although there are real differences in approaches, Neumark-Sztainer et al. (2006) suggest that strategies should be considered for the ED field to collaborate with, and learn from, professionals developing obesity prevention programmes. ED and obesity prevention overlap with healthy weight control, healthy eating habits, increased physical activity, improved media literacy, positive body image and effective coping skills. For example, although programmes such as *New Moves*, *The Planet Health* prevention tool, and the *Health at Every Size* movement have not had a particularly large impact, researchers such as Austin, Field, Wiecha, Peterson & Gortmaker (2005) call for the development of programmes that address a wide range of weight-related issues, as this is a necessary step to improving ED prevention programmes in a broader context.

For example, *SILENCE* is an evidence-based programme for older adolescents to prevent inappropriate attitudes and eating behaviours, including eating disorders and obesity. The *SILENCE* programme uses a „full-blind“ strategy, i.e. participants in the programme were not aware of the objectives of the programme, which were integrated into the lessons. In the specific case of the study by Monthuy-Blanc, Lemieux, Thériault & Rousseau (2020) the *SILENCE* programme was integrated into the secondary school curriculum by the art, French and drama teachers, with all the lessons being taught by the physical education teacher, and the graphic novel *Corkifaipo* and its virtual environment were chosen as the interdisciplinary pedagogical tool for this prevention programme. According to Monthuy-Blanc et al. (2020), this programme focused on physical self-awareness, media influence, emotion management, family and peer influence and physical activity to promote healthy eating and physical habits and emphasise physical self-perception (PSP). During the 14 weeks of *SILENCE* prevention, a positive development of the PSP components (global self-perception, perceived physical appearance, etc.) was observed.

It is important to note that the objectives of ED prevention programmes are based on protective behaviours, which can be described as skills. This is in line with the *World Health Organisation (WHO)* (1997) emphasis on the importance of life skills education in reducing health problems, including ED. This assumption is echoed in the review by Stice et al. (2007) that the life skills approach is beneficial for students and needs to be integrated into the

curriculum. Pursey et al. (2022) discuss the inclusion of eating disorder prevention content in wellbeing and mental health programmes.

The *POPS programme (Potsdam Prevention at Schools)* builds on existing research on risk and protective factors for ED, with an emphasis on sociocultural factors. This structured prevention programme focuses on the development of resources based on a life skills approach (Warschburger, Helfert & Krentz, 2011). The *POPS* programme included lessons on strengthening healthy eating and physical activity habits, reducing unhealthy eating habits, building resilience through media literacy and strategies for responding to social pressure. It also includes the introduction of problem-solving techniques and coping strategies that act as protective factors against both ED and other diseases. It is noteworthy, that this programme includes not only nine lessons with the students, but also a meeting with the students' parents. Warschburger et al. (2011) concluded that *POPS* can be implemented by teachers as a regular part of the classroom. This reflects the recommendation of Neumark-Sztainer et al. (2006) to consider sustainability, relevance, participatory approaches and the involvement of the wider school community in the implementation of the prevention programme paradigm.

The role of schools and school professionals in preventing eating disorders

A meta-analysis by Stice, Marti, Shaw & Rohde (2019) on ED prevention programmes with 7808 participants highlighted a trend towards the implementation of prevention programmes in schools by external service providers rather than by school professionals, although it is acknowledged that the implementation of programmes by teachers and peers is more effective. According to Stice et al. (2019), school professionals such as teachers, counsellors, psychologists, principals, vice-principals, and school administrators are in a unique position to be in close contact with students and to engage in discussions about body image, physical activity, and nutrition, and thus identifying problematic attitudes towards their own bodies in a timely manner.

According to Jourdan et al. (2016), school professionals' positive attitudes towards their role in contributing to the effectiveness of health promotion programmes have a significant impact on creating a supportive environment. However, a study conducted a decade ago by British researchers Knightsmith, Treasure & Schmidt (2013) showed that the majority of professionals working in schools admitted that they did not have the knowledge to recognise and support students with ED. In other words, the lack of knowledge among school professionals is considered to be one of the main barriers to effective prevention of ED in schools. Among other things, there is a lack of research that identifies the needs and attitudes of school professionals towards the prevention of ED and

contributes to the development of an effective and sustainable prevention programme.

One of the most recent studies on the needs of school professionals and their belief in their professional effectiveness in implementing eating disorder prevention approaches is by Pursey et al. (2022). The research team's study involved 51 school professionals from the New South Wales region of Australia who were over the age of 18. The school professionals identified in this study were classroom teachers, social support teachers, special education teachers, health and physical education teachers, senior teachers, school counsellors, principals, and assistant principals.

Looking at the results of this study, the majority of respondents agree that the implementation of ED prevention in schools is necessary. There are also those who believe that not all teachers need to participate in ED prevention programmes. The main reasons for this are workload and lack of knowledge. A study by Pursey et al., (2022) highlighted a gap between the perception of ED among school professionals and their lack of confidence in contributing to the direct implementation of ED prevention interventions. In other words, although respondents recognise that they, as school professionals, need to be involved in the implementation of these preventive interventions, they are not confident in their ability to implement them properly. The authors of this study argue that this attitude of the respondents shows that the role of school professionals in the prevention of ED is inconsistent.

The study by Pursey et al. (2022) reopened the problem areas in the implementation of ED prevention programmes in schools that were identified by Neumark-Sztainer, Story & Collier (1999) more than twenty years ago. One of the main barriers limiting ED prevention interventions in schools is the passive attitude of school structures that ignore higher level changes. This indicates that the implementation of ED prevention interventions in schools is still not considered a priority and it is suggested that attention should be paid not only to the perceptions of individual school professionals on ED, but also to the perceptions of educational organisations.

This situation is well illustrated by the cluster randomised controlled trial conducted by Gumz et al. (2017), which aimed to evaluate the effectiveness of a universal ED prevention programme for young females and males. The researchers invited all 144 secondary schools in Hamburg to participate in the prevention programme. Of the 144 schools – ten categorically refused to participate, 111 gave no feedback and only 23 agreed to participate. Although the school is recognised as an appropriate setting for prevention, this case study supports ideas of Pursey et al.'s (2022) ideas that a phased approach should be considered when implementing prevention interventions – prioritising schools that have expressed an interest in ED prevention.

Conclusions

Addressing ED should move beyond a medical approach to a socio-cultural one, developing mental health literacy for ED in different populations and groups. This reconceptualisation would allow not only to focus on risk factors (which has long dominated research for a long time), but also to identify possible protective and preventive actions. This would allow not only social, psychological and biological factors to be taken into account, but also the development of more effective intervention strategies, which in turn could prevent serious eating disorders.

While there is an agreement on the need of formal education measures on ED in schools, there is a lack of educational policies to address ED, even when there is a marked increase in risk factors, such as body dissatisfaction, which is observed over the course of a student's schooling.

Certainly, we can see a shift from a clinical to a socio-cultural understanding of ED, and identify the levels and signs of risk for ED in relation to socio-cultural factors and characteristics, which would enable the development of ED education, prevention and intervention, and promote a multi-disciplinary approach to develop effective practical approaches.

Despite the promising evidence for some universal ED prevention programmes, there is a tendency for most of these programmes to remain at the research level, without being integrated into classroom practice. There is also a lack of ED prevention programmes that focus on gender, age, race, etc.

Based on the scientific literature, it is recommended that sustainability – be considered in the paradigm of ED prevention programmes in schools. It is suggested that participatory and life skills approaches should be used and integrated into the curriculum and the wider school community, allowing the implementation of programmes by school professionals rather than only external providers.

Research has also highlighted problems that have become a prevailing trend – a lack of knowledge among school professionals and a passive stance by school structures that ignores higher-level developments. This is seen as one of the main barriers to effective prevention of ED in schools. This indicates that the implementation of ED prevention interventions in schools is still not considered a priority. It is therefore suggested that attention should be paid not only to the perceptions of individual school professionals about eating disorders but also to the educational organisations, including the macro environments.

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