#### **ORIGINAL PAPER**



# A Storybook Approach to Raise Awareness of Unhealthy Attitudes Towards and Behaviours Around Eating in Children Aged 6–11 Years

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#### **Abstract**

The issue of eating disorders and disordered eating (ED/DE) is becoming more prevalent in younger children and prevention efforts are required in the formative years. However, existing approaches are resource intensive, focus more on 'healthy eating' and are not necessarily embedded within everyday education. In this qualitative study, parents, teachers, and practitioners (affiliated and non-affiliated with an ED charity, N = 16) provided open-ended feedback after engaging with a research-informed ED/DE children's storybook, which is not part of the formal curriculum, for children aged 6–11 years. Reflexive thematic analysis led to four global themes: [A] Confidence in approaching the subject and extent of concern, [B] Discussions, training, and empathetic conversations, [C] Social media and social identity, and [D] Application and development. Our findings suggest that ED/DE in children is a concern, and the storybook was viewed as a versatile and valued resource that could support initiating conversation with children, particularly in response to wider societal pressures. The storybook was viewed as raising awareness of ED/DE for both parent/practitioner and children, although development of supplementary materials and activities is needed to address other aspects of ED/DE. We discuss these findings in relation to researchers working more closely with area experts to develop credible resources to support a range of complex topics and issues

Keywords Eating disorder · Disordered eating · Storybook · Younger/older children · Resource

# **Highlights**

- The research utilised a co-developed storybook approach to address ED/DE in children.
- Participants were concerned about the extent of ED/DE in children.
- The storybook was valued and viewed as supporting initial conversations with children.
- Wider societal pressures underpin children's eating concerns, e.g., social media.
- Development of supplementary materials/activities can address other aspects of ED/DE.

Adolescence is a critical period where the influence of peers especially in social media environments, may expose young people to negative imagery (e.g., idealised bodies, thinspiration/fitspiration) and unhelpful appearance comparisons (Chung et al., 2021). This can have a particularly strong negative impact on eating behaviour as adolescents

progress through puberty (Filippone et al., 2022). Eating Disorders (ED) (e.g., Anorexia Nervosa, Bulimia Nervosa, Binge Eating Disorder and Avoidant/Restrictive Food intake Disorder) and Disordered Eating (DE) (i.e., engagement with maladaptive eating behaviours such as food restriction, binging, or purgative practices) are prevalent in adolescence (Hay, 2020). For example, in a survey of >5000 adolescents, Mitchison et al. (2020) found the point prevalence for any eating disorder was 13% in boys and 33% in girls. Furthermore, a record number of children are now seeking and receiving treatment for eating disorders in the UK (NHS [National Health Service], 2022), and 6% of pre-adolescents (aged 10–11) have subclinical (disordered but does not meet criteria for a clinical diagnosis) Anorexia

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Nervosa (AN), Bulimia Nervosa (BN) or Binge Eating Disorder (BED) (Murray et al., 2022).

Traditional talk therapy treatments for EDs can be timeconsuming, expensive, and with long waiting lists. For example, therapist-guided Cognitive Behavioural Therapy for EDs (CBT-E; Dalle Grave, 2022) involves 20 + 50-min sessions. It is therefore imperative that ED prevention efforts are targeted in the formative years (i.e., pre-adolescence / late childhood) to reduce the likelihood that ED and DE will emerge in adolescence, and the subsequent treatment burden associated with this. Existing school-based DE prevention efforts have shown promising results. For example, a recent review found that 59% of school-based DE programs, which included psychoeducation workshops, mindfulness-based approaches, and dissonance-based interventions, were effective in reducing symptoms of disordered eating among adolescents (Wong et al., 2024). However, it is evident that current interventions are resource heavy and not typically developed in conjunction with key people in the child's social environment (e.g., parents, teachers) or with experts in the field of EDs (e.g., psychologists, ED service providers).

A key mechanism for raising awareness and understanding of these issues is by involving parents in the coproduction of prevention / interventions strategies. Parental involvement is paramount, given that they are often responsible for implementation and decision-making when it comes to the prevention and treatment of weight-related problems (Aleid et al., 2024; Carbonneau et al., 2021).

Previous studies exploring parent perspectives for improving healthy eating and body image in children have suggested that parents desire resources that provide practical tips. For example, how to educate a child on the importance of eating healthily without this leading to a child's unhealthy obsession with good food vs bad food or poor body image (Hart et al., 2015). In addition, early childhood professionals have highlighted that new resources should help facilitate parents' conversations with their child about their body image (Hart et al., 2015). Specifically, parents have highlighted a preference for age-appropriate educational resources they could use with their child (e.g., a book, toy, game) (Hart et al., 2015)

Books are an important avenue to explore within the context of improving healthy eating body image in children. Reading is a familiar activity for most children. Stories are often fun and engaging and parental/caregiver interaction during story time provides an excellent opportunity to acquire new knowledge and develop a deeper understanding (Bus et al., 2020). Furthermore, the images in storybooks help children to remember what has been learned and increase children's familiarity with the topic area (i.e., healthy food) (Crawford et al., 2024). Reading can be used independently of a mealtime setting; there is no requirement for the child to be doing any eating which may alleviate some of the pressure

often associated with having to taste or try healthy foods (Snuggs & Harvey, 2023). Additional benefits of education through storytelling include ease of administration, cost, improved literacy skills, and increased social interaction between parent/caregivers and the child. Books also have the added benefit of increasing awareness both at home and within childcare/school settings (Kobel et al., 2017). Due to the outlined benefits, the use of storybooks as a resource for encouraging healthy eating in young children has been well documented (e.g., Coulthard & Ahmed, 2017; Coulthard & Sealy, 2017; Coulthard & Thakker, 2015, Coulthard et al., 2016; Coulthard et al., 2017). For instance, recent research (Canova et al., 2021) has shown that the storybook approach effectively increases vegetable acceptance among preschoolaged children. The findings indicate that using storybooks, along with supplementary materials like Fun Facts handouts and recipe ideas, enhances children's familiarity with and preference for cruciferous vegetables. This highlights the key benefits of the storybook method in promoting healthy eating habits in children during this critical developmental stage. However, the potential for books to raise awareness and prevent the development of ED/DE and body image issues is yet to be investigated.

Research highlights a critical gap in parental understanding of how to promote healthy eating without negatively impacting children's body satisfaction (Hart et al., 2015) seek guidance on fostering positive body image, encouraging healthy behaviours, and addressing weight-based bullying (Puhl et al., 2023). Additionally, professionals and caregivers emphasize the need for practical, sustainable, and trustworthy resources (Fiskum et al., 2022).

Storybooks offer an engaging, low-cost method to promote healthy eating and positive body image (Horst & Houston-Price, 2015; Greenhoot et al., 2014), yet their potential for ED prevention remains underexplored. Given accessibility challenges in online ED information (Tarchi et al., 2024), an ED-focused storybook is a crucial, evidence-based intervention.

"Noodles Healthy Eating Heroics" is a storybook within the "Whoopsie Doodle Little Noodle" series that has been developed by psychologists in conjunction with eating disorder charities and stakeholders. It has been designed to raise awareness of healthy eating behaviours in children aged 6–11 years. The current research aimed to obtain insight regarding the suitability and potential application of the storybook if subsequently used to support children. However, given the sensitive nature of eating behaviours, the research aimed to *first* obtain insights and feedback about the storybook from key stakeholders (e.g., parents/carers, teachers, and practitioners).

The current research aimed to trial a storybook approach to analyse feedback from stakeholders (e.g., parents, teachers, practitioners of an eating disorder charity)



surrounding their perspectives of unhealthy attitudes towards and behaviours around eating in children aged 6–11 years in response to a targeted children's storybook.

#### Method

# Design

The research aligned with interpretivism, and therefore applied a qualitative approach, allowing participants to report their perspectives and experiences (Burton & Bartlett, 2009) with a wider aim of informing approaches to support children with ED/DE. Given the potentially sensitive nature of this work, participant perspectives were obtained through open-ended surveys to promote privacy while following a schedule of standardised questions that encourage different perspectives. Before completing open-ended surveys, participants completed a series of slider-scale responses to provide additional context to their insight (see materials).

The research used Reflexive Thematic Analysis (RTA) as the analytical method, following the guidelines of Braun & Clarke (2006; 2019) which emphasises an immersive,

reflective, and non-linear analytical approach. An inductive approach complimented RTA by allowing data to naturally inform, rather than imposing preconceived categories or frameworks (Moretti et al., 2011) given that storybooks to support eating disorders/disordered eating have not been widely utilised.

Finally, a phenomenological epistemology was most suitable for the aims and focus of the research, and allowed for personal perspectives, attitudes, and reflections in response to the perceived utility of the eating disorders/disordered storybook. This allowed the research to orient toward participant experiences, while allowing for shared patterns to be considered across the data.

# **Participants**

The research employed a purposive sampling technique and volunteer sampling for open-ended survey responses with stakeholders of an eating disorder charity, and non-affiliated parents, teachers, and professionals who have a child or support children in their professional role (N=16; x12 females & 4 males) (see Table 1 for additional demographic information).

**Table 1** Participant demographic details, including responses to slider scales responses on a scale of 0 (not at all confident) to 10 (extremely confident) and average percentage scores for educator, gender and previous support status

| Participant | Age | Educator | Gender | Previously received support for ED/DE? | Confidence in approaching topic of healthy eating | Confidence in approaching topic of EDs | Extent do you perceive<br>DE and EDs to be an<br>issue for children in a<br>general sense | Extent are you<br>worried about<br>DE and EDs in<br>children |
|-------------|-----|----------|--------|--|---|--|---|--|
| 1           | 30  | Yes      | Female | Yes, previously                        | 1   | 10                                     | 10  | 10   |
| 2           | 44  | No       | Female | No, never                              | 7   | 2                                      | 4   | 7  |
| 3           | 41  | No       | Female | Yes, previously                        | 9   | 8                                      | 9   | 8  |
| 4           | 23  | Yes      | Female | No, never                              | 10  | 7                                      | 4   | 5  |
| 5           | 38  | No       | Female | No, never                              | 2   | 0                                      | 10  | 3  |
| 6           | 49  | No       | Male   | No, never                              | 6   | 4                                      | 6   | 5  |
| 7           | 58  | No       | Female | Yes, previously                        | 8   | 8                                      | 4   | 2  |
| 8           | 32  | Yes      | Female | Yes, previously                        | 8   | 7                                      | 6   | 10   |
| 9           | 35  | No       | Female | No, never                              | 5   | 3                                      | 7   | 7  |
| 10          | 44  | No       | Female | No, never                              | 10  | 6                                      | 10  | 10   |
| 11          | 37  | No       | Female | No, never                              | 8   | 9                                      | 5   | 5  |
| 12          | 29  | Yes      | Male   | No, never                              | 8   | 5                                      | 7   | 9  |
| 13          | 67  | No       | Female | No, never                              | 7   | 6                                      | 10  | 8  |
| 14          | 39  | Yes      | Male   | No, never                              | 8   | 9                                      | 8   | 8  |
| 15          | 51  | No       | Female | No, never                              | 8   | 9                                      | 9   | 9  |
| 16          | 85  | No       | Male   | No, never                              | 3   | 3                                      | 5   | 3  |
| Overall %   | -   | Educator | -      | -                                      | Yes (70%)<br>No (66.3%)                           | Yes (76%)<br>No (52.7%)                | Yes (70%)<br>No (71.8%)   | Yes (84%)<br>No (60.9%))                                     |
| Overall %   | -   | -        | Gender | -                                      | Male (62.5%)<br>Female (69.2%)                    | Male (52.5%)<br>Female (62.5%)         | Male (65%)<br>Female (73.3%)  | Male (62.5%)<br>Female (70%)                                 |
| Overall %   | -   | -        | -      | Previous<br>Support                    | Yes (65%)<br>No (68.3%)                           | Yes (82.5%)<br>No (52.5%)              | Yes (72.5%)<br>No (70.8%)   | Yes (75%)<br>No (65.8%)                                      |



#### **Materials**

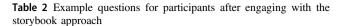
# The Storybook

The storybook (32 pages in length, illustrated pages & written in rhyming verse) belongs to a wider series of researchinformed children's books (Whoopsie Doodle Little Noodle) and is a self-published series (Amazon Kindle Direct Publishing) of which the author has full ownership. The book aims to raise awareness of ED/DE and healthy eating for children aged 6-11 years by embedding knowledge and understanding taken from research and knowledge from experts in the area e.g., an eating disorder charity. Specifically, the storybook was devised around stakeholder insight and appraised for relevance and age-appropriateness during the design/amendment stages by the Chief Executive Officer of an eating disorder charity. The storybook is based on the learnings of the protagonist (Noodle) who demonstrates concern for a boy called Mason who is struggling with food and makes a series of mistakes: mistake #1 is based on Noodle drawing attention to Mason not wanting to eat, mistake #2 is based on choosing to eat only 1 food source (chips), and mistake #3 is based on Noodle again drawing attention to Mason who is judging himself negatively when looking in the mirror. With the support of her family, Noodle learns about food and ways in which to support Mason.

The storybook was launched on March 4th (2021) for World Book Day. The project was supported by a local funding body, resulting in 5000 copies being printed and shared in every primary school across neighbourhood, place and at system level (district, city and county) plus the five NHS CAMHS ED services in the East Midlands. A free downloadable version is available nationally and internationally. Having received initial positive stakeholder feedback, this widening participation approach was also endorsed by NHS England Midlands Children and Young People Quality Improvement Team who recommended further afield across clinical ED services for children and young people.

# **Slider Scale Questions**

Before participants engaged with the storybook and responded to the standardised series of questions, they were required to complete 4 slider scale questions that were intended to provide additional context to the analysis. On a scale of 0 (not at all confident) to 10 (extremely confident) participants rated their confidence in approaching the topic of healthy eating, confidence in approaching the topic of ED/DE, the extent to which they feel ED/DE are an issue for children, and the extent that they are worried for ED/DE in children. For each slider scale response, participants could also provide open-ended feedback to support their



**Example Questions** 

As well as promoting healthy eating, do you think it is important to focus on the impact of disordered eating / poor body image in children?

Do you think the signs that children show when they are experiencing disordered eating / eating behaviours are addressed in the storybook? Please fully explain your perspectives.

Do you think potential underlying factors linked to the development of issues with disordered eating / eating behaviours are addressed by the storybook? Please fully explain your perspectives.

Please can you explain or identify the potential impact of the images used in the storybook.

Do you feel that the storybook could support parents/caregivers including siblings when approaching conversations with children surrounding disordered eating / eating behaviours?

response. The rich data obtained for this portion of the research supported the development of theme 1.

#### **Standardised Ouestion Schedule**

In this research, a standard question schedule (see Table 2) was used to gauge participant perceptions of features of the storybook, including its appropriateness and relevance (e.g., do you think the signs that children show when they are experiencing disordered eating / eating behaviours are addressed in the storybook?). The questions were created by the researchers (some of whom are the authors of the storybook) with an understanding of the purpose and design of the story. To increase their 'trustworthiness,' the question schedule was also checked by the Chief Executive Officer of our collaborative eating disorder charity.

#### **Procedure**

To approach key stakeholders (e.g., parents, teachers, practitioners) linked to a local eating disorder charity, permission was sought from the Chief Executive Officer. Parents, teachers, and professionals who were not affiliated with the charity were also approached. Participants accessed study information through dedicated research software, and following their informed consent, completed demographic questions, the slider scale questions (with optional openended responses), and then proceeded to access the storybook through a PDF file. Participants were encouraged to have as much time as they needed and to read through the story a minimum of 2 times, as well as taking notes. Following this, they moved to the final portion of the research and responded to the series of open-ended questions that asked about different aspects of the storybook surrounding DE/ED.



# **Positionality**

As researchers engaged in the development of a storybook to support children experiencing eating disorders and disordered eating, we recognise the importance of reflexivity in our work. Our research team brings diverse backgrounds, professional experiences, and affiliations that have shaped our perspectives and approach to this study. We acknowledge that our personal and professional histories influence the ways in which we frame our research questions, interpret data, and engage with participants.

The lead author specialises in psychology in education and has extensive practical experience working in schools and residential care settings with children exhibiting complex behaviours and needs. This experience has influenced the direction of the authors wider works, aiming to develop approaches that can support children when encountering complex topics and issues. The fourth author of this research (and storybook co-author) has over five years of experience as an early year's teacher and as current subject lead for English in a Higher Education Institution, contributes expertise in literacy, child engagement, and curriculum development. Together, they have co-authored multiple books in collaboration with external charities, demonstrating a commitment to creating accessible and impactful educational resources.

The second author's research explores the protective and risk factors associated with disordered eating, with a particular emphasis on social influences. The third author's research is focused on all aspects of eating behaviour, specifically examining the link between emotion processing and disordered eating. As researchers engaged in the study

of disordered eating, our knowledge and experiences shape our perspectives and approach to this work.

Nevertheless, our professional backgrounds enhance the credibility and applicability of our research. We remain mindful of the potential biases this may introduce and strive to main objectivity, while recognising the importance of diverse viewpoints. In this work, we have remained committed to ensuring that the voices and lived experiences of parents, educators, and practitioners - both those affiliated and non-affiliated with an eating disorder charity have been accurately represented in the results section, including perspectives surrounding further development of the resource that recognises scope for improvement.

# **Analytical Strategy**

The analysis process followed the 6 stipulated stages (Braun & Clarke, 2006; 2019) including a constant reflexive process. The guidelines urge [1] familiarisation with the data and a detailed understanding of the content; [2] which then enables an initial list of codes to be produced. [3] Themes can then be generated through refocusing the analysis and sorting codes [4] that are then refined with some becoming redundant. [5] This leaves themes that best encapsulate the data, though further refinement may be required. [6] A full set of themes has been established, and data is reported at this phase. Coding (see Table 3) was inductive (conducted by DP and RP) allowing themes to be developed from the obtained data rather than being pre-determined (Moretti et al., 2011) and utilized inter-rater reliability throughout. Initial codes were generated through a close reading of the data, capturing meaningful patterns. These codes were then iteratively clustered into broader categories - 'emerging themes' - that were refined

Table 3 Coding examples and 'emerging themes' to show a transitional step between initial coding and the finalised overall themes

| Question   | Codes   | Emerging Themes   |
|--|---|---|
| As well as promoting healthy eating, do you think it is important to focus on the impact of disordered eating / poor body image in children?                                       | Need to educate children and focus on more than just healthy eating => needs to be addressed carefully.  Teachers may have a lack of training => supported by resource.  Social media-based issue.  Potential negative attitudes. | Education/Training. Social media-driven issue. Issue needs to be approached carefully.  |
| Do you think the signs that children show when they are experiencing disordered eating / eating behaviours are addressed in the storybook? Please fully explain your perspectives. | Other areas for consideration. Book covers important areas. Book provides space to discuss issues. Important for children to be aware of signs in others. Supported participant (teacher) in what behaviours to look for.         | Scope for development. Book is a useful resource = To educate. Space for discussions (personal issues and signs in others). Training. |
| Do you think that a storybook approach could support a child with disordered eating / eating behaviours? How do you imagine the storybook could be utilised?                       | Utilise at home and in school<br>Promoting discussions.<br>Educates & raises awareness of signs in<br>others.   | Discussions Educates (at home, in school and shared through other resources).   |



further through a reflexive process with the data, aligning with the guidance of Braun & Clarke (2019). Emerging themes were reviewed, developed and refined to ensure they appropriately captured the depth of participants' experiences and their perspectives, giving focus to core areas of importance. Adherence to this process led to the development of 4 global themes. During the data collection stage, it was felt that data saturation had been achieved in accordance with the guidance of Aurini et al. (2022) whereby categorizations can be substantially supported by a substantial amount of evidence. This determined the final sample size. Analysis – using inter-rater reliability - also corresponded to the guidance of Hennink et al. (2017) regarding code saturation which was achieved due to no additional ideas or perspectives being identified.

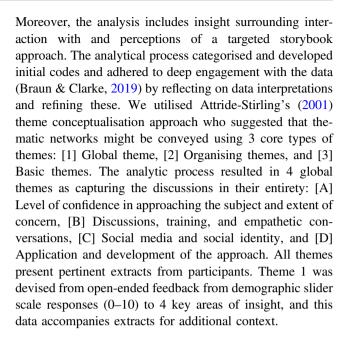
Given the interpretive nature of qualitative works, the researchers remained aware of their own positionalities, perspectives, and potential biases that could shape data analysis. To mitigate these influences, ongoing reflexivity was maintained through reflective notes and discussions within the research team, while trustworthiness was promoted by focusing on ensuring that participant experiences and insights were accurately reported. Additionally, although the storybook was written by two authors of this research paper, the analysis aimed to highlight current limitations of the storybook approach as raised by participants in their feedback, putting aside any potential bias and demonstrating the avoidance of a focus on data that seemingly supports researcher prejudgments, theories or goals (Aurini et al., 2022). The analysis also aimed to adhere to trustworthiness guidance (Noble & Smith, 2015) including providing rich verbatim quotes/descriptions of participants accounts (see results section) to support analytical perspectives and by providing clear and transparent analytical narrative. These measures contributed to a clear analytical process to enhance the credibility and trustworthiness of the findings.

#### **Ethics**

The research was cleared through the university Research Ethics Committee (ETH2324-1337) and adhered to the British Psychological Society's ethical guidelines. Participants were provided with full study information and gave their informed consent to take part in the research and for their anonymised data to be used for publication purposes. The data in this research has not been used in previous works/published papers.

# **Findings**

The analysis presents key reflections of participant experiences of supporting or approaching the topic of disordered eating/eating disorders – in various capacities and roles.



# Global Theme 1: Level of Confidence in Approaching the Subject and Extent of Concern

The study sample comprised schoolteachers and parents who provided additional comments for key slider scale questions, which, as an initial point of analysis, demonstrated differing degrees of confidence in approaching the topic of ED and DE, and concern for these as a wider issue for children. For example, participant 1 who works in a service and rated ED and DE as a considerable concern, stated, "I work in a service and see firsthand how much of an issue this is," but still provided a low confidence rating for approaching the topic. Additionally, participant 8 who explained their educator role responded, "It scares me," when considering ED and DE as an issue for children, while participant 12 also indicated a high degree of concern regarding the issue, stating that, "ED and DE are a major cause for concern [...] impacts child's health, personal and social development, and education."

Participants referred to their range of experiences at this stage of the research, and although some reported these as supporting knowledge and understanding when approaching the topic, for others, this intensified their wider concern for children's development and wellbeing. For example, participant 13 explained that, "For children, it can affect their development, mental health, low confidence, and the way they see themselves...it's a topic that needs to be addressed further." As such, increased knowledge is shown to highlight the prevalence of this issue, and despite comments that there is currently more talk around ED and DE, it was also felt that these should be addressed further. Responses also highlighted the difficulty of the topic or lack of knowledge as a potential barrier to supporting children or



discussing this issue generally. Participant 13, who perceived ED/DE as a considerable issue for children, explained that, "it's a difficult topic to address," while participant 5 (rating themselves as having no confidence in approaching the topic of ED) shared that, "My understanding around food is quite old fashioned...approaching the topic [is] very daunting and I worry about making it worse."

Other concerns were raised surrounding current externally used school schemes of how food is conceptualised and labelled, and a lack of training for educators. For example, participant 8 drew on their experience and explained that, "We have prescribed work or [external] support [...] but is sometimes based on 'treat' food, which potentially demonises certain food groups." They added that, "I worry there is a lack of training in schools, so staff may have archaic ideas or use language/behaviours that could instil negative eating behaviours." In terms of lower confidence in approaching the topic of ED, participant 12 (an educator) reported on identifying a child with an ED, which emphasised their low confidence in approaching the topic, stating that, "I would not feel completely confident approaching the topic directly with the child but would be able to engage in conversation without causing shame or embarrassment." Social media was also implicated at this stage of the analysis for its 'intensity' and space for denigrating comments against initiatives and images around body positivity that could 'trigger' negative attitudes or behaviours in children. In reference to plus sized models, participant 8 stated that, "Social media comments are filled with negative attitudes, insults or comments on their health."

Further highlighting the role of educators and training in supporting children, participant 8 explained how teachers identified and then worked collegiately to support their child's eating disorder, "They developed an eating disorder due to grief. Thankfully her teachers picked up on this and we were able to work together to help her cope." This important role was also reinforced by another educator (P12) who referred to an occasion where "having observed eating habits congruent with an ED was referred further and [led to] hospitalisation." Participant 4 further reported that issues may be grounded in how food is categorised, such as 'good' and 'bad' and "forcing children to eat when not hungry due to pressure from health professionals" which again emphasises careful reflection for health-based advice and messages. Further implicating social media - and a generational difference whereby Generation Z (1995–2009) and Alpha (2010-2024) are arguably exposed to greater pressures - this participant drew on wider societal attitudes and how "even positive' messages are not a true reflection of what is 'normal'" suggesting that more insight and lived experiences should be considered to develop positive initiatives and schemes. This may relate to educator comments about children becoming negatively aware of their bodies leading to behavioural changes, for example, participant 4 discussed that, "Children (9+) become aware of their bodies and become ashamed, either leading them to restrict food intake or to feel guilty and overeat."

To counter some of the issues discussed, other educators outlined their approaches for addressing this area more broadly, such as focusing more "on the function of food rather than body image" and "discussing keeping our bodies and brains healthy in the context of food" (P4). However, it was still felt that relationships with food can have a wider developmental impact, for example, participant 4 further stated that, "I am keenly aware of how a child's relationship with food can impact them further moving into adolescents," while participant 8 (an educator) reported their observations of children that have struggled and acknowledged the increasing prevalence of EDs and DEs in younger children, sharing that, "I know of children further up school that have suffered and that this is starting to impact much younger children."

# Global Theme 2: Discussions, Training, and Empathetic Conversations

Theme 2 represents the start of data analysis surrounding the standardised questions following participant engagement with the ED/DE storybook approach. Storybook feedback centered on a range of beneficial features. For example, participant 6 felt that ED/DE was "handled in a natural way," participant 15 shared that "it covers a range of topics very well" and participant 4 considered that "many children can relate to the images of the character becoming antisocial and tired. This may trigger empathy, or even stronger emotions in a child who has similar experiences." Extending this point and further indicating the prevalence of this issue – and the need for suitable resources - they report that, "I do know many overweight children who struggle with their body image and do not feel good about themselves." Indeed, the storybook was written to support and promote awareness, which was acknowledged by participant 4 who considered that "images of the character [...] appearing "full, and happy [...] provide glimpses of hope, implying that not everything is bad, there is some good, and nothing has to permanently stay the way it is."

However, the storybook aspired to provide a realistic account of ED/DE, noted by participant 9 who felt that associated behaviours were appropriately addressed and "it is clear the problem is not solved in a day." This resource was also carefully designed to be inclusive, and this was noted by participant 2 who felt "the diversity of race and gender was helpful and will be useful in the book being relatable," participant 3 who stated that "different role



models, demographics in the story help different people to relate" and participant 5 who shared that "it was good to present a boy because disordered eating seems to be associated with girls, so this highlights that we should be thinking about [...] body image worries for boys." This indicates the wider suitability of this storybook approach and places emphasis on diligent design.

Participant responses shared perceptions surrounding the value of the storybook as a "catalyst to discuss feelings" (participant 7) given that aspects relating to ED/DE covered in the story "accurately represent a child who is experiencing an eating disorder" (participant 7). This participant also shared that "it reminds me of a childhood friend who had experienced anorexia nervosa" suggesting the relevance and potential impact of this resource. The storybook also seemed to resonate with participants who had previously experienced ED/DE, such as participant 3: "When I was in the grips of disordered eating (at the age of 11–12) there were signs that have been clearly identified in the book such as choosing specific foods because they were healthier." More specifically, insight emphasised the utility of the storybook in terms of approaching and initiating conversations with children, as "a nonconfrontational pathway for discussing eating disorders and balanced eating without intimidating or shaming the child [...] it may create a safe space for discussing their experiences [...] it could motivate them to seek support" (participant 4). This was shared by participant 6: "it offers possible ways of approaching the problem in a non-judgemental, unconfrontational and supportive way," while participant 13 felt that "it addresses DE/ED in a gentle manner." Participant 6 also considered the storybook as "a prompt for discussion, to help the child understand what is going on with them and to feel less different to everyone else," and participant 13 reported that the storybook "will let children ask questions." This again emphasised the potential positive function of this approach, and although responses predominantly focused on the storybook supporting children, including those at risk of ED/DE, feedback also pointed toward the wider merit of encouraging understanding and empathetic approaches in children that could be especially supportive for a struggling child: "it is important that children understand what others may be going through and encourage them to be sensitive around the topic" (participant 12). A central premise of the storybook (and wider series) is that the main protagonist makes a series of mistakes that support children's learning by witnessing how these can be rectified and showcase an improved course of action. This key underpinning was acknowledged by participant 8 who shared that, "I think it's good how the dog character keeps getting things wrong, as it doesn't feel 'finger pointy' but also teaches children how they can respond in these situations."

In addition to supporting children, the storybook was also perceived as a useful resource for educators who may not necessarily know or be trained in how to approach or manage children who experience ED/DE. Insight centred on concerns over limited training and available resources in this area, for example, participant 8 reported that "I worry about a lack of training, having a resource like this is beneficial because you aren't expected to have the answers, but more to encourage children to share and reflect." Moreover, participant 12 described themselves as "a teacher who would lack confidence in initiating a conversation about eating disorders with a child." However, they too perceived the storybook as valuable, stating that "this book would encourage children to think about their eating habits and may open them up to discussing any of their concerns. If a teacher has concerns, the book can be used for reference." The feedback can be considered encouraging given the apparent suitability of the storybook but also discouraging in that there currently exist few approaches for normalising talk surrounding ED/DE in children. Other educators drew on their limited experience of supporting a child with an ED/DE but felt the storybook has provided them with knowledge and understanding. For example, participant 14 shared, "I have never experienced a child suffering from eating behaviours and so it has helped me know what behaviours to look for," and participant 13 reported, "I've never come across a child storybook to address DE/ED and after reading the storybook it helped show me signs of when a child could be suffering with DE/ ED." Several participants shared their insight surrounding how this storybook could be utilised in educational settings with all children, including within Personal Social and Health Education lessons (participants 8, 9, 12), "on a oneto-one basis" (participant 11), "assemblies" (participant 12), "talking therapy" (participant 3), "flashcards" for creating a balanced plate," "by professionals working with children in schools" (participant 2), "hospital wards" (participant 14), and "educational websites, [and] government websites that address DE/ED" (participant 13) suggesting the scope for application of this resource.

A storybook approach can be a versatile and adaptable resource that transcends the classroom and can be used in the home and other environments. Underpinning this view, parents felt the storybook provided an opportunity to approach and discuss the issue with their child, but also health professionals: "This book could be used by parents and caregivers, teachers, therapists, doctors, etc." (participant 2). Feedback predominantly indicated the value of a storybook in a general sense, for instance, "Storybooks are an excellent way to initiate conversations and understanding about issues" (participant 2), and "I could imagine reading this with my child as a starting point [...] it could promote good conversations between parents and children"



(participant 10). As a firmer example, participant 6 shared that "It was engaging and thought-provoking. My son thought it was good and understood the points it was making." Insight also suggested that the storybook and equivalent resources also support confidence and knowledge in parents, for example, participant 12 shared that, "parents/carers could use this book with confidence to approach conversations" and participant 5 declared that, "I learned a lot and was surprised because I would have previously done a whoopsie doodle [referring to the main protagonist making mistakes in the story]." A parent also suggested that parents could utilise the storybook "not just to prevent disordered eating in their own children but to foster compassion for other children" (participant 11). Finally, a parent (participant 5) demonstrated the intended impact of this storybook and shared that, "My son recognised himself in Mason [...] it opened up a way for us to talk about body image in a way he hasn't opened up before [...] a great way to have a deep conversation that will positively impact him." Supporting the utility of the storybook, when the storybook was launched in 2021 and provided to schools, educators were asked to allow children to take the book home so that parents could facilitate their reading. Linking to this, our collaborative eating disorder charity can evidence an increase in referrals from Derby and Derbyshire across this age cohort by teachers/professionals and parents making those new referrals into the eating disorder charity.

#### Global Theme 3: Social Media and Social Identity

Theme 3 appeared to capture the observations and wider concerns of parents and teachers - including some who previously experienced an ED/DE - surrounding the role and influence of social media. Insight highlighted aspects of the story that children would relate to and unrealistic expectations that children might aspire to based on what they see. A teacher felt that "children are having access to social media at younger ages" (participant 14) and this can expose them to imagery and information that they are not developmentally ready for. Participant 4 (teacher) added to this point and felt that, "social media in particular creates an unrealistic body standard, and any child who engages in these social media platforms has the potential to develop unrealistic expectations of themselves early on." Given that children are accessing social media at younger ages, there is increasing emphasis on the need for suitable and ageappropriate resources that are grounded in research to instill confidence in approaching the topic, as discussed in previous themes in this work. This is underpinned further by participant 15: "When children start to engage with any social media, they need tools to support them with pressures." Drawing on the credibility of research-informed

resources, participants highlighted parts within the story that reflected real-life scenarios, for instance, participant 13 noted that, "Mason looking on social media at people he didn't know and instantly comparing is a huge underlying factor. Social media is not real and very easy for anyone - especially children - to believe what they see is real."

Moreover, participant 14 shared that, "Mason [the character] looked on social media and compared himself to people he didn't know but made him feel low and unworthy [...] I think children would really relate to that situation," and this was a view shared by participant 12 who felt that the social media influence, "will resonate with older-primary-age children." Participant 4, a teacher, also elaborated on the function of "poor body image" in relation to the development of DE and reflected on experience:

"I have found that children's self-perceptions can lead them to act out - some children who do not see themselves as good-looking may assume the "joker" identity to compensate for a lack of self-confidence. I've met young girls who from an early age restrict food intake to look like a "surfer girl"."

This theme serves to demonstrate the potential influence of social media as a source of unrealistic expectations and a point of comparison for young children. Given these indications of concern, the previous theme discussions surrounding an informed resource to initiate conversations are further contextualised and important, particularly in cases when a child may be less forthcoming about discussing their concerns, as underpinned by participant 11: "I think it could support a child especially if they are secretive about their behaviours or unaware of their issues with disordered eating."

### Global Theme 4: Scope for Development

Analysis of feedback suggests the utility of the storybook approach, with some participants requesting a follow-up resource based on their enjoyment and engagement with this approach. For example, participant 13 stated, "I think it's very engaging, I wanted to read more to learn about Mason and what he was going through and understanding how a child feels when suffering with a DE/ED," and participant 4 shared that, "the book is excellent [...] I would love to see a follow-up on children who are a bit overweight/ overeat exploring their feelings and experiences in a school setting." This insight aligned with other feedback that emphasised other features – and potential development of corresponding resources - that could be devised to equip primary care providers with the necessary knowledge to support children surrounding DE/ED. Indeed, this interpretation is supported by participant 8 who worried, "they



[parents] might not know how to follow this up. For example, if a child discloses these behaviours." Aligning with scoping and areas for development, some participants provided specific points that could be integrated into resources in this area. Participant 15 considered, "eating disorders due to trauma or as a means of control rather than body image," and participant 2 suggested focusing on "ARFID [Avoidant restrictive food intake disorder] and sensory issues with food" as well as "obsessive eating or starving oneself like in anorexia." Participant 2 added, "aversion, lack of appetite and hunger signals, a need for control and certainty, stress, trauma, [and] bullying." However, these would need to be "handled carefully" (participant 10) and implemented at the appropriate age, which reflects some participant concerns, including participant 11 who shared that, "I would have a minor concern that would also incite negative attitudes of body image and create disordered eating in children." Therefore, an iterative process of developing resources that actions feedback from those with experiences should be central to resource development.

Adding to factors of ED/DE that participants considered for this and other resources, feedback included valuable and creative suggestions. Participant 14 suggested, "a healthy eating plate that shows what type of foods, vitamins, etc could be included," and participant 12 recommended a "Creating a balanced plate" activity with real food or cutout photos to generate conversations around healthy eating and habits." Extending the storybook approach and to facilitate child engagement and consideration, participant 4 added that, "a workbook encouraging reflective thinking would be an excellent addition," further indicating an approach whereby children could anonymously initiate personal concerns: "These can include worksheets for children but also interactive classroom activities. Children could also be given the option to write an anonymous letter to Noodle discussing when they have had trouble with food." Notably, the suggestion of an anonymous letter could be a step toward children being supported early but would require teacher training in terms of the course of action to follow and securing a wider collaborative approach. Adding to this consideration, participant 16 requested, "a book for adults to explain the ground covered and to suggest questions that might be asked of the child/children" if "a child discloses these behaviours." Moreover, it was acknowledged that while, "most children of primary age could be supported [...] by the book [...] perhaps not all children would be receptive to this approach" (participant 12) and reinforces that the storybook is one means of addressing this issue, and other approaches can be explored. With inclusivity in mind, other participants considered how the approach could be adapted to reflect the experiences of children and young people living with autism spectrum disorder (ASD) and attention deficit hyperactivity disorder (ADHD) in terms of "[those with] ASD, for example, not liking certain textures or mixing colours" (participant 8). Participant 4 reflected on "working with children with ADHD who prefer carbohydrates/white foods over a balanced diet. This seems to have an impact on behaviour." Although not discussed more widely, it also seems prudent to develop neurodivergent resources that would initially require grounding in empirical evidence.

### **Discussion**

This study explored practitioner, parent, and teacher perspectives of a storybook approach to raise awareness of unhealthy attitudes towards and behaviours around eating in children. Core findings and implications are considered surrounding [1] the utility of the storybook approach, [2] society, influence, and context, and [3] the necessity for requisite provisions. We end the discussion by considering limitations and future directions, and outline concluding points.

# The Utility of the Storybook Approach

Drawing on experience, participants emphasised that despite ED/DE being an issue for children (represented by slider scale responses), training and resources are limited in guiding their support, and in simply initiating conversations with them. This caused concern for some who would be reluctant to approach the topic, although it was acknowledged that relationships with food can have a wider developmental impact. However, participant reflections showed the value of training and confidence to approach the topic when teachers were able to identify a child who showed signs of an ED, leading to a collaborative response. In terms of contextualizing the issue of ED/DE for children, other discussions focused on issues of how some foods are labelled (e.g., as "treats") and generational pressures relating to social media, with younger children become negatively aware of their bodies.

The storybook was valued as accurately representing a child who might be experiencing an ED, supported by feedback from those who had previous experiences of an ED. This suggests that the development of this storybook alongside an eating disorder charity led to a credible and trustworthy resource. Indeed, qualitative insight indicated that the storybook could be a supportive resource for parents and teachers, even supporting those who did not have prior experience of ED/DE. This could address the discussed limitation of few available resources and limited training opportunities. Drawing specifically on a particular benefit of storybooks, participants felt that this would



encourage children to ask questions (both at home and in school, Hart et al., 2015) and discuss feelings in a nonconfrontational and supportive way (Greenhoot et al., 2014) that does not shame the child. Linking to this, participant feedback highlighted the potential use of the storybook across a range of scenarios/settings, both within the classroom and at home (Kobel et al., 2017) as well as by several professionals, highlighting the versatility of this approach. Moreover, as well as raising children's awareness of ED/DE and supporting children who may be displaying symptoms, the storybook was also discussed as potentially promoting empathy in children to promote their understanding of certain feelings and behaviours, thereby implicitly supporting those who struggle with an ED/DE. Adding to the suitability of the storybook, the images were discussed as supporting the storyline by clearly and accurately depicting behaviours associated with ED/DE (Greenhoot et al., 2014; Heath et al., 2014).

Importantly, participants appreciated the portrayal of a male with DE given that this is distinctly lacking in the DE narrative. Male boys/adolescents are an incredibly difficult DE sub-population to reach, likely due to marginalisation associated with the notion that disordered eating is an inherently female issue (Griffiths & Hay, 2021). Therefore, seeing themselves represented in a storybook such as this may increase the likelihood that young boys disclose their problematic eating. Indeed, our collaborative eating disorder charity has seen an increase in boys being referred, and across their services in 2023, 17% were boys and men. Working in partnership on research projects can contribute toward reducing stigma, improving access, and reducing health inequalities.

# Society, Influence, and Context

Although other factors can underpin ED/DE symptomatology, participant feedback especially implicated the role and impact of social media. This insight focused on children being exposed to unrealistic body expectations and consequentially requiring age-appropriate resources to better help them manage pressures. The development of the storybook alongside an eating disorder charity drew on insight to embed social media influence within it, and participants reflected on this as being particularly relatable for children. The perceived relevance of the storybook encourages a movement toward increased collaboration between researchers and experts within a particular area (such as an eating disorder charity) to carefully develop suitable resources to address current issues. By developing research-informed resources, this is an example of taking literature and understanding from an academic sphere and moving this into the public domain in an accessible format. These resources should be designed to support primary care providers and professionals in approaching potentially challenging and sensitive topics to support children at an earlier age. Indeed, this is particularly poignant given the 'my voice matters' focus of Children's Mental Health Awareness Week (Place2Be, 2024).

Furthermore, the importance placed on social media highlights the need for children to be educated to view aspects of social media (particularly those relating to eating/body image i.e., highly filtered images) with a critical eye. If supplementary resources are developed for this book (as suggested by participants), it could be that some provide specific psychoeducation as to the nature of such image editing and to highlight that what they see doesn't always reflect reality (e.g., as outlined by Casares & Binkley, 2022).

# **Requisite Provisions**

Although participant insight emphasised the value and application of the storybook approach, feedback also focused on other features and development of resources that could further support parents, teachers, etc. Participants highlighted that the challenge of creating a storybook in this area is to ensure that the content explored is not potentially triggering to children who have not otherwise come across such disordered eating attitudes/behaviours. This has, unfortunately, been the case with other DE/ED psychoeducation attempts. For example, the documentary "The Truth about online Anorexia with Fearne Cotton" delves into the disturbing world of pro-ana websites, which encourages dietary restriction as a lifestyle choice (Ellidge, 2011). Such content can inadvertently expose viewers (especially children/adolescents) to harmful ideas and behaviours they might not have encountered otherwise. Therefore, creating educational resources in this way requires careful thought and an iterative process of resource development, drawing on stages of feedback to ensure relevance, suitability, and sensitivity.

Participant feedback was generally positive in relation to the accurate portrayal of disordered eating symptomatology (e.g., restriction, vomiting), and that these behaviours occurred in light of social media induced negative body image, which is most often the case (Loth et al., 2014). However, it was noted that the manifestation of other DE symptoms (e.g., binging, overexercise) were not covered. Furthermore, participants reflected other attributes with well-established links to, and unique presentations of DE, such as sport participation (Goodwin et al., 2016) trauma (Groth et al., 2020), ADHD (Kaisari et al., 2017) and Autism (Baraskewich et al., 2021) were not covered. While it is acknowledged that including all possible symptoms / causes of DE in the storyline is not practical for a single book, a suggestion for future books that may be developed in this series (and other resource formats) is to broaden the



DE experience presented. Fiskum et al. (2022) reported that parents and professionals require practical, sustainable and trustworthy guidance on healthy living and body image and given the highly sensitive nature of this subject area, diligent and careful development of resources is crucial, but these should also remain accessible and not overwhelming. Indeed, Hart et al. (2015) identified a gap in parental understanding of how to encourage their children to eat healthily, without having a negative impact on their child's body, and further reiterates the need for research to underpin the development of subsequent resources that raise awareness of key areas of children's ED/DE. This may be particularly valuable given evidence to suggest that the more DE prevention strategies are tailored to the target population, the higher the likelihood it will resonate with and improve their outcomes (Hirsch & Blomquist, 2020). Indeed, feedback also suggested the use of supplementary materials, such as activities, questions, etc. to be used in conjunction with the storybook, to also provide more parent/teacher focused tools to build confidence in moving beyond just initiating conversation.

### **Limitations and Future Directions**

The results of this study are not without limitation. First, we acknowledge that qualitative research can be limited by subjectivity of participant insight and researcher interpretation. However, this was somewhat mitigated by drawing on insight and experiences from parents/carers, teachers and practitioners affiliated and non-affiliated with an eating disorder charity (with various understanding ED/ DE). Moreover, many NHS Child and Adolescent Mental Health Services (CAMHS) ED services do not support children younger than 12 years old, and a majority under 12 years were previously supported by NHS feeding clinics, meaning that an DE/ED diagnosis could likely be missed. However, our collaborating ED charity is the only all age charity in the UK (5 years plus) and is a foundation anchor in supporting the younger age all gender cohort. Furthermore, inter-rater reliability was utlised for data analysis, coding, and theme development, closely adhering to reflexive guidance (Braun & Clarke, 2019) that encourages deep engagement with the data. We also acknowledge that the study could be replicated to include a larger sample size, even within a qualitative context. However, in determining our sample size, we followed the guiding principles of "information power" as proposed by Malterud et al. (2016) who suggest that a smaller sample may be sufficient when participants hold substantial, relevant knowledge about the study topic. Given the focused aim of our research to evaluate the suitability of a storybook, the specificity of our sample (charity stakeholders, educators, parents, those with personal experience of ED/DE), and the high quality of the data obtained, a sample of 16 well-informed participants was deemed adequate to meet the objectives of the study, particularly when also following guidance of data saturation. In the study, data saturation was determined based on the extent to which each category was substantiated with comprehensive evidence, rather than relying solely on a limited number of illustrative quotes (Aurini et al., 2022).

A further limitation that may be directed towards this work centres on authors of this research also being authors of the storybook and naturally creates a risk of bias. To mitigate this, guidance surrounding trustworthiness has been closely adhered to, including the inclusion of rich verbatim quotes/descriptions of key discussion points (Noble & Smith, 2015). Indeed, a central theme devised through the analysis, 'Application and Development,' focuses on points raised by participants surrounding the current limitations of the storybook approach and how this might be developed. This demonstrates that the researchers have worked to avoid analytical bias and prejudgment (Aurini et al., 2022) and sought to represent participant insights and experiences.

In considering directions for future work, we acknowledge that the current study sample limits insight pertaining to the effectiveness of the storybook for use in different cultures. Thus, future research exploring the generalisability and cultural transferability of the storybook approach in preventing ED/DE in children is needed. This includes the strategic use of translanguaging to develop linguistically and culturally appropriate versions of the storybooks, particularly for priority languages spoken by communities at increased risk or with limited access to mainstream resources. Further work examining the long-term utility of this methodology would also be valuable using longitudinal studies to evaluate its sustained impact. Future research should aim to further develop and robustly evaluate the effectiveness of the storybook, potentially adopting a multistudy approach. For example, a first study could utilise qualitative methodology to inform the development of supplementary resources. These would be used alongside the storybook (in accordance with study data). A subsequent study could involve implementation of both the storybook and a structured plan of supplementary resources in a pre/post intervention design. Primary outcome measures could include parent/teacher changes in their awareness of DE and self-efficacy in approaching/supporting children with DE. In addition to establishing the storybook's effectiveness with teachers and parents, further intervention work could implement the storybook with children to explore whether improvements in their awareness of ED/DE, confidence to discuss this, empathy, and self-compassion (particularly with a focus on social media) are identified. There is also scope to develop a research-



informed storybook, consisting of a series of research-informed/experience-based short stories that raise awareness of key areas of children's ED/DE. The project could utilise expertise from diverse sources, including researchers, charities, professionals and other key stakeholders in a design that is twofold: (i) qualitative research to explore children's eating behaviour and to include care provider insights, and (ii) to devise and illustrate short stories and accompanying resources/activities to reflect pertinent findings from phase 1 (in combination with academic and stakeholder insights) to ensure a credible and reliable resource.

The present study has demonstrated that fostering strong collaborative relationships between academic researchers and charities/organiations are vital for effective resource development. Drawing on a broad range of expertise – often across charity/organisation alliances - can also help to curate and develop information around current foci, such as health inequalities, focusing on ED/DE in boys and men (as discussed by participant feedback in response to the storybook focus), ethnic minority groups/backgrounds, and the unmet need in current services around language and different social-norms for different cultural diversities. As a further example, our working relationship has emphasised food insecurity as a factor affecting children and young people (and adults) and is 'restriction', whereby once the anxiety has gone (access to food) the binging (response to restriction) and sometime purging (response to guilt) can occur. Our collaborative charity informs us that 46% of all ages diagnosed or referred onto weight management services are incorrectly signposted to weight loss pathways when they should be diagnosed correctly with disordered eating and binge eating disorder. Again, this highlights the need for suitable resources to raise awareness that can lead to more appropriate support.

In line with suggestions from participants in the current study, along with directions from our relationship with an eating disorder charity, future resources can be developed to address avoidant restrictive food intake disorder (ARFID) which has been highlighted as an area of focus and is linked to neurodiversity (Bourne et al., 2022).

This work also has several significant implications for public policy. For example, utilising storybooks to address unhealthy eating attitudes and behaviours can help policymakers promote early intervention strategies within educational settings with the goal of teaching children about the importance of developing healthy relationships with food from a young age. Additionally, incorporating storybooks into school curricula can enhance existing health education programs by teaching children about nutrition, body image, and the importance of healthy eating in an engaging and age-appropriate manner. Since parents and teachers found the storybook to be a valuable resource for children, such storybooks could

be used to inform public awareness campaigns aimed at reducing the stigma around eating disorders and promoting healthy eating behaviours in children. Therefore, the findings of this study have the potential to create a more supportive environment for children, parents, and teachers, ultimately contributing to the prevention and early intervention of disordered eating behaviours.

### **Conclusion**

This paper has presented parent, teacher, and practitioner perspectives of their engagement with an ED/DE storybook for children. Our analysis indicates that this resource is valued, and a storybook (and similar approaches) can facilitate conversation by raising awareness and confidence. Participant insight also emphasised the potential versatility of the storybook approach that can be used by several professionals, across a range of settings. This approach is not limited to ED/DE (and has been used to address maths anxiety, for example) and our findings highlight a wider need for credible resources to initiate conversations with children about a range of topics/and issues. However, resources require careful development and may benefit from wider input from experts/charities/organisations in a particular area to ensure that content and images are age appropriate. This study has also shown that social media remains a key factor that underpins ED/DE in children, and resources need to suitably address this, particularly given participant accounts of the potential adverse impacts of social comparison and unrealistic expectations. Indeed, our analysis shows that there is scope for further development by means of wider materials and activities to further inform their support and practice.

This work advocates a storybook approach to initiating conversations with children about ED/DE with the primary aim to open discussions about feelings and potential concerns. More generally, we advocate the development of research-informed resources that encourages collaboration between higher education institution researchers and external partners to ensure that information transfer from an academic sphere into the public domain for the benefit of the intended audience.

Author Contribution We note that DP conceived of the project and was principal lead. CS and ES contributed to early project development and ethical approval was sought by DP, CS and ES. Material set up and study administration was led by DP, CS and ES. DP and CS led data collection. DP and RP conducted data analysis which was checked by CS and ES. Manuscript writing was led by DP and included all authors, including proofing. All authors provided approval for the final paper submission.

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# **Compliance with Ethical Standards**

**Conflict of Interest** The author(s) declare that there were no conflicts of interest with respect to the authorship or the publication of this article. However, the first and fourth author of this paper are also the authors of the storybook used in this research.

Ethics Approval The authors did not receive support from any organization for the submitted work and full ethics approval was provided by the named institution. This work has not been submitted elsewhere. The first and fourth author self-publish the named series of children's storybooks through Amazon Kindle Direct Publishing for a small fee. However, the storybook used in this work is free to download.

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