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Parents' perspectives on adolescent social emotional learning: an explorative qualitative study amongst parents of students in prevocational secondary education

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Abstract

Purpose – Worldwide, schools implement social-emotional learning programs to enhance students' social-emotional skills. Although parents play an essential role in teaching these skills, knowledge about their

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perspectives on social-emotional learning is limited. In providing insight into the perspectives of parents from adolescent students this paper adds to this knowledge.
Design/methodology/approach – An explorative qualitative study was conducted to gain insight into parents' perspectives ($N = 32$) on adolescent social-emotional learning. A broadly used professional framework for social emotional learning was used as a frame of reference in interviews with parents from diverse backgrounds. Within and across case analyses were applied to analyze the interviews.
Findings – A conceptual model of four social-emotional skills constructs considered crucial learning by parents emerged from the data: respectful behavior, cooperation, self-knowledge and self-reliance. Parents' language, interpretations and orderings of skills indicate that the model underlying these constructs differs from skills embedded in the professional framework.
Research limitations/implications – Participants were small in number and mainly female. Therefore, more research is necessary to test the model in other parent populations.
Practical implications – The social-emotional skills students in prevocational secondary education learn at home differ from those targeted in SEL programs. Engaging students' parents in SEL program implementation is indicated to align the skills taught at home and school. Preparing teachers to implement such programs requires training them on engaging parents from diverse backgrounds.
Originality/value – The study is one of the first providing insight into parents' perspectives on SEL, the social-emotional skills deemed crucial to master for adolescents, and the roles they view for themselves and school on teaching these skills.

Keywords Parents, Education, Qualitative methods, School health promotion, Adolescence, Culturally diverse populations

Paper type Research paper

1. Introduction

Social and emotional learning (SEL) matters. SEL is the process of acquiring the social-emotional skills, such as empathy, self-regulation and problem-solving, necessary for successfully contributing to and participating in different living and learning contexts (Zins and Elias, 2007). SEL is associated with child outcomes, such as psychosocial health, resilience, academic achievements and well-being. Developing social-emotional skills is a continuous and cumulative process, starting from birth in interactions with parents and other people at home (Grusec, 2011; Osher *et al.*, 2020). During this socialization process, young people become familiar with the skills, behaviors and attitudes expressed and reflected in the practices parents and others use when caring for, protecting and guiding them to participate in the community they belong to. Schools are also considered crucial contexts for SEL and acquiring the social-emotional skills needed for success in life, education and work (Eccles and Roeser, 2011; National Research Council, 2012). Adolescence is considered a sensitive period for developing the advanced social-emotional skills required for accomplishing central developmental tasks, such as a differentiated self-concept and independence (Crone, 2017). However, adult guidance and support concerning SEL remain necessary. Collaboration between parents and schools is assumed to promote positive youth development (Bronfenbrenner and Morris, 2006; Garbacz *et al.*, 2015). Teachers and parents also agree that they both have a part to play in enhancing social-emotional skills (e.g. Bridgeland *et al.*, 2013; Hill *et al.*, 2018).

Contextual, as well as personal, factors shape an individual's SEL. For instance, growing up in low-income and/or migrant families challenges developing the social-emotional skills required for success in education and work (Fletcher and Wolfe, 2016; West *et al.*, 2020). Intellectual, emotional-behavioral and learning problems similarly impede social-emotional skill development (Cook *et al.*, 2008; Goodman and Scott, 2015). Parents and teachers perceive enhancing SEL in young people with such problems as particularly demanding (Gresham, 2015). However, in collaborating with parents, schools and teachers commonly encounter challenges related to differences in their role perceptions, goals and expectations of students (Hornby and Blackwell, 2018; Garcia-Carmona *et al.*, 2020). They particularly perceive parents from poor and migrant backgrounds as hard to reach.

Over the past 30 years, a new field of research on SEL emerged. Scholars in this field develop programs and theoretical concepts to support teachers and schools in purposefully

enhancing students' SEL. Although collaboration with parents is addressed and emphasized in the SEL literature in this field, insight into whether and how to engage parents in school SEL is limited.

2. SEL programs and frameworks

All over the world, schools implement SEL programs to enhance social-emotional skills to improve adolescents' psychosocial health, education, and work prospects (Durlak *et al.*, 2015). For guiding this implementation, several SEL frameworks targeting various social-emotional skills have been designed to support sharing conceptual models, develop a common language regarding skills development and promote collaboration amongst different ecological systems (e.g. teachers, students, school staff and parents) (Jones *et al.*, 2019). The framework developed by the collaborative for academic, social, and emotional learning (CASEL) is broadly used in SEL programs (Durlak *et al.*, 2015). This framework comprises five competency domains containing behaviors, skills, and attitudes relating to SEL: self-awareness, social awareness, self-management, relationship skills and responsible decision-making. SEL frameworks and -programs have broad theoretical foundations, being informed, for instance, by social learning theory, cognitive-behavioral theory, systems theory and development theories. What is more, they target various social-emotional skills.

Meta-analyses and evaluation studies of SEL programs showed significant positive effects on social-emotional skills, psychosocial health and academic achievement in diverse populations of children and adolescents (e.g. Durlak *et al.*, 2011; Sklad *et al.*, 2012; Taylor *et al.*, 2017). These studies did not evaluate parent engagement. Other meta-analyses found positive effects of engaging parents on student outcomes associated with programs' responsiveness to parental developmental goals (Goldberg *et al.*, 2019; Sheridan *et al.*, 2019). Students facing personal and contextual adversities, such as learning difficulties and growing up in low-income families and neighborhoods, are assumed to profit most from SEL programs (Elias and Haynes, 2008; West *et al.*, 2020). To achieve an SEL program's intended outcomes in students, a program should be implemented with fidelity, requiring teacher training (Durlak, 2016). Teachers are also assumed to tailor their lessons to meet the specific needs of their students; insight into how teachers implement programs is limited. Collaboration between parents and schools on SEL program implementation is also emphasized (Patrikakou and Weissberg, 2007; Bronfenbrenner and Morris, 2006). Fruitful parent-school collaboration is associated with shared views and responsibilities on SEL (Garbacz *et al.*, 2015).

However, the skills taught in SEL programs are also criticized for not necessarily matching the skills students growing up in poor and/or migrant families learn at home (e.g. Dinallo, 2016; Gillies, 2011). Such a mismatch is associated with unequal benefits of those programs for students growing up in disadvantaged circumstances and can put pressure on parent-school collaboration on SEL (Jagers *et al.*, 2019). Engaging these students and their parents in SEL program implementation is emphasized. Therefore, more insight is necessary into their perspectives on SEL.

2.1 Parents' perspectives on SEL during adolescence

Parents play a core role in helping their children acquire social-emotional skills. Apart from providing a safe and supportive context at home, parenting practices regarding SEL are associated with adolescents' skill development, health and well-being (Grusec, 2011; Smetana, 2017). The skills young people learn at home depend on parents' role perceptions and practices in different socialization domains (e.g. care and protection, building reciprocating relationships, control, guided learning regarding particular skills and (socio-cultural group) participation). Perceptions and practices in these domains vary depending on the socio-

culturally and -economically determined developmental views and values parents hold, as well as the goals they desire for their children. Depending on their views, values and goals, perceptions and practices of (in)adequate parenting and (in)appropriate social-emotional skills can vary (Smetana, 2017; Sorkhabi and Middaugh, 2019).

Adolescents' increasing independence and advancing skills also demand more egalitarian parent-adolescent interactions involving explanation, renegotiation and advice on (appropriate) social-emotional skills (Smetana, 2017). Insight into parents' perspectives on the social-emotional skills they perceive as crucial for adolescents to master and parental practices on teaching these skills is limited.

A few small sample qualitative studies have provided insight into the skills perceptions of adolescents' parents. For instance, in one study, parents from diverse socioeconomic backgrounds considered mastering self-regulation skills as conditional for responsible decision-making on health and behavior (Mynttinen *et al.*, 2020). For adolescents with special educational needs, parents perceived skills such as empathy, self-regulation and self-awareness as critical for maintaining positive interactions with peers (Kolb and Hanley Maxwell, 2003). Although parents in these studies perceived themselves as primarily responsible for teaching social-emotional skills, they also recognized that schools played a role. However, these studies did not provide insight into the perspectives on SEL of parents from various sociocultural backgrounds. More insight into the perspectives on SEL of these parents is necessary for collaborating with them on enhancing the social-emotional skills adolescents need.

2.2 SEL program implementation and current study

Collaboration between parents and schools in SEL programs is particularly emphasized for students growing up in low-income and/or migrant families (Jagers *et al.*, 2019). As parents' perceptions of skills may differ from the principles, values and goals guiding SEL programs, such differences might threaten, particularly, the opportunities of students in growing up in poor or disadvantaged circumstances for profiting from SEL school programs. Therefore, collaboration with parents of these students is advisable for implementing SEL programs in today's diverse and inclusive schools. Establishing such collaboration requires a deeper insight into parents' perceptions of adolescents' social-emotional skills, their role in teaching these skills and the parenting practices they use at home.

The current study is part of a larger project on implementing and evaluating an evidence-based Dutch secondary education universal classroom-based SEL program, Skills4Life (S4L). For this project, the program was adapted to the learning abilities of students with additional educational needs in prevocational education (see 3.1 Participants for more information). An evaluation study of the adapted S4L program showed no effects on outcomes in the full student population and adverse effects in a subgroup of students from migrant families (Van de Sande *et al.*, 2022). To better understand these outcomes and to inform the implementation of the adapted S4L program, we conducted a qualitative study exploring parents' perspectives on SEL. We interviewed parents of relevant students aiming to provide insight into 1. Parents' perceptions of the social-emotional skills deemed crucial to master for adolescents; 2. The roles parents perceive for themselves and schools in teaching these skills; 3. The practices parents perceive adequate for teaching social-emotional skills at home and possible differences between parents from different backgrounds.

3. Methods

In 2017, we conducted in-depth interviews with 32 parents regarding their perspectives on adolescent SEL. Parents were interviewed once, at a time and place convenient to them, which helped them to feel confident and relaxed, and encouraged them to express their thoughts, opinions, and experiences.

Teachers and researchers invited parents to participate in the study during parent-teacher conferences at four different schools in the urban western part of the Netherlands. Researchers also used their social networks to recruit parents. The parents were not personally known by the researchers. If parents were willing to participate, they either received written information from the teacher or were orally informed about the purpose of the study by the researchers. Every interview started by informing parents of the study procedures and confidentiality and explaining the study's aim of gaining insight into parents' perspectives on SEL. Parents were offered a gift voucher of EU 20 for participating.

3.1 Participants

The parents in our study had at least one child in grade 9 or 10 (aged 14–18 years) in the least selective track in Dutch prevocational secondary education, i.e. the Practical Education track (PrE, known in Dutch as Praktijkschool). The PrE track trains students for work. Two percent of secondary education students in the Netherlands are in the PrE track (Central Bureau Statistics, 2022). All students in this track have additional educational needs, associated with IQs varying from 60 to 90 (measured in IQ tests with a mean of 100), severe learning problems (three years delay in reading and mathematics) and/or emotional-behavioral difficulties. Students from low-income and migrant families are overrepresented in this track (Koopman *et al.*, 2015).

Purposeful (emergent) sampling was applied to reach maximum variation in gender, socio-cultural background, family composition and education level (see Table 1). Throughout the study, we interviewed 32 parents. Data saturation was agreed upon by the research team when, in the last three interviews with parents, no new themes, patterns or ideas emerged (Guest *et al.*, 2006).

3.2 Data collection and interview topics

The first two authors (MS and EP) discussed the objectives and methodology of the study in close collaboration with the Skills4Life research group. This group consisted of experts in qualitative research on low-income and migrant family backgrounds, parenting and parent education, and SEL program development and research. Although the research group members were all white and Dutch, they were all parents. One of the interviewers/coders is raised in a low-income and -educated family and knows that background well. Therefore, it can be assumed that the background differences between them and the parents they interviewed did not affect the quality and analysis of the data.

A semi-structured interview protocol (see Appendix) was developed to discuss in the interviews with parents their perceptions of: (1) the social-emotional skills necessary for adolescents to master; (2) the roles and responsibilities of parents and schools in teaching these skills; and (3) the skills teaching practices they considered adequate at home.

We used the five CASEL competence domains to formulate subtopics for the semi-structured interviews. Aiming to get insight into parents' skills perceptions and to avoid them clinging to the rather abstract and unfamiliar definitions of CASEL, a list of nine skills was derived from this framework (see Table 2). We operationalized these skills to make them more accessible to parents' educational and family backgrounds, considering their vocabulary. Besides these operationalizations, socialization theory and literature on parenting were used as resources to provide insight into parents' perspectives on SEL (e.g. Grusec 2011; Smetena, 2017).

All interviews were conducted in Dutch. After the first few interviews, the operationalizations of the skills were slightly adapted to match the parents' vocabulary; for example, *Knowing your strengths and weaknesses* was changed to *Knowing what you are good at and are not good at*. Interviewers used descriptions of skills in Dutch, English and the most common languages of migrant parents in the Netherlands, i.e. Moroccan and Turkish.

Table 1. Background characteristics of the parents included in the study

	Gender		Family background *		Education level **		Family composition	
	Female	Male	Native Dutch	Migrant	Low	High	2-Parents	1-Parent
1	X			X	X			X
2	X		X		X		X	
3	X		X			X	X	
4	X		X			X	X	
5		X		X	X			X
6	X			X	X		X	
7		X		X	X		X	
8	X	X	X		X		X	
9		X		X	X			X
10	X			X	X			X
11	X		X		X			X
12	X		X		X		X	
13	X		X		X			X
14	X		X		X			X
15	X		X		X		X	
16	X			X		X		X
17	X		X			X	X	
18	X		X		X			X
19	X		X		X		X	
20	X		X		X		X	
21	X			X	X		X	
22	X		X			X		X
23	X			X	X		X	
24		X		X	X		X	
25	X			X		X	X	
26	X		X			X	X	
27	X		X		X		X	
28	X		X		X		X	
29	X	X		X	X		X	
30	X			X	X		X	
31	X	X		X	X		X	
32	X			X	X		X	
Total	29	7	17	15	25	7	22	10

Note(s): * Migrant parents had various backgrounds, e.g. Cape Verdean, Moroccan, Polish, Turkish
** Highly educated parents had graduated from college, and lower-educated parents had high school, vocational, or primary education levels
Source(s): Authors' own creation/work

Depending on parents' preferences, interviews were conducted by telephone, at home, or at school. The interviews lasted 30–45 min. All interviews were audio-recorded, transcribed verbatim into Dutch by E.P., and numbered to ensure confidentiality.

3.3 Data analyses

As the purpose of our study was explorative, data collection and analyses were performed simultaneously and iteratively (Galetta, 2013). Preliminary findings were discussed in the research group three times: after the 10th, the 22nd and the last interview. All interviews were entered into a data processing program for qualitative research, Atlas.ti 7, and inductively coded (open coding followed by axial coding) by E.P. and M.S. We performed within-case analyses to identify main perceptions of skills, roles and practices used at home. Additionally, these researchers conducted cross-case analyses to elicit commonalities and differences

CASEL competence domain	Social-emotional skills comprised in each domain *	List of operationalized social-emotional skills (used in the interviews)
Self-awareness	- Recognizing own emotions - Knowledge of strengths and weaknesses - Self-efficacy	- Knowing what you are good at and are not good at
Social awareness	- Empathy - Perspective-taking - Appreciating diversity - Understand social norms	- Knowing and understanding others' feelings and thoughts - Respecting others' feelings and thoughts
Self-management	- Self-regulation - Goal-setting - Perseverance	- Managing difficult situations and emotions - Speaking-up for yourself
Relationship skills	- Communication - Cooperation - Managing peer pressure - Social problem solving - Help seeking	- Getting along with others - Cooperating with others
Responsible decision making	- Considering relevant factors and consequences of actions - Taking responsibility for decisions	- Taking other(s) interests into account in decisions - Making and sticking to agreements

Note(s): * We used the descriptions from the Collaborative for Academic, Social, and Emotional Learning (CASEL) (2003) for reasons of accessibility and comprehensibility for parents.
Source(s): Authors' own creation/work

Table 2. Competence domains and skills described in CASEL's SEL framework and the operationalizations used in the interviews

related to dimensions such as ethnic background (Dutch vs migrant), family composition (single-parent vs two-parent families) and parents' education level (low vs high). By combining within-case with cross-case analyses, we were able to give meaning to parents' perspectives on SEL based on identified patterns of contextualized ideas, perceptions, and experiences of individual parents and commonalities between parents (Ayres *et al.*, 2003).

The results section includes illustrations of parents' interpretations and constructions of social-emotional skills in their own words (italicized). In addition, we included quotes that reflect parents' reasoning and arguments about the interrelations between skills, their beliefs and perceptions regarding skill development, and the values and goals desired for their children.

4. Findings

All parents seemed engaged and interested in the interviews, which was expressed in their enthusiasm to share their thoughts, opinions and expertise on SEL and detailed explanations of crucial social-emotional skills.

In the following, we first set out the social-emotional skills parents perceived necessary for adolescents to learn. After that, we report on parents' role perceptions in teaching social-emotional skills, the practices they considered adequate for teaching skills at home, and we touch upon differences in perspectives related to parents' backgrounds. The numbers between brackets in this section indicate the homogeneity vs heterogeneity in parents' perspectives.

4.1 A conceptual model of four social-emotional skills constructs

Parents associated social-emotional skills across all domains in the CASEL framework with the skills they perceived as relevant for adolescents to master. However, a conceptual model

of four interrelated social-emotional skills constructs that differed from the CASEL framework inductively emerged from our data analyses, i.e. (1) respectful behavior, (2) cooperation skills, (3) self-knowledge and (4) self-reliance. Parents indicated an order (from 1–4) in which the development and teaching of skills should occur during adolescence.

4.1.1 Respectful behavior. According to all parents (32), respectful behavior was first and most important for their children to master. They considered this a self-contained construct of skills. They attributed their perceptions of respectful behavior to the skills and values they learned from their parents, such as trustworthiness, fairness and helping others. Half of the parents (16) interpreted respectful behavior in terms of appropriate manners, such as talking politely. The other parents used more general qualities, such as showing respect for other religions, cultures and opinions. The following quote illustrates how a parent associated respectful behavior with *being open-minded*:

> I want my children to be open-minded, non-judgmental, and respectful of others' opinions. I want them to appreciate others for who they are. [. . .] Even if you do not agree with someone or experience their behavior as annoying or odd [. . .]. (Interview 3)

4.1.2 Collaboration skills. Most parents (22) perceived respectful behavior as crucial for establishing positive relationships and collaboration with people from different backgrounds. They particularly emphasized learning *cooperation skills*, as *today's society revolves around teamwork*. Parents associated these skills with adolescents future work prospects. They argued that cooperating in complex situations and contexts required additional skills, such as *taking others' perspectives into account* and r*esisting peer pressure*. Parents believed adolescents need these skills to *resolve conflicts* and *adjust to situations beyond their control* at home, school and work. According to parents, mastering *cooperation skills* was a prerequisite for developing other skills during adolescence. The following quote illustrates the order in which parents thought skills should be developed:

> To cooperate with other people, you need not only respectful behavior but also self-knowledge. When you have self-knowledge, you can learn to speak up for yourself and to set boundaries. All these skills are necessary for establishing successful interactions with other people. (Interview 13)

4.1.3 Self-knowledge skills. Half of the parents (16) emphasized the need for adolescents to *know who they are* and *what they are good at and not good at*. According to parents, *accepting yourself as you are, self-confidence* and *creating a realistic self-image* precede developing *realistic goal setting* and *understanding the consequences of behavior*. *Setting realistic goals* and *understanding the consequences of behavior*, in particular, were associated with future work prospects. Parents also linked the skills relating to self-knowledge with the development of more general personal qualities, as the following quote demonstrates:

> It is essential for me that my children know what they want and who they are. . . .. . We try to raise all four of our children as individual persons. They are all unique people in their own way, with different talents [. . .]. I just want them to discover what they like to do and what talents they have. (Interview 3)

4.1.4 Self-reliance skills. A majority of parents (22) believed that adolescents need self-reliance skills in order to develop independence. According to them, self-reliance comprises skills such as *speaking up for yourself, setting boundaries, sticking to your opinion* and *self-control*. Most of these parents (19) linked these skills to *resisting peer pressure* and *resolving conflicts* in interactions with peers and adults. However, the following quote shows how a parent couple related their perception of certain skills – in this case, *speaking up for yourself* and *respectful behavior* – to justify the disrespectful behavior of their child toward a teacher:

> One day, she [daughter] called me from school and said: if you don't come here right now, I will to start throwing tables through the classroom. [. . .] The teacher did not show respect by neglecting her

> request [not using an aerosol in the classroom because of her allergies]. I thought: she [daughter] is correct. Teachers need to respect students too. That is what I mean by mutual respect. (Interview 15)

4.2 Beliefs regarding the responsibilities and roles of parents and schools concerning SEL

All the parents (32) in our study perceived teaching social-emotional skills during adolescence as primarily their task and responsibility. This perception was grounded in their belief that *parents know best what skills their children need*. However, almost all parents (28) viewed a supplemental role for schools, particularly in teaching *cooperation skills* that are difficult to teach at home, i.e. *getting along with people from different backgrounds*. Teaching skills related to acquiring internships and work were also explicitly labeled the responsibility of schools. A few parents (3) suggested their children might feel more comfortable discussing skills related to specific subjects, such as substance use or intimate relationships, with peers and teachers. Despite their awareness of adolescents' needs, some parents (5) felt embarrassed to discuss such issues with their children, as the following quote indicates:

> I cannot talk about this [intimate relationship] with her. [. . .] We do not talk about this in our culture before you are married [. . .] As they would bully her because she has never had this [intimate relationship] [. . .] if it makes her feel uncomfortable, I would allow her to talk to the teacher [. . .]. (Interview 32)

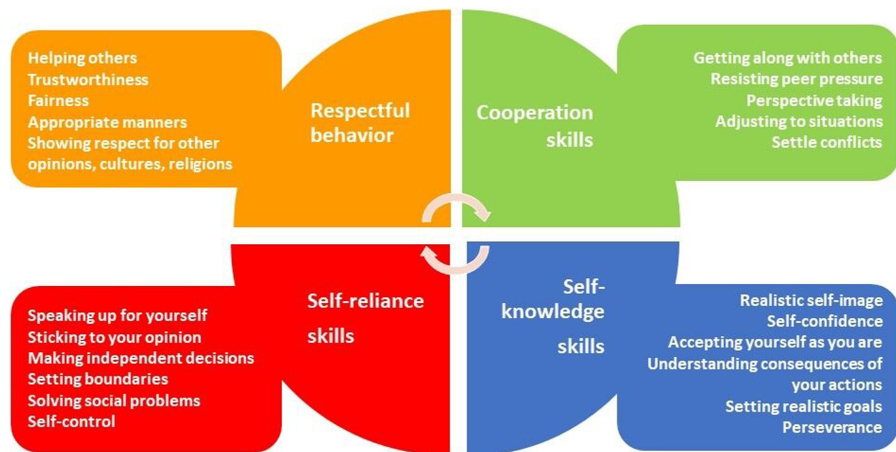
A majority of the parents (22) wanted schools to inform them about SEL at school. They emphasized the absolute necessity of aligning the social-emotional skills taught at school to those learned at home to prevent their children from *getting confused about the proper skills*. Some of them even suggested that parents, teachers and students should learn social-emotional skills together. Parents wanted to collaborate with schools on SEL. One of them said:

> During adolescence, your children need to become more independent. [. . .]Therefore, schools must pay attention to and develop partnerships with parents. [. . .] Maybe this sounds peculiar, but, you know, what I mean is that we have to collaborate. (Interview 11)

Figure 1 represents a conceptual model of the four interrelated social-emotional skills constructs parents perceived as crucial for adolescents to learn; as far as we know, this is one of the first models reflecting parents' perceptions of these skills.

4.3 Parenting practices relating to enhancing social-emotional skills

Some parents (8) considered providing a safe and caring environment at home conditional for enhancing social-emotional skills during adolescence. Except from one, parents also emphasized that they tried to teach skills that enhanced adolescents' independence by using several practices. *Talking* about the social-emotional skills they considered most appropriate in situations was the practice parents (30) preferred and tried to use. In addition, most parents (24) tried to *monitor* their children's whereabouts – which had become more difficult as adolescents spend more time outside the family. Based on this monitoring, parents attempted to *coach* their children by *giving advice* (15)*, explaining a situation* (16) and *referring to their responsibilities* (5). Besides this, a few parents (3) used everyday situations and television programs to discuss (in)appropriate skills. A few parents (4) also purposely tried to be role models regarding social-emotional skills. Overall, they were satisfied with the practices they used. However, some parents (10) also struggled with balancing between *interfering or not interfering in their children's problems*. They indicated that they lacked the support they had had from other parents when their children were still in primary education. Despite the general agreement in parents' perspectives on SEL, we also identified differences.



Source(s): Author's own creation/work

Figure 1.
Conceptual model of four complementary adolescent social-emotional constructs, as perceived by parents by parents, and the skills associated with these constructs

4.4 Differences in parents' perspectives on SEL

Parental beliefs, values and goals concerning child development seemed to differ between high- (7) vs low-educated (25) parents and/or migrant (15) vs Dutch (17) parents. Their interpretations of social-emotional skills and the practices they preferred to teach these skills express these differences. However, the sample sizes were small Therefore, the findings related to parental backgrounds should be interpreted with prudence. All highly educated parents (7) associated *respectful behavior* with *being open-minded towards people from different backgrounds*. These parents preferred to *discuss* the most appropriate skills in a particular context. Lower-educated parents (18) mainly associated respectful behavior with appropriate manners; they *talked* to adolescents by instructing them on the skills they wanted them to master. A few Dutch parents (2) perceived respectful behavior to be mutual. They expected such behavior of their children in response to respectful behavior from others. Most migrant parents (10) expected unconditional respectful behavior from their children. Some of them related these expectations to their experience of raising children in a context that *always blames people of color for causing problems*. A few low-educated migrant parents (4), believing schools were primarily responsible for academic learning, regarded teaching social-emotional skills as their domain in which *schools should not interfere*. Although these parents questioned the role of schools in teaching skills, they demanded to be informed about the disrespectful behavior of their children at school. One of them said:

> You know, I am not sure what school can do to teach these skills to students. I expect the school to inform me about my daughter's problems at school. That is what school can do. [. . .]. (Interview 9)

Parents also varied in their expectations regarding adolescents' self-reliance skills. The migrant parents (15) believed that adolescents should *manage their problems with others by themselves*. According to lower-educated Dutch parents (12), adolescents need room for *exploring the skills that feel comfortable for them*. A few of these parents (4) tried to start a conversation when they noticed *something was bothering* their child. Others purposely tried not to intervene in skills learning, believing adolescents needed *room for experimentation*. Highly educated Dutch parents expected their children to *talk about their feelings and problems and not keep up appearances*.

5. Discussion

Worldwide, schools implement SEL programs designed to enhance social-emotional skills, aiming to improve adolescents' life and health prospects [2]. However, knowledge about parents' perspectives on SEL is limited. To provide insight into parents' perspectives on adolescent SEL, we conducted an exploratory qualitative study.

5.1 Conceptual model of four social-emotional skills constructs

The first significant proceed of our study is the conceptual model of four complementary skills constructs that emerged from our analyses of the interviews with parents, i.e. *respectful behavior, cooperation skills, self-knowledge skills* and *self-reliance skills* (see Figure 1). The parents were believed that mastering social-emotional skills was essential for adolescents' future work prospects. This finding is consistent with the conviction of parents in studies that did not report on their socio-cultural background (Kolb and Hanley-Maxwell, 2003; Mynttinen *et al.*, 2020).

At first sight, the skills in the conceptual model seem to coincide with the competence domains described in the CASEL framework, i.e. self-awareness, social awareness, self-management, relationship skills and responsible decision-making. However, the parents language, their interpretations of and interrelations articulated between skills, and views on the order in which adolescents develop these skills reflect differences between their skills perceptions and professional skills descriptions embedded in the CASEL framework. According to Jukes *et al.* (2021), such potential subtle differences between skills taught at home and school indicate that awareness is necessary for communication with parents on social-emotional skills.

5.2 Parental perceptions of social-emotional skills vs CASEL's skills

The parents in our study considered respectful behavior a self-contained construct of social-emotional skills. In contrast, respect for others' feelings and thoughts is a component skill of CASEL's social awareness competence domain. They associated respectful behavior with values or qualities they desired for their children (e.g. helping others, trustworthiness, fairness and appropriate manners). Such qualities are not directly visible in the skills descriptions used in the CASEL competence domains.

The parental construct of cooperation skills corresponds to skills in the CASEL domains of relationship skills (i.e. getting along with others, resisting peer pressure and conflict resolution) and social awareness (i.e. perspective-taking). The self-knowledge skills that parents perceived as crucial for adolescents to master reflect CASEL's domains of self-awareness (e.g. self-confidence, realistic self-image and accepting yourself as you are) and self-management (i.e. realistic goal-setting and perseverance). The parental construct of self-reliance skills overlaps with CASEL's domains of relationship skills (i.e. social problem solving), self-management (i.e. self-control) and responsible decision-making (i.e. sticking to your opinion and making independent decisions). Finally, the parents in our study emphasized that adolescents need to learn to speak up for themselves and set boundaries. These skills might reflect skills in CASEL's competence domains of self-awareness, self-management and relationship skills. Parents associated self-related skills with adolescent development, reflecting their perceived order in social-emotional skills development.

Notably, unlike the CASEL framework, parents did not mention self-regulation or empathy as skills they deemed crucial for adolescents to master. Possibly, parents believed that adolescents should already have acquired self-regulation, as is demonstrated in other research (Klimes-Dougan *et al.*, 2007). In addition, they might have associated empathy with helping others and perspective-taking and may have, therefore, perceived empathy as being included in respectful behavior and cooperation skills (Carlo *et al.*, 2003).

The finding that parents' language and interpretations concerning social-emotional skills vary from those used in the CASEL framework accords with other studies on parents and SEL (Miller *et al.*, 2018; Tyner, 2021). Hubbard (2019) determined in their study that parents considered skills to be interrelated. However, they did not provide insight into these interrelations nor into parents' views of the ordering of the development of skills like we did in our study. Considering parental language and interpretation of social-emotional skills, contextualizing SEL program implementation seems indicated to allow adolescents to acquire the social-emotional skills they need across contexts.

5.3 Parental role perceptions and practices on SEL

A second notable finding of our study is the role parents claimed for themselves in SEL, both at home and at school. Although perceiving themselves as experts and primarily responsible for SEL, parents acknowledged that schools have a role too. They considered schools to have a role in teaching skills that are difficult to learn at home, e.g. cooperation skills, and managing temptations such as intimate relationships. Additionally, parents expressed their motivation to collaborate with schools on aligning the skills taught at home and at school. The findings that parents in our study were of the opinion that both parents and schools have a part to play in SEL. Their wish to be informed about SEL at school is consistent with findings in other studies on SEL programs (Haymovitz *et al.*, 2018; Hill *et al.*, 2018). Similar to our study, Hubbard (2019) found that parents believed that skills taught at school should match up with the skills taught at home, but not that parents had doubts about teachers' expertise in SEL. Both the leading role parents claimed for themselves in teaching social-emotional skills and their wish to collaborate with schools on aligning the skills taught at home and school provide opportunities for fruitful parent-school collaboration on SEL. Insight into these parental perceptions is helpful when negotiating and deciding with them on the skills that adolescents need to master. Knowledge of the parenting practices relating to SEL can help to support parents in enhancing social-emotional skills at home.

The parents in our study mentioned several practices they liked to use in teaching social-emotional skills at home. The practice of communication – which comprised instruction, advising, explaining and coaching – was the practice preferred by most parents. According to Roy and Giraldo-Garcia (2018), parent-adolescent communication on SE skills is central to enhancing these skills. Comparable to findings in other studies (Kolb and Hanley-Maxwell, 2003; Mynttinen *et al.*, 2020), parents in our study attempted to provide a safe home context, monitor adolescent behavior and be role models for appropriate social-emotional skills.

Although parents in our study perceived self-efficacy on skills teaching, they also felt challenged on SEL during adolescence. In particular, they missed the support from other parents when their children were still in primary education. This lack of support is presumably due to the decline in parent involvement in secondary education (Hill *et al.*, 2018; Roy and Giraldo-Garcia, 2018). According to parents, schools are trustworthy sources for supporting them on the SEL of their children (Hubbard 2019).

5.4 Differences and similarities in parents' perspectives on SEL

Parents in our study largely agreed on the social-emotional skills they considered crucial for adolescents to master and the parenting practices appropriate for helping their children acquire these skills. They perceived themselves as having expertise and claimed a leading role in adolescent SEL. However, consistent with other research, their perceptions of skills and parenting practices also varied depending on their background characteristics (Grusec, 2011; Kagitcibasi, 2012).

As our study shows, parents also have their own ideas about which social-emotional skills are crucial for adolescents to master. These ideas varied related to their education level and

socio-culturally rooted beliefs, values and goals regarding child development and differed from the descriptions of skills embedded in CASEL.

Parental skills perceptions are expressed in their language, understanding of skills, their views on the interrelations between skills, and the order in which they believe skills develop. In their perception, migrant parents reflected a more other-centered approach to social-emotional skills considered critical to learning; Dutch parents found it important to acquire more self-oriented skills (Hoffman, 2009; Kagitcibasi, 2012). Besides, parents are motivated to work with schools on aligning the skills taught at school and home to improve adolescents' prospects in life, education and work. Working with parents and their children requires awareness of differences and similarities regarding SEL amongst them.

5.5 Strengths and limitations

Our study contributes to the literature on SEL by presenting a parental model of social-emotional skills. Particularly, the language parents use, their interpretation of social-emotional skills, and the order in which they believe these skills develop cause them to prioritize and relate skills in ways that differ from the skills embedded in professional SEL frameworks (Jones *et al.*, 2019; Kane, 2012). Parents' perceptions of skills have recently become a research focus. However, the model presented in this study is one of the first to provide comprehensive insight into how parents order and interrelate adolescent social-emotional skills.

In addition, including low-educated parents from various socio-cultural backgrounds is a strength of our study, as typical research procedures are insufficient for engaging these parents (Bonevski *et al.*, 2014). However, the selective group of parents included in our study limits the generalizability of our findings (Ayres *et al.*, 2003).

Our list of eight operationalized skills derived from the CASEL framework is both a strength and a limitation of our study (Durlak *et al.*, 2015). The list enabled us to openly discuss and explore the social-emotional skills parents desired their children to master, their interpretations of these skills, and the order in which they perceive these skills ideally develop. However, the operationalizations might also have narrowed parents' perceptions of skills and prevented them from elaborating on a broad range of skills beyond those operationalized. By using open-ended questions and inductive coding, we tried to prevent this as much as possible (Thomas, 2006).

The small and specific sample of parents of low-achieving students in PrE should also be considered a limitation. As all parents participated in our study voluntarily, they might not be representative of those who declined to participate and those not reached with the invitation strategies used (Kvale and Brinkmann, 2009). Although we managed to include parents varying in their sociocultural background, family composition, and, to a lesser extent, education level and gender, the conceptual model of social-emotional skills constructs that emerged from our study cannot be generalized to other parents (Patton, 2002).

Another limitation is that parents possibly responded in a socially desirable way in the interviews and might have presented an idealized picture of their parenting practices, while underreporting undesirable practices to put themselves in a good light. Such desirable answering might have compromised the validity of our findings (Hewitt, 2007). However, we tried to prevent this problem by creating an open and informal atmosphere in the interviews. We believe both parents' engagement and openness in sharing their thoughts, reasoning, doubts and uncertainties, and the differences we identified between the parental model and the CASEL framework demonstrated that we managed to limit social desirability bias.

5.6 Implications for practice and research

Parents' perceptions of the social-emotional skills that adolescents should master differ from the professional perceptions embedded in SEL programs. Being aware of these differences is

crucial for implementing SEL programs that will benefit all adolescents, including those in marginalized situations (Garbacz *et al.*, 2015; Jagers *et al.*, 2019). Therefore, we recommend a four-step approach to parent-school collaboration on SEL. These steps are as follows: (1) Acknowledge parents as active agents with expertise on SEL and involve them as partners in SEL at school; (2) Collaboratively explore which social-emotional skills parents and schools perceive as crucial for students to master, paying attention to both parties' beliefs, values and goals regarding child development, language, and interpretations of skills; (3) Align the skills taught at home and school based on joint negotiations and decisions on the skills adolescents need to master; (4) Discuss opportunities for parents and teachers to employ complementary practices to improve these skills.

We recommend that diverse and inclusive schools implementing SEL programs use a systemic approach involving teachers, students and parents in a team setting to explore, negotiate and align the differences in interpretations of and language used on skills taught at home and school. Such a systemic approach is required for implementing an SEL program schoolwide and at the classroom level to adapt to the skills students from diverse backgrounds bring to school (e.g. Jagers *et al.*, 2019; McCallops *et al.*, 2019). Collaboration with parents on SEL may be achieved in several ways. For instance, parent-teacher conferences and school websites seem to be straightforward resources for informing parents about SEL programs; however, engaging and supporting parents does require personal communication, which a school website does not offer. Awareness of potential barriers to collaboration, such as differences in skills perceptions, parents' socio-cultural background, language and unfamiliarity with school participation, is crucial (Hornby and Blackwell, 2018). Therefore, we recommend additional teacher training and support on engaging and collaborating with parents from various backgrounds.

Further research is required to refine, validate and extend the conceptual model of the four social-emotional skills constructs that emerged from our study, either using our operationalizations of the CASEL skills or conducting more open-ended interviews and grounded theory methods to gain in-depth insights into parents' skills perceptions (Kane, 2012; McKenna and Millen, 2013).

Since our study included mainly lower-educated mothers of low-achieving adolescent students, future research should aim to provide insight into the perspectives on SEL of, e.g. fathers and parents from other backgrounds and with children in different educational tracks, to inform the implementation and tailoring of SEL programs to students' needs. Such knowledge is also necessary to indicate if and which of our findings are generalizable to other parents. Besides this, the four-step approach we presented for collaboration with parents on implementing SEL programs needs to be evaluated in future research.

6. Conclusion

Both parents and schools have a part to play in adolescent SEL, and both have expertise in this topic. The conceptual model of four interrelated adolescent social-emotional skills constructs, presented in our study, indicates that parents' perceptions of these skills might differ from the professional skills embedded in SEL programs and frameworks. Therefore, we argue that aligning the skills young people are expected to master for their success in life, education, and work should be an integral part of the parent-school collaboration on SEL program implementation in diverse and inclusive schools. To accomplish such alignment, we advise schools to explore parents' willingness to collaborate on SEL and to come to agreements with them about the skills taught at school. For informing parents, the need for (cultural) adaptations of SEL material should be examined. Furthermore, teacher training is necessary to facilitate communication and collaboration on SEL with parents from various

socio-cultural backgrounds. Finally, further research is required on the skills perceptions and constructs beyond those of parents of low-achieving students in prevocational education.

The study was approved by the Dutch Central Committee on Research Involving Human Subjects (CCMO). Parents received written information from the teacher or were orally informed about the purpose of the study by the researchers. Parents included in the study agreed to participate.

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Appendix

Topics	Subtopics
1. Interview context	- Home - School/parent-teacher conference - Telephone
2. Background characteristics	- Gender - Family composition - Country of birth - Educational level
3. Familiarity with SEL at school	- Knowledge of SEL at school - Attitude towards SEL at school
4. Social-emotional skills crucial learning (CASEL framework)	- (Most) crucial skills for adolescents - Need for learning these skills - How do adolescents acquire these skills?
4. Responsible for teaching skills	- Parents - School - Others
5. Parenting practices related to learning skills	- Skills parents teach themselves - How parents teach skills - Development of skills
6. Parent support on SEL	- Perceived efficacy of parents in teaching skills - Need for support in teaching SEL

Source(s): Author's own creation/work

Table A1. Topic list for the interviews on parents' perspectives on SEL

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Co-creation solutions and the three Co's framework for applying Co-creation

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Abstract

Purpose – A sense of collective free-thinking with tangible goals makes co-creation an enlightening experience. Yet despite the freedom and organic flow of the methodology, there remain barriers to deploying co-creation in the real-world context. The aim was to understand the barriers and solutions to co-creation, reflect on applying co-creation in practice and co-create an applicable framework for co-creation.

Design/methodology/approach – These reflections and conceptual developments were completed using a Participatory Action Research Approach through the co-creation of the Erasmus+ funded Co-creating Welfare course.

Findings – Results presented are centric to the experiences in the United Kingdom but led to application at an international level. Problem formulation led to solutions devised about who should co-create, what co-creation aims to achieve, how to receive management buy-in, co-creating beyond the local face to face context and evaluation.

Originality/value – The Three Co's Framework is proposed using the outline of: Co-Define, Co-Design and Co-Refine. Those who take part in co-creation processes are recommended to be called co-creators, with less focus on "empowerment" and more about facilitating people to harness the power they already have. Utilising online and hybrid delivery methods can be more inclusive, especially in response to the COVID-19 pandemic. The use of co-creation needs to be evaluated more moving forwards, as well as the output co-created.

Keywords Cocreation, Coproduction, Codesign, Action research, Patient and public involvement, Framework

Paper type Original article

Introduction

The concept of stakeholder participation originated in the business management field referring to the process where customers, brands and business actively engage together interactively to create products that meet demand (Prahalad and Ramaswamy, 2000, 2004). This has since been applied to a range of contexts including education (e.g. Pinar *et al.*, 2011; Ribes-Giner *et al.*, 2016; Whitehead *et al.*, 2003; Carvalho *et al.*, 2021) and health (e.g. World Health Organization, 2013; Dean *et al.*, 2016) with the EU commission embracing the need for participatory approaches as a more sustainable model because current societal demands are too complex to be met by the public sector alone [1] (Torfing *et al.*, 2019). However, this has been used inconsistently across and within countries with a variety of terminology, such as co-design, co-production and co-creation, with a range of delivery from tokenistic consultation to partnership and collaboration (Darlington *et al.*, 2022; Martin, 2010).

For clarity and consistency, the term co-creation was employed for this work based on the definition that it is a "collective creativity, i.e. creativity that is shared by two or more people" with co-production and co-design as specific instances or components of co-creation (Sanders and Stappers, 2008, p. 6). Co-creation as an approach begins early in the process from the initiation and co-design of service development, with co-production considered to relate to the

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implementation phase of public services (Voorberg *et al.*, 2015). Our definition was also based on the six principles for co-creation whereby (1) co-creation is innovative aiming to create new prosperity within the context; (2) creates new qualities through combinations of different resources and skills; (3) is a dialogue-based process, where the people involved in the co-creation define the challenge and solution together; (4) propagates initiative and the rights for all to participate; (5) creates an understanding of interdependence and (6) requires openness and willingness to take risks (The Voluntary Council, 2016). The creative aspect includes divergent and convergent thinking, that embraces the multiplicity of lived experience sometimes beyond the boundaries of a given subject and acting together as a self-organising collective. Our expression of divergence begins with expanding the number of ideas (Interaction Design Foundation, 2016), with fewer limits and de-focussed thinking (Goldschmidt, 2016) letting the imagination run free. This thinking then shifts into convergence to synthesise a solution by applying experience highlights (Callari *et al.*, 2019) as constraints. The effect is to go from the purely conceptual, and funnel down to the feasible. However, this process remains able to repeatedly diverge and converge until a solution might be validated.

The co-creative process is just as important as the output using accessible methods of exploring, reflecting, communicating and documenting (Langley *et al.*, 2022). Co-creation should embrace an adaptive "complex system" model of change and interrelationships involved, be creative with human experience at the core and facilitate the development of quality relationships that utilise conflict and power positively (Greenhalgh *et al.*, 2016). It should be emphasised that Co-creation, whilst organic, liberating and satisfying to partake (den Boer *et al.*, 2017), does remain a process – albeit a cyclical, non-linear one. External viewpoints can perceive the process as a quick, snapshot method that only observes a very narrow field of view. This may be partly attributable to the short timescale required to be involved in any one stage. However, once experienced in a real world setting rather than merely observed, co-creation methods and philosophy are cumulative, helping to democratise knowledge (Ramírez and García-Peñalvo, 2018) from shared insight that results in an environment where we connect, empathise and engage.

It has been identified that even with these definitions and understanding, there remain barriers to using co-creation as people feel they need the competences, training and tools to apply co-creation processes in practice (Darlington *et al.*, 2022). Co-creation is a complex process and when key principles are not fully adhered to, this risks it being tokenistic or a failure (Greenhalgh *et al.*, 2016). Therefore, the aim of this research was to understand the barriers and potential solutions to co-creation and develop an applicable framework alongside reflections of how to apply co-creation processes in practice. This conceptual development is focused on the United Kingdom experience, but this fed into a European level project where competencies that people need to co-create were examined (Darlington *et al.*, 2022). An educational course using co-creative tools was then designed and tested to teach people how to facilitate and apply co-creation in their own contexts (the full contents are freely available to access at Anastácio *et al.* (2019), Co-Creating Welfare (2019) and https://ccw.southdenmark.eu/). This consequently has not been presented as a traditional article, but instead crafted as a piece of reflective learning with outputs of future recommendations and a framework for applying co-creation.

Context – participation in action

The co-creation process was underpinned by a Participatory Action Research (PAR) approach (Baum *et al.*, 2006). Despite mid-century origins (Lewin, 1946), PAR is fundamental to a contemporary notion of establishing wide collaboration with multiple overlapping perspectives; hence our understanding of PAR was applied within the context of developing an educational course. This embodied multiple layers of the co-creation of a course using

co-creation tools to enable people who wanted to apply the methods in their own welfare contexts. Those acting as teachers and facilitators of this process (the authors) were academic professionals in the United Kingdom (UK), which then fed into a European level project developing this conceptual work with partners in France, Portugal and Denmark. People taking part in the co-creation of the course and attending its pilot delivery were professionals from a variety of welfare settings, such as health and education, and from a range of organisational contexts including local, regional and national coverage within the UK (see acknowledgements). Those involved were recruited through already established networks, snowball sampling and advertisement over social media with ethical approvals appropriate to each country's regulations. University board ethics approval was received in the UK.

The first step of co-creation was working with those involved to define and understand the needs of a co-creation course together as documented in Darlington *et al.* (2022). The findings from this identified key needs around promoting equal voice, shared understanding, problem solving, process management, mediation, dissemination and evaluation. These training needs were embedded within a training course outline of four parts: creating a common understanding of co-creation; initiating the co-creation process through collaborative problem formulation; managing the co-creation process and dissemination and communication of the co-creation process and its results (Anastácio *et al.*, 2019). Co-creation tools were participatory activities used and developed by the professional facilitators of the course specifically aimed to address these co-created needs.

The pilot of this course was delivered one day per month over four months to provide time in between training for those taking part to embed their co-creation learning. Attendees were encouraged to try using the co-creation activities they had experienced after each course day in their applied practice contexts and feedback their barriers and successes to the next course day a month later. This enabled the course to iteratively develop to suit the attendees needs as they arose, which led to the identification of key barriers faced. Following this problem formulation, solution formulation activities and aspects of training were iteratively developed to address these barriers during the course delivery. The identified problems to facilitating co-creation in practice alongside the solutions formulated during the course with the attendee co-creators are the first results presented.

The key reason for people being involved in the course development or delivery was because they wanted to know how to actually achieve co-creation in practice. This led to the development of the three Co's framework as a means for the facilitators to teach the "how" of applying co-creation, which forms the second part of the results presented. The results presented focus on knowledge mobilisation (Ward, 2017) occurring throughout the co-creative processes and as outcomes of activities within the course. The course provided the basis for skills building, developing individual confidence to move towards collective making as a group (Langley *et al.*, 2018). The process was underpinned by Design Thinking and creative hermeneutics where the experience of making together led to collaborative thinking that goes beyond the individual's potential solution (Cross, 2011). Thus, reporting focuses on aspects considered key to co-creation processes: decision making, critical reflection and consideration of meaningful implementation of these decisions into practice (Gillard *et al.*, 2012). The training course materials were refined together as a result and are freely available online (Anastácio *et al.*, 2019). The learning from the iterative problem and solution formulation, the co-created framework and facilitator reflections for carrying out co-creation in practice are the novel aspects provided in this article (see summary in Table 1).

Problem formulation

Five key barriers to co-creation arose through problem-formulation activities: (1) who to involve and what to call those involved in the co-creation; (2) what is the aim of co-creation; (3)

Section of article	Problem	Solution
"Problem formulation" and "Solution Formulation to Arising Barriers of Co-creation in Practice"	Who to involve and what to call those involved in the co-creation?	Co-creators – people who could facilitate the success or provide a barrier to the output happening or working and could therefore be those crucial to it being rolled out in practice successfully
	What is the aim of co-creation?	Not to empower *per se* because people already have their power, instead it is about facilitating the space and support to harness that power
	How to negotiate the rationale for co-creation compared to traditional methods with management	Understand priorities and terminology of management, involve management in the co-creation and discuss how co-creation can be more efficient in the long term to align with management and financial goals
	How to co-create beyond a local face-to-face context?	'Pass-the-parcel' method as well as using online and hybrid methods using multiple medias and snowballing techniques to reach a range of community groups
	How to evaluate co-creation processes?	Formative and summative co-evaluation Consider what is being evaluated, i.e., the end product and/or the quality of the co-creative processes
"Developing a Co-creative Framework – The Three Co's"	A need to outline how the co-creation collaboration process can be carried out in practice	The three Co's Framework 1) Co-Define 2) Co-Design 3) Co-Refine
"Co-creation Facilitator Reflections"	The role of the facilitator	Facilitators of co-creation are not there as the 'experts' because everyone involved brings expertise. Consider together whether the facilitators are co-creators too or not
	Co-creation setting	Neutral space where possible
	Managing group dynamics	Co-create rules of engagement at the beginning and continue to assess this together if people join or leave the co-creation team
	Sharing responsibility for sustainability	Facilitators should not automatically be assumed as the people who will create the output or implement it. It should be discussed as part of the co-creation who will be responsible for making different aspects of the agreed solutions happen to ensure they are feasible and sustainable

Source(s): Author's own creation

Table 1. Summary of the findings from the problem formulation, solution formulation, developing a co-creative framework and co-creation facilitator reflections

how to negotiate the rationale for co-creation compared to traditional methods with management; (4) how to co-create beyond a local face-to-face context and (5) how to evaluate co-creation processes? These arose directly from the co-creation methods used within the teaching of the UK-adapted version of the course (Co-Creating Welfare, 2019). In particular, they arose (1) as outcomes from the ice breaker (i.e. word cloud, cue cards, co-creation ladder) and problem formulation activities (i.e. CUbe, photograph, walk and talk) on day 1 of the course to establish what co-creation was and the barriers to co-creation and (2) from the month between each of the course delivery days where the attendees had homework to try and embed what they had learnt into their practice contexts. This enabled time for the attendees to feed back the barriers they faced during the training sessions so that the course could be iteratively developed within that same course and teaching could be tailored to specific needs. The use of reflection during and after action (Schön, 1991) alongside the use of creative methods allowed for deeper learning (Meltzer, 2020).

Solution formulation to arising barriers of Co-creation in practice

Solution formation activities were carried out across days 2 and 3 of the course (Co-Creating Welfare, 2019). Day 2 allowed participants to choose from the barriers to co-creation they had identified on day 1 and look to find solutions to ones that they prioritised (i.e. using post-it notes on flip charts, fishbowl, simulation game, poster activities). Day 3 focused on barriers to co-creation that they had identified in their own practice of applying co-creation in their local contexts (i.e. using Q-sort, project management case study, flip charts and Lego activities).

(1) *Who to involve and what to call those involved in the co-creation*?

Through the post-it notes on flip chart activity on day 2 (Co-Creating Welfare, 2019), it was defined that the people who should be involved in co-creation processes are not only those involved in developing the output being co-created (such as a design, practice-based or research team) or those receiving it (as an end-user). They are also importantly people who could facilitate the success or provide a barrier to the output happening or working, and could therefore be those crucial to it being rolled out in practice successfully. An example of this could be the inclusion of a service deliverer, financial commissioner, management and/or policy maker. It was discussed that a preferred term for those involved in the co-creation was not stakeholders, citizens or people as these can be too generic. It was also preferred not to distinguish professionals and end-users as terms because this creates an “us versus them” environment devaluing the idea that everyone involved are experts in their own experience with an equal voice. Upon reflection, a consensus was reached that the preferred term was “co-creators”.

(2) What is the aim of co-creation?

The aim of co-creation was initially discussed on day 1 of the course by co-creators as “empowerment”. However, this fuelled a deeper discussion across the remaining 4 course days as attendees began to reflect upon and understand their meaning of co-creation and what creates quality co-creation. The attendees agreed that although they had seen co-design and co-production as often interchangeable words with co-creation in the past, following this course they felt that co-creation was at a fuller higher level of quality with a deeper level of partnership and a wider range of people who should be considered co-creators. Co-creation was therefore considered to be an approach that should be embedded in the way that we always work with people rather than a one-off method. For example, applying co-creative process and activities in everyday meetings and the staff coffee area, as well as in specific projects. It was agreed that “empowerment” was not a useful term to use in this context because this implies that power is being given to those involved. Instead, it was agreed that

people already have this power and co-creation is about facilitating co-creators to have the space and support to harness that power.

(3) How to negotiate the rationale for co-creation compared to traditional methods with management?

Additional emphasis was placed on the management of the co-creation process, specifically focusing on gaining management "buy-in". This was identified as a barrier in between course days by the attendees when trying to apply co-creation in their own real contexts. We therefore dedicated case study time on day 3 of the course to examine solutions to this aspect. A key solution included understanding the priorities and terminology of management or those that you are looking to be involved or support the process. An aspect the attendees found useful was the understanding that traditional methods can be quicker to begin with but can often lead to the development of an output that can have low uptake, attendance or success rates. It can therefore be less time efficient and cost effective in the long term. A co-created output should have key relevant voices included from the beginning meaning that the implementation of that output in practice is more likely to be successful for those receiving and delivering it, therefore more amenable to management and financial goals.

(4) How to co-create beyond a local face-to-face context?

Co-creation has more traditionally been completed in local face-to-face contexts where everyone can be joined together in one room at the same time. Barriers to quality co-creation can occur when harder-to-reach groups (including both end-users and professionals) cannot all meet at the same time, or the co-creation requires people nationally or internationally to work on a project together. Finding a solution was identified by course attendees as a priority to examine on day 2 and chosen to be addressed during the poster activity (Co-Creating Welfare, 2019). Solutions included phases of co-creation where discussions are started as a group of co-creators and shared with another group, who develops ideas further and then passes it on to another group. The co-creators from the course called this the "pass-the-parcel" method of co-creation. Translating and using co-creative tools to online and hybrid methods was also discussed, with the use of multiple medias used and snowballing techniques to reach a range of community groups.

(5) How to evaluate co-creation processes?

The methods for evaluation, both formative throughout the co-creation process to allow for iterative development, and summative at the end of the course were demonstrated and provided in the training e-book (Anastácio *et al.*, 2019). Through a formative reflection activity, it arose that they wanted to focus on evaluation more during the course, so this was embedded on day 3 as a flip chart activity (Co-Creating Welfare, 2019). Through this activity, they highlighted that it is important to consider whether the aim is to evaluate the product created and/or the quality of the co-creative processes, because these should be considered as two separate aspects of the evaluative options. Additionally, evaluation of the use of tools for creative engagement is useful (Galabo and Cruickshank, 2021).

Developing a Co-creative framework–the three Co's

The three Co's framework was developed in response for a need to outline how the co-creation collaboration process can be carried out in practice. The three Co's developed and proposed for this framework are (1) Co-Define, (2) Co-Design and (3) Co-Refine (see Figure 1 [2]). Each stage is explained alongside learning and reflection iteratively developed from co-creating the course. We also include examples of co-creation tools from the course (Anastácio *et al.*, 2019; Co-Creating Welfare, 2019) that can be used to carry out the framework stages in practice.

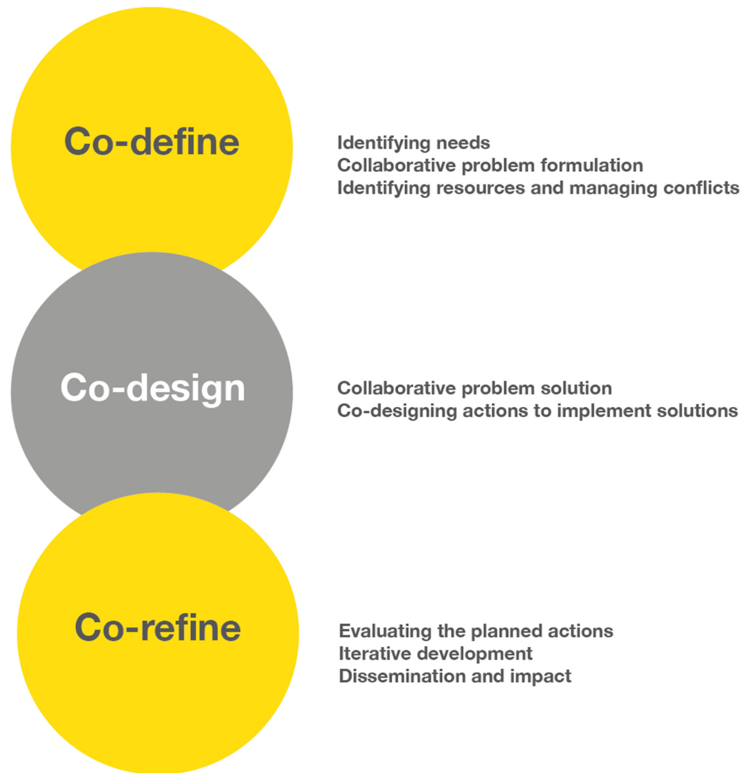


Figure 1. The three Co's framework: Co-define, Co-design, Co-refine

Note(s): This provides a framework on how the co-creation process can be carried out, while acknowledging that this process will not necessarily be linear
Source(s): Author's own creation

However, these are not aimed to be prescriptive, and the framework remains open to be used with any relevant participatory approach or method. Although the framework phases mainly happen in order, it is important that co-creation remains flexible and iterative, and so the linearity presented is a general guidance rather than a strict order of process. The three Co's framework arose as a formalisation of co-creation concepts distilled from the design and business model of "fail fast" (Forbes, 2019; Goldberg and Ruehlin, 2019) and "fail often, learn fast" (Langley *et al.*, 2022). This uses the minimum viable product (MVP) approach to encourage ideas to be shared, their creators not to be precious and the result to be better informed as a result of mistakes.

Co-define

The first stage, co-define, includes bringing the co-creators together for the first time with "ice-breaking" activities and understanding the individual reasons that each person has become a co-creator, as well as the shared goal that everyone is working towards together. The aim is to identify the key needs of the group and consider the strengths and resources that each person brings. This can also ensure that potential conflicts are identified and addressed (Basadur *et al.*, 2000) as early as possible. Recommended activities from the CCW

course for this ice-breaker stage include word clouds, the photo challenge, walk and talks, cue cards, post-its and flip charts (Anastácio *et al.*, 2019).

An important aspect that arose during this development process was that co-creating the rules of engagement with each other is key to reduce the number of potential misunderstandings and conflicts that arise during the co-creation, whilst also building rapport as a team. The rule setting stage is vital reference since it can be used to ensure that the collective operates in the way they initially agreed and to provide interaction guidelines to any latecomers in the process. This not only includes aspects of respect, openness and equal voice, but also includes aspects such as confidentiality, acknowledgement and intellectual property (Hoddinott *et al.*, 2018).

It is also important to explicitly discuss terminology being used and understand how different people can have different meanings for the same word. An example of this was found to be different understanding of the word "co-creation". Some course attendees were worried about their ability to actively do co-creation because they did not consider themselves to be creative people. It is useful in these initial stages to clarify that it does not mean creativity in the sense of being an artist, but instead is about the ability for everyone to come together to develop and realise ideas together. The Q-sort activity from the CCW course (Anastácio *et al.*, 2019), based on constructionist multiple-participant design Q-methodology (McKeown and Thomas, 2013), provides a useful method to examine different linguistic understanding, encouraging the co-creators to initiate collaboration, negotiation and collective problem-solving.

Previously it has been considered that co-creation starts with the fuzzy front end of pre-design, examining what needs improving or what the next thing should be (Sanders and Stappers, 2008). However, this co-define stage positions co-creation starting even earlier than this by examining the problems first and creating the co-creation team. In the co-defining phase, the more variation in the co-creator's interests and backgrounds, the better as diverse potential barriers and limitations can be identified right at the beginning of the process; as well as the people that could add resource and accessibility to the co-creation team. Often co-creators looked to move ahead to finding solutions to some of the initial problems arising at a shallow level of depth from the loudest voices. Referring to the rules of engagement can help to minimise the impact the loudest voices may have.

It is highly recommended that facilitators keep the co-creators focused on problem identification at this early stage with enough time for people to think at a deeper level and ensure all voices have been heard. The importance of active listening can be highlighted at this point. The aim is to avoid people only listening superficially to gain the gist or understand how to respond, but instead encourage a deeper level of active listening (Rogers and Farson, 1957) to understand the other person's logic, emotion and point of view (Spataro and Bloch, 2018). A key is to facilitate the co-creators to investigate differences, and not just similarities and consensus. Equally important is the facilitator's role in encouraging the listener to try to think impartially while listening and empathise with the insight being shared. Recommended activities from the CCW course (Anastácio *et al.*, 2019) for problem formulation include the CUbe (Magee *et al.*, 2012; Moody *et al.*, 2020), picture challenge and the fishbowl (Kane, 1995; Tricio *et al.*, 2019).

Co-design

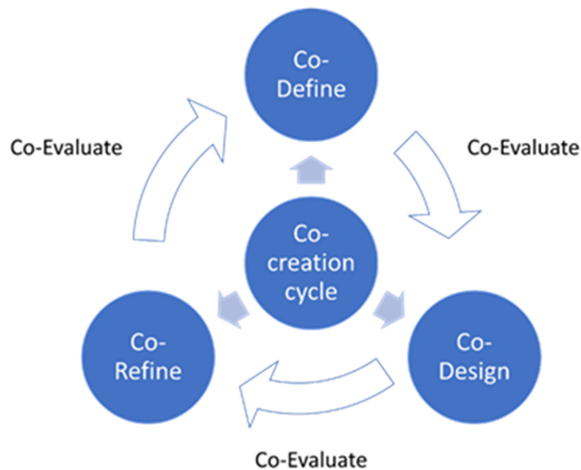
Co-design is the second stage where the identified problems can be prioritised and solution formulation for these priorities can now be utilised. A mistake can be made when people decide to complete collaborative processes by starting with the presentation of a solution to those it might impact in practice. By doing this it assumes the presenter understands the underlying problems and it can therefore become tokenistic consultation or involvement (Arnstein,1969; Torfing *et al.*, 2019).

Once the priorities have been identified and solutions formulated together, these can then move from ideas to design together. This maps well with previous understanding of where co-design fits in with the co-creation process (Sanders and Stappers, 2008). The co-creators need to then discuss what the responsibilities are, who will complete them and how low fidelity prototypes (Ku and Lupton, 2020) of the outcomes will be achieved. Without this final conversation and dissemination of responsibility the design might not turn into an implementable action. Alternatively, our attendees found that it was unrealistically assumed that they, as the facilitator, will have responsibility for all actions decided. Recommended activities from the CCW course (Anastácio *et al.*, 2019) for solution formulation include the poster pitch, simulation game (Vlachopoulos and Makri, 2017) and Lego® play underpinned by Design Thinking (Brown, 2008; Dell'Era *et al.*, 2020).

Co-refine

The final stage of co-refine begins with the co-creators reassembling to assess the prototype of the outcomes developed and discussing how these can continue to be built upon and refined in a sustainable way. This builds upon the previously generated knowledge in a high-fidelity form (Ward *et al.*, 2015) relevant to the proposed solution. Iteration is vital to co-creation processes and this can be a continual development stage over time as evaluation, dissemination and impact occurs. Recommended activities from the CCW course for dissemination include story-telling, story cubes and Pecha Kucha (Anastácio *et al.*, 2019). This was underpinned by discourse and narrative methodology where the co-construction of verbal stories aids the framing of the process and output (Goffman, 1981; Lloyd and Oak, 2018).

We observed that by the time the co-creators reached this co-refining point, they were much clearer about their intention's and more deeply aware of the consequences of decisions made during the course of their collaboration. They were additionally clearer about how to go about refining them. The linear representation in Figure 1 can be helpful to those new to the experience to see a number of sequential steps, rather than be distracted by the fuzzy logic of the initially chaotic characteristic of open collaboration (Sanders and Stappers, 2008). The reflective activity of co-evaluation throughout the process is likely to cause a return to the design or definition phase and consequent re-iteration of the method as represented in Figure 2.



Source(s): Author's own creation

Figure 2.
Representation of the Three Co's framework as a non-linear process with co-evaluation embedded throughout

Co-creation facilitator reflections

Facilitator reflections were developed with the co-creators of the course as an iterative process. This was through developing understanding of arising areas where attendees benefitted from more in-depth exploration together as a group, or where it was identified that key learning points had happened within the group from the action-based pedagogical approach being delivered (Chevalier and Buckles, 2019). As facilitators, strength and excitement was witnessed through people truly co-creating experientially. The feeling of energy in the room was powerful as novelty was uncovered live using this approach. As this course was developed with the aim of training attendees to facilitate co-creation and embed the co-creation philosophy within their workspaces, these four main reflections are targeted at the overarching facilitation level: the role of the facilitator, co-creation setting, managing group dynamics and sharing responsibility for sustainability.

The role of the facilitator

The first reflection focuses on the reason we have called the people "teaching" co-creation to the course attendees, the facilitators. As academics in this role, we had backgrounds in using participatory and co-creative methods across health, education and design previously. To reduce collaborative tensions and power imbalance (Phillips, 2009), we felt it important to emphasise that as facilitators we were not there in the role of expert; everyone involved brought expertise to the group and no one individual's expertise was more important than another's. During the course delivery we also reflected together on whether a facilitator had to stay removed from inputting to the co-creation happening or whether they could be part of it. This was because the facilitator usually has motivation for organising the co-creation in the first place, and therefore also have a key role in the co-creation themselves. Together we agreed that facilitators could be involved as a co-creator too for this purpose because it is difficult to separate yourself from the evolution and learning of the group. The level of co-creator the facilitator may be is to be agreed with the group when the rules are developed in the co-define stage (i.e. do they take part in the co-creation activities as an equal participant? Or do they facilitate the activities from an organisational capacity but are able to co-create through reflecting with the group throughout the process and creating the designed output for refinement as we did when co-creating this course?)

Co-creation setting

The second reflection is based on the co-creation setting. Often what can happen is that one person or group of people, such as health care professionals, invite another group, such as patients, to come and meet them to discuss the development of an output, such as a health service. This often means that the meeting is being held at the host's setting. The same can occur if participants are being invited to come to an academic building to take part in research. This can exacerbate the "us versus them" impression as those invited are external to the host setting and can therefore feel like outsiders. To avoid this, a neutral setting is preferable to help encompass the philosophy of equal voice, expertise and importance during the co-creation. We recognise that practicalities do not always mean it is easy to bring a range of people with different needs and responsibilities together, and this might lead to a group being hosted where the busiest group of people are or where the free room is. If this is the case, then this could be explicitly discussed at the co-define stage ensuring that all involved understand that this choice was purely logistical, and everyone's voice is valued equally within the co-creation. The hosts may also wish to take measures to make the co-creation setting feel as neutral as possible and be away from their usual working space. For example, stepping outside into a green space in the grounds or using a less formal room in the building. Additionally, the use of some co-creation tools can be hosted online and although this cannot

replace the benefit that can be gained from face-to-face tools, such as building Lego® structures together, online forums are a promising neutral space to bring the co-creation process.

Managing group dynamics

The management of group dynamics during co-creation sessions are important, such as ensuring that everyone has been able to say what they think and different perspectives have been appreciated (Langley *et al.*, 2022). Using creative activities over traditional methods that additionally provides time and space for idea resolution puts co-creators on a more even platform to work together helps this to be achieved. However, the main novel aspect of this reflection focuses on the management of the potential for co-creators to leave or join throughout the ongoing co-creation process over time. Logistically if co-creation is happening over time, it will mean that people will change priority or move away and therefore leave the co-creation group, and likewise as the co-creation evolves people may be brought into the group. It is advised that the co-created rules of engagement and how people's inputs will be acknowledged are re-assessed as this change occurs. A new voice in an already established working group can cause disruption to the group. This occurred during our course delivery, which made that group feel uncomfortable when the new voice was dominant and risked the new voice feeling like an outsider. Therefore, managing this explicitly and early on as a group is recommended.

Sharing responsibility for sustainability

With a range of co-creators who can bring barriers or successes to the final product being implemented and useable, there is a risk that the group get carried away with the solutions and do not give themselves enough time to discuss how they will actually happen. Some co-creating attendees found that when they went to facilitate their own co-creation in practice, it was often assumed that after the co-creation they would then be the person responsible for making all of the agreed solutions happen. This was outside of their own capacity and can be off-putting to co-create in the future if it leads to giving yourself more work from it. It is therefore recommended that co-creators are facilitated to discuss who will take responsibility for making the implementable actions happen, especially at the co-design stage.

Discussion

Important barriers to applying co-creation processes in practice led to co-created solutions to those barriers. Additionally, the three Co's framework and facilitator reflections are novel additions for utilising the approach in real-world contexts. In particular, the three Co's framework responds to the call for a new "ladder of co-creation" examining initiation, design and implementation of new solutions (Torfing *et al.*, 2019). The diagram of the framework created in Figure 1 was a result of the cocreated course output. This highlights the basic outline of the framework and what can be undertaken at each stage. However, it is important to acknowledge that this is a simple presentation where realistically the co-creative process may go back and forwards between these steps or be cyclical alongside the fuzzy complex nature of cocreation as represented in Figure 2. This links in with the question and potential solutions on how to co-evaluate developed from this project, but also highlights a need for more detail on how to evaluate co-creation processes and their outputs generally and within this framework.

Overall, co-creators felt there was an importance in the shared voice that happens as a result of the co-creation process. This aligns not only with the agenda of active involvement, but also the underpinning primary objective to democratise service development and

research (Pinfold *et al.*, 2015). Previous understanding of who should be involved in co-creation (and other co-approaches) mainly focuses on academics, designers or the service deliverer inviting end users to be actively involved in the service development (Darlington and Masson, 2021) or researchers involving practitioners (Martin, 2010). The solutions formulated from our co-creation process build on this by highlighting the need to involve a range of people who can provide solutions and reduce barriers to the success of the co-created output. This range includes managers, commissioners and policy makers who may place limits or provide resources that can make a difference to the failure or success of co-creation goals. The facilitator role and involvement in the co-creation should also be discussed alongside the rules at the beginning. Involving a facilitator actively in the co-creation can bring bias to the group, but alternatively their experience and voice may be an important one to include (Darlington and Masson, 2021). It is also key to note that the co-creation process does not need to be initiated by a professional and can, for example, come from a community member or student wanting to initiate change (Bovill, 2019). To avoid the "us versus them" feeling, it is important to not only include a range of perspectives, but to be explicit in this to encourage knowledge creation (Gillard *et al.*, 2012). The use of the term co-creators aligns with the collective making approach to knowledge mobilisation where stakeholders are directly influenced by the creative practice to become co-creators within the process (Langley *et al.*, 2018). This has developed within high-income countries, and health and education contexts. It would be useful to examine these solutions, reflections and framework across other countries and fields, particularly using trans-disciplinary approaches.

There is an acknowledgement that time and effort is needed at the planning stages of projects to consider the use of embedding co-creation (Goldsmith *et al.*, 2019). The outlined reflections and the three Co's framework provide considerations and a structure for how this can be done. It addresses the need to advance the reporting and reviewing of participatory approaches (Smith *et al.*, 2022) and provides a systematic outline for future research examining the potential mechanisms of "co-approaches" on knowledge mobilisation and health outcomes (Grindell *et al*, 2022). These co-approach terms can be used interchangeably (Voorberg *et al.*, 2015) and so the application of the framework and solutions should be transferable to equivalent terms, such as when co-production is defined similarly or to more explicitly document which aspect of co-creation has been completed. However, our course attendees who on a surface level experienced co-creation and other co-approaches as interchangeable terms, ended up reflecting that co-creation was a more overarching concept. This aligns with previous research concluding that co-creation should not be a term used interchangeably with co-planning, co-managing, co-design and co-production (Darlington and Masson, 2021) and that co-design and co-production are components of co-creation (Sanders and Stappers, 2008). Additionally, co-creation begins from initiation to realise new disruptive solutions to shared problems (Torfing *et al.*, 2019) rather than co-production focusing on implementation (Voorberg *et al.*, 2015) and service usability (Realpe *et al.*, 2015). Co-creation is not just a one-off method that can be applied for a project, but an approach to work and life where co-creative processes and activities can be applied to embed the philosophies of active involvement and equal voice. Co-approaches can often be conflated or mislabelled, and so the three Co's framework and co-created solutions provided could help to reduce this problem of "cobiquity" (Williams *et al.*, 2020). However, these applications need further examination.

One of the purposes of co-creation has previously been identified as empowerment (Darlington and Masson, 2021). However, within our co-creation, this was questioned as a word that implies that power is given to others, for example if professionals invite end-users to be actively involved. It was reflected that the co-creation approach is more about providing a space and support for all co-creators to harness their power. This links to the facilitator reflections on what the co-creation space organised means to the different co-creators and whether it implicitly

implies a hierarchy of power. There are benefits to providing a neutral co-creative space where feasible. Although in-person co-creation potentially provides space for deeper knowledge mobilisation and solution formulation, co-creation facilitated online can provide this neutral space. This can be especially useful if co-creating across a larger geographical area or more remote communication in response to COVID-19. The "pass-the-parcel" method co-created as a solution to this potential problem can be useful here. The key is not to be precious about draft ideas or prototype designs and allow other co-creators to amend and evolve ideas. It harnesses the "fail often, learn fast" approach (Langley *et al.*, 2022) to creating a minimum viable product, underpinned by design thinking (Brown, 2008; Cross, 2011; Dell'Era *et al.*, 2020). The three co's framework has already started to be used to underpin pedagogical and research projects (e.g. Pezaro *et al.*, 2022; Pearce *et al.*, 2023a, c). However, there is a future need to evaluate the use of the three Co's framework, as well as examining the impact it has in research, practice and policy development. A need for clearer guidance to evaluate co-creation activities, processes and outputs was highlighted. These could build on the current CO-creation REporting Standards (CORES) that are being developed (Pearce *et al.*, 2023b).

Conclusion

There is a dearth in previous publication on how co-creation and similar co-approaches can actually be utilised in real-world contexts and research. Through problem and solution formulation during the co-creation course, key barriers and solutions to co-creating in practice have been identified and reflected upon. The novel three Co's framework has been developed to outline the co-creation collaboration process and guide the facilitation of co-creation in practice: Co-Define, Co-Design and Co-Refine. Those who take part in co-creation processes are recommended to be called co-creators, as people that can create either a barrier or help an output be successful. Co-creation shouldn't be about "empowerment" *per se*, but instead be about facilitating people and provide space to harness the power they already have, our experience suggesting a different emphasis to typical community-based research. Co-creation can be a useful approach for management to buy into because in the long term, an output being developed using this method is more likely to meet the needs of those receiving, producing, delivering and financing it, and therefore increasing chances of long-term success. The "pass-the-parcel" method of co-creation, as well as utilising online and hybrid delivery methods can be a useful way of including a wider range of groups internationally across disciplines, especially in the context of the COVID-19 pandemic. There can be benefits to co-creation facilitators being actively involved in the co-creation and this should be discussed with the other co-creators. Neutral co-creation spaces can reduce the feeling of power imbalance between co-creators. Co-creation rules should be established together early in the process, and re-assessed as people leave and join the co-creation team. Responsibility should be explicitly discussed and shared among the co-creation team to ensure that the facilitator is not burdened with implementing all of the planned actions and the co-created output is sustainable. The use of co-creation needs to be evaluated more moving forwards, as well as the success of the output co-created. The use of the Cocreating Welfare approach and tools, and the three Co's Framework needs further trial and evaluation, but so far has been reported as useful for applying co-creation processes in practice.

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Notes

1. Horizon 2020 programme focusing on; “Europe in a changing world – inclusive, innovative and reflective Societies
2. The colour scheme indicated by Figure 1 provides contrast against the overall project visual identity only.

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Further reading

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A content analysis of the frequency of fat talk in Walt Disney animation films (1937–2021)

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Abstract

Purpose – Previous research demonstrates a consistent association between the media and body and eating related issues in children. Recent research has highlighted a role for "fat talk" to describe discourses around body size and food. One key source of media information is Disney animation films, yet to date no research study has explored the verbal content of this genre.

Design/methodology/approach – The present study used a content analysis to examine fat talk in Disney animation films (1937–2021; n = 53) with a focus on the frequency of fat talk, changes over time and differences between the genders and heroic statuses of the givers and receivers of fat talk. Fat talk was defined as relating to both body size and food and could be either positive or negative.

Findings – Results revealed that there was more negative than positive fat talk per film; no significant changes over time; males were the givers of significantly more positive and negative fat talk than females and were also the receivers of more negative fat talk; good characters were the givers and receivers of more positive and negative fat talk and more self-directed negative fat talk than bad characters.

Practical implications – The results are discussed in terms of possible legislation and parenting interventions to minimise the harm of this genre on young children.

Originality/value – Disney animation films may not be as benign as often thought.

Keywords Children, Body image, Body dissatisfaction, Eating disorders, Fat talk, Media, Disney animation films

Paper type Research paper

Research indicates links between pre-adolescent body dissatisfaction, mental health, eating disorders and depression which have been exacerbated by the COVID pandemic (Ricciardelli and McCabe, 2001; Parliament.UK, 2020). One key cause of negative body image is the media (e.g. Groesz *et al.*, 2001; Grabe *et al.*, 2008) with research indicating an increase in thinner and more muscular figures in films and magazines over time (Guillen and Barr, 1994; Katzmarzyk and Davis, 2001; Leit *et al.*, 2000). In parallel, data indicate that children's screen time sharply increased during the pandemic from 3.8 h to 7.7 h per day (excluding online classes) with 12 million new subscribers to streaming services such as Netflix, Amazon Prime and Disney+ (BBC, 2020; Marples, 2021). Whilst body dissatisfaction is related to many factors, one key area of concern is the presence of fat talk in the media which is the focus of the present study (Herbozo *et al.*, 2004; Sharpe *et al.*, 2013).

Fat talk has been defined as negative comments made towards others or the self which are focused on weight, food and body shape (Nichter and Vuckovic, 1994). These comments can also involve self-comparisons (e.g., "I'm so fat!", "No, you're not, I'm the one who is fat!") and have been conceptualised as an expression of normative discontent and a means to fit in with others even if an individual is not experiencing body dissatisfaction (Nichter and Vuckovic, 1994; Salk and Engeln-Maddox, 2011; Vanderkruik *et al.*, 2020). Fat talk varies by gender and whereas male fat talk focuses more on muscularity, female fat talk tends to be concerned with weight and thinness (Engeln and Salk, 2014; Rudiger and Winstead, 2013). Furthermore, females experience higher exposure and social pressure to engage in fat talk (Martz *et al.*, 2009) and are more likely to believe fat talk comments over positive body and food comments

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from other females (Corning *et al.*, 2014). Research has also consistently demonstrated positive correlations between participation in fat talk and negative eating behaviours, body dissatisfaction, and depression in participants of all weight ranges (Arroyo and Harwood, 2012; Ousley *et al.*, 2007; Sharpe *et al.*, 2013). Further, simple exposure to fat talk can increase body dissatisfaction (Stice *et al.*, 2003) and can make participants more likely to partake in fat talk themselves (Salk and Engeln-Maddox, 2012).

To date, several studies have examined how bodies are both represented and talked about in the media. For example, Fouts and colleagues focused on prime-time adult sitcoms and conducted a series of content analyses investigating both verbal messages and audience reactions. Key findings showed that male characters gave significantly more positive body talk towards female characters, particularly if they were thin (Fouts and Burggraf, 1999); that female characters who were dieting gave more negative comments towards other women and themselves (Fouts and Burggraf, 1999); that male characters gave significantly more negative comments towards heavier females than thin females, with 80% of these comments receiving an audience reaction of laughter (Fouts and Burggraf, 2000) and that heavier male characters gave more self-directed negative comments that also received laughing audience reactions (Fouts and Vaughan, 2002). In line with these findings, Himes and Thompson (2007) concluded from their content analysis of TV shows and films that men were three times more likely to engage in fat talk (often in the form of humour) than women and Eisenburg *et al.* (2014) concluded from their analysis that negative comments about one's own, and other people's bodies are often rewarded through audience laughter. Some research has also specifically explored media aimed at children. For example, Northup and Liebler (2010) conducted a content analysis of programmes on Disney Channel and Nickelodeon aimed at 9–14-year-olds and concluded that 87% of female characters were underweight, and that thinner characters were significantly more likely to receive positive body and beauty comments over negative comments (Northup and Liebler, 2010). Further, thin and physically attractive characters were more likely to receive positive male attention compared to sporty and intelligent characters (Northup and Liebler, 2010). Similarly, Klein and Shiffman (2005) carried out a content analysis of animated cartoons and concluded that in recent decades there has been an increase in underweight characters and a decrease in overweight characters and that in general thinness was associated with good characteristics and "stoutness" with more negative messages. Likewise, the content analysis by Herbozo *et al.* (2004) indicated that negative traits such as obesity are more often given to bad characters than heroes. In line with this, Disney films in particular, have been criticised for their influence on body esteem, body dissatisfaction, and triggers of eating disorders (Orenstein, 2012) although, in recent years, an increase in diversity of visual body representations in Disney films has been noted with characters in Moana and Encanto having fuller figures, compared to traditional Disney princesses such as Cinderella (Coyne *et al.*, 2021). Recent experimental and longitudinal studies, however, indicate that exposure to Disney princess films had no impact on body image (Coyne *et al.*, 2016, 2021) and that exposure to selected scenes from ten different animated children's films (some of which were Disney films) had no direct impact on the body dissatisfaction of 3–6 year olds (Hayes and Tantleff-Dunn, 2010). To date, however, the extent of fat talk in Disney films has not been explored.

In summary, young children can experience body dissatisfaction and eating issues, which is related to media exposure (Groesz *et al.*, 2001; Grabe *et al.*, 2008). Research has also shown that engaging in, and exposure to fat talk is significantly correlated with body dissatisfaction, depression, and negative eating behaviours (Arroyo and Harwood, 2012; Ousley *et al.*, 2007; Sharpe *et al.*, 2013). To date, however, whilst some research has explored the extent of fat talk in adult orientated media only two content analyses have explored body and food representations in children's films, which primarily focussed on visual messages rather than fat talk frequency (Herbozo *et al.*, 2004; Klein and Shiffman, 2005). The present study

therefore aimed to determine the extent of fat talk in a key child orientated media, namely all Disney animated films from 1937–2021. Disney animations were selected for this study because of their sustained popularity amongst pre-adolescents and as they are easily accessible to children via the Disney+ streaming service, which hosts 151.1 million subscribers across 64 countries, where all Walt Disney animated films (except one) are available to view (Stoll, 2022). Furthermore, Disney animated films have been made continually since 1937 which provides the opportunity to explore changes over time compared to other producers of animation (e.g. Dreamworks, Warner Bros) which are either more recent production companies or have had breaks in their production of animations. In addition, some research indicates recent changes in the body size and shape of Disney characters (Coyne *et al.*, 2021). Whilst fat talk is typically associated with negative comments, given the occurrence of both negative and positive comments about the body in daily interactions (e.g. Berge *et al.*, 2013; Gross and Nelson, 2000) the present study also assessed both negative and positive comments made about body size and shape. In addition, the study also explored the frequency of both positive and negative food related talk. This broader notion of fat talk to incorporate food and body related comments which are either positive or negative reflects the role of internal schemas on both body dissatisfaction and eating related problems and how these have been hypothesised to link with both critical and more benign conversations between children and their parents with food and bodies at their core (Gross and Nelson, 2000; Ogden, 2014; Ogden *et al.*, submitted). The present study therefore addressed the following research questions:

RQ1. Are there differences in the frequencies of the six fat talk classes in Disney animation films?

RQ2. Are there changes over time from 1937–2021 in the frequencies of the six fat talk classes?

RQ3. Are there gender fat talk frequency differences between the characters giving, receiving, and self-directing positive and negative fat talk?

RQ4. Are there fat talk frequency differences in the heroic statuses (good and bad characters) of the characters giving, receiving, and self-directing positive and negative fat talk?

Method

Design

The present study used a content analysis to identify the frequency of fat talk in all Walt Disney animation films from 1937–2021. The dependent variables were six classes of fat talk (body (positive vs negative); food (positive vs negative); overall positive; overall negative); the gender (male vs female) and heroic status (good vs bad character) of the characters giving, receiving, and self-directing fat talk. These classes were derived from existing research exploring the different types of talk in terms of both food and body talk and both positive and negative aspects (e.g. Arroyo and Harwood, 2012; Berge *et al.*, 2013; Roche *et al.*, 2017; Gross and Nelson, 2000; Ogden *et al.*, submitted).

Sample

The original film list (n = 60) was identified from the comprehensive list of Walt Disney animation studios films list displayed on Wikipedia (2022). Inclusion criteria were fully animated and containing dialogue. Seven films were therefore excluded resulting in a final sample size n = 53. Table 1 provides details of the release year, running time, and worldwide

Film	Year	Viewing time	Box office	Film	Year	Viewing time	Box office
Snow White	1937	1 h 27 m	$184,925,486	The Hunchback of Notre Dame	1996	1 h 37 m	$325,500,000
Pinocchio	1940	1 h 30 m	$84,300,000	Hercules	1997	1 h 39 m	$250,700,000
Dumbo	1941	1 h 3 m	Unavailable	Mulan	1998	1 h 36 m	$303,500,000
Bambi	1942	1 h 14 m	$268,000,000	Tarzan	1999	1 h 36 m	$448,191,819
The Adventures of Ichabod and Mr. Toad	1949	1 h 9 m	Unavailable	Dinosaur	2000	1 h 25 m	$356,148,063
Cinderella	1950	1 h 18 m	$263,591,415	The Emperor's New Groove	2000	1 h 22 m	$169,630,573
Alice in Wonderland	1951	1 h 21 m	Unavailable	Atlantis: The Lost Empire	2001	1 h 40 m	$186,049,020
Peter Pan	1953	1 h 21 m	$87,400,000	Lilo and Stitch	2002	1 h 28 m	$245,800,000
Lady and the Tramp	1955	1 h 20 m	$93,600,000	Treasure Planet	2002	1 h 40 m	$91,800,000
Sleeping Beauty	1959	1 h 18 m	$9,464,608	Brother Bear	2003	1 h 32 m	$250,397,798
101 Dalmatians	1961	1 h 22 m	$153,301,581	Home on the Range	2004	1 h 23 m	$76,482,461
The Sword in the Stone	1963	1 h 20 m	$22,182,353	Chicken Little	2005	1 h 26 m	$310,043,823
The Jungle Book	1967	1 h 20 m	$141,843,000	Meet the Robinsons	2007	1 h 39 m	$170,552,719
The Aristocats	1970	1 h 23 m	$55,675,257	Bolt	2008	1 h 40 m	$328,015,029
Robin Hood	1973	1 h 25 m	$32,056,467	The Princess and the Frog	2009	1 h 41 m	$270,997,378
The Many Adventures of Winnie the Pooh	1977	1 h 15 m	Unavailable	Tangled	2010	1 h 43 m	$584,899,819
The Rescuers	1977	1 h 19 m	$48,775,599	Winnie the Pooh	2011	1 h 12 m	$50,145,607
The Fox and the Hound	1981	1 h 24 m	$43,899,231	Wreck-It Ralph	2012	1 h 45 m	$496,511,521
The Black Cauldron	1985	1 h 22 m	$21,288,692	Frozen	2013	1 h 45 m	$1,263,305,823
The Great Mouse Detective	1986	1 h 15 m	$23,605,534	Big Hero 6	2014	1 h 48 m	$648,415,024
Oliver and Company	1988	1 h 17 m	$49,576,671	Zootopia	2016	1 h 53 m	$1,004,629,935
The Little Mermaid	1989	1 h 27 m	$222,299,758	Moana	2016	1 h 51 m	$633,518,536
The Rescuers Down Under	1990	1 h 18 m	$47,431,461	Ralph Breaks the Internet	2018	2 h	$529,290,830
Beauty and the Beast	1991	1 h 32 m	$438,656,843	Frozen II	2019	1 h 48 m	$1,445,182,280
Aladdin	1992	1 h 34 m	$504,050,219	Raya and the Last Dragon	2021	1 h 55 m	$116,782,367
The Lion King	1994	1 h 33 m	$986,214,868	Encanto	2021	1 h 52 m	$230,849,302

Source(s): Authors' own work

Table 1. Disney animation films used in analysis (n = 53)

box office figure for each film. All verbal expressions from all characters in the films were included in the data collection, including those from fictional and non-human characters. All films were viewed from start to finish and ranged from 63 to 120 min in length.

Procedure

The research team consisted of two researchers with expertise in health psychology. One has 35 years' experience of qualitative and quantitative research with a focus on body image and weight management and led the coding process. The second was a Masters student. The coding scheme was discussed and refined at length over 4 weeks with several iterations within the research team. Initially three films were watched and coded according to a draft coding scheme to understand its suitability. The coding scheme was then modified following discussion and the trial films were re-watched in line with the updated coding scheme. Further modifications were made and the finalised agreed categories were set out in an Excel spreadsheet. Each film was then watched and coded by one researcher with ongoing discussions within the research team. All films were accessed via the Disney+ streaming service.

The final coding scheme included codes for: (1) types of talk (body (positive vs negative); food (positive vs negative)); (2) who delivered the fat talk (giver/receiver/self-directed); (3) the gender of this person (male vs female); (4) and their heroic status (bad vs good). Body related comments included; body shape, size, strength, physical attractiveness and weight. Food-related comments included: eating a lot, eating little, treats, healthiness and food encouragement. There were twenty-four cues for the food and body categories, with six positive and six negatives in each. Overall scores were computed for "overall positive" and "overall negative" fat talk. Gender and heroic status fat talk frequencies were only recorded for the overall positive and negative fat talk classes and did not distinguish between food and body talk. A frequency spreadsheet was then created to record the number of times a fat talk reference was made, in accordance with the coding scheme. The coding scheme for body and food positive and negative fat talk with examples is shown in Table 2.

Data analysis

Data was analysed using Jamovi. Data screening demonstrated significant skewness and kurtosis exceeding the threshold for normally distributed data for all six classes of fat talk, gender categories, and heroic status categories. Consequently, non-parametric tests were employed for all analyses. Whilst outliers were acknowledged, they were not removed from the data as they reflected the heterogeneity of the films being recorded. Data were analysed in the following ways: 1) To describe and rank the frequency of fat talk across all Disney animation films using descriptive statistics; 2) To examine changes over time using descriptive statistics and correlations (Kendall's tau); 3) To analyse gender differences between overall positive and overall negative fat talk frequencies of the receivers, givers, and self-directed fat talk using paired *t*-tests (Wilcoxon test); 4) To explore heroic status differences between overall positive and overall negative fat talk frequencies of the receivers, givers and self-directed fat talk, using paired *t*-tests (Wilcoxon test).

Results

RQ1: Frequency of fat talk in Disney animation films

The data were analysed to describe and rank the frequency of fat talk across the sample (see Table 3). The results showed more overall negative compared to overall positive fat talk per film; more body negative than body positive fat talk per film and more food positive than food negative fat talk per film.

RQ2: Changes over time in fat talk

Fat talk changes over time from 1937–2021 were analysed for each of the six classes of fat talk (see Table 4). No significant correlations were found between year and overall positive, overall negative, body negative, body positive, food positive, or food negative comments.

Fat talk type		Description	Example
Body negative "Negative comments made about an individual's or one's own body"	Fat negative	body fat as negative	"You're looking too chubby"
	Skinny negative	thinness as negative	"You're just skin and bone"
	Strong negative	strength as negative	"You look too bulky"
	Weak negative	weakness as a flaw	"You'll never be able to lift that"
	Physical looks negative	physical looks as negative	"Look at me, I'm hideous"
	Weight negative	weight as negative	"Wow you've piled on the pounds"
Body positive "Positive comments made about an individual's or one's own body"	Fat positive	body fat as positive	"I'm like a cuddly teddy bear"
	Skinny positive	thinness as positive	"I wish I was as skinny as you"
	Strong positive	strength as positive	"Wow you can lift so much"
	Weak positive	weakness as positive	"I'm too weak and dainty, you'll just have to carry it all"
	Physical looks positive	looks as positive	"You look beautiful"
	Weight positive	weight as positive	"I am confident with what I see on the scales"
Food negative "Negative comments made about an individual's or one's own food or dietary preferences"	Eat a lot negative	large food consumption as negative	"Do you ever stop eating?"
	Eats little negative	small food consumption as negative	"You're like a rag doll, you don't eat enough"
	Treat negative	treat foods in a negative manner	"Gross I can't have that chocolate it will make me so bloated"
	Healthy negative	healthy food as negative	"All you eat are vegetables, do you ever eat anything else"
	Unhealthy negative	unhealthy food as negative	"Oh no I couldn't possibly eat that, do you know how much fat it contains?"
	Food encouragement negative	Discouraging eating	"No more seconds for you, you need to watch your weight"
Food positive "Positive comments made about an individual's or one's own food or dietary preferences"	Eat a lot positive	large food consumption as positive	"Wow you have such a healthy appetite"
	Eats little positive	small food consumption as positive	"Just a small portion is perfectly enough to satisfy me"
	Treat positive	treat foods as positive	"Look at all this chocolate; I can't wait to eat it all"
	Healthy positive	healthy food as positive	"You have such a well-balanced diet"
	Unhealthy positive	unhealthy food as positive	"A plate full of carbs and fats! I can't wait to get stuck in"
	Food encouragement positive	Encouraging eating in positive way	"Here eat some more food there is loads for everyone"

Source(s): Authors' own work

Table 2. Coding Scheme: Positive and negative body and food fat talk with examples

RQ3: Gender differences of givers, receivers and self-directed fat talk

Gender differences for the givers, receivers, and self-directed overall positive and negative fat talk were assessed using Wilcoxon paired *t*-tests (see Table 5).

For givers, males gave significantly more positive fat talk and more negative fat talk than females. For receivers, whilst there were no gender differences for positive fat talk, males were more likely to be the receivers of negative fat talk than females. No gender differences were found for either the givers or receivers of self-directed positive or negative fat talk.

RQ4: Heroic status differences of givers, receivers, and self-directed fat talk

Heroic status differences for the givers, receivers, and self-directed overall positive and negative fat talk were assessed using Wilcoxon paired *t*-tests (see Table 6).

For givers, the results showed that good characters gave significantly more positive and negative fat talk than bad characters. For receivers, the results showed that good characters received significantly more positive and negative fat talk than bad characters. No differences were found for self-directed positive fat talk, however, good characters self-directed significantly more negative fat talk than bad characters.

Discussion

The present study aimed to investigate the prevalence of fat talk in children's media via a content analysis of Disney animation films from 1937–2021, with a focus on fat talk frequencies, changes over time, and differences between the gender and heroic statuses of the givers and receivers of fat talk. The results showed that Disney animation films contained more negative than positive body fat talk overall per film, but whereas there was more negative body talk than positive body talk, the results showed more positive food talk than negative food talk. Previous research

Table 3. Descriptive statistics showing the frequency of fat talk in Disney films

Variable	n	Mean	SD	Rank
Overall Positive	53	4.40	4.31	3
Overall Negative	53	5.34	5.35	1
Body Positive	53	3.15	3.59	4
Body Negative	53	5.09	5.31	2
Food Positive	53	1.25	2.15	5
Food Negative	53	0.25	0.62	6

Source(s): Authors' own work

Table 4. Associations between year and positive and negative fat talk

Variable	
Overall Positive	B = −0.008 p = 0.938
Overall Negative	B = −0.092 p = 0.35
Body Positive	B = −0.077 p = 0.45
Body Negative	B = −0 0.079 p = 0.42
Food Positive	B = −0.016 p = 0.88
Food Negative	B = −0.142 p = 0.21

Source(s): Authors' own work

Table 5. Gender differences in positive and negative fat talk

Giver/Receiver	Comment	Male M	Male SD	Male Mdn	Female M	Female SD	Female Mdn	W	p	r_{rb}
Giver	Positive	2.13	2.50	1	1.15	1.68	1	477.5	0.007	0.52
	Negative	3.53	4.61	2	0.96	1.39	0	693.5	<0.001	0.69
Receiver	Positive	1.68	1.95	1	1.64	2.38	1	339.0	0.931	0.02
	Negative	3.87	4.96	2	0.60	1.08	0	746.0	<0.001	0.82
Self-directed	Positive	0.81	2.08	0	0.28	0.79	0	170.5	0.15	0.35
	Negative	0.59	1.35	0	0.21	0.53	0	113.50	0.072	0.49

Source(s): Authors' own work

indicates a relationship between fat talk and eating behaviour, body dissatisfaction and depression (Arroyo and Harwood, 2012; Ousley *et al.*, 2007; Sharpe *et al.*, 2013) and that such fat talk is present in adult media (e.g. Fouts and Burggraf, 1999, 2000). It has also been argued that Disney films may influence body esteem and trigger eating disorders (Orenstein, 2012). The results from the present study indicate that this genre of children's entertainment may not be as benign as sometimes assumed and is also a source of fat talk. The results, however, also showed no significant changes over time in the frequency of fat talk from 1937–2021. Therefore, whilst the media in general has been criticised for using images which have become increasingly unrealistic over recent years (Guillen and Barr, 1994; Katzmarzyk and Davis, 2001; Leit *et al.*, 2000; Klein and Shiffman, 2005) the extent of fat talk in Disney films has remained constant.

The results from the present study also provide insights into who are the givers and receivers of fat talk and indicate that males gave significantly more positive and negative fat talk than females and that males received more negative fat talk than females. Whilst real-life studies showing that females have higher participation rates in fat talk than males (Martz *et al.*, 2009), previous research exploring adult media indicates that males are more likely to be the givers of fat talk than women (Fouts and Burggraf, 1999; Himes and Thompson, 2007). The present study indicates that this is also the case in Disney animation films aimed at children. The results also indicate that males are also more likely to be the receivers of fat talk. Therefore, whilst in real life females may use more fat talk than men, in films the reverse seems to be the case which may reflect the use of fat talk as "humour" by males in films which is why it is associated with laughter (Himes and Thompson, 2007; Fouts and Vaughan, 2002). Furthermore, whilst much research focuses on the detrimental impact of the media on women's sense of self, the results from this study indicate that males are also under similar pressures.

The results also showed an impact of heroic status with good characters giving and receiving more positive and negative fat talk and self-directing more negative fat talk than bad characters. This was a surprising finding given evidence that negative traits such as obesity or more often given to bad characters (Herbozo *et al.*, 2004; Klein and Shiffman, 2005; Northup and Liebler, 2010). These differences suggest that although films may visually depict bad characters with negative body traits and food habits, positive and negative fat talk is given by, and given to, predominantly good characters.

These results have implications for research and practice. In terms of research, future studies need to explore the impact of fat talk in Disney films on young children in terms of body dissatisfaction and their relationship with food as well as their own subsequent use of fat talk. Research could also assess whether the impact of fat talk is influenced by factors such as identification with the characters who use fat talk, social comparison processes, the role of humour and the extent to which they are exposed to fat talk in the daily lives beyond these films. In terms of practice, primarily media companies need to be made more aware of the potential harm they can do and be encouraged to moderate their language and even be encouraged to use their genre for good by using more supportive and facilitative language in

		Good			Bad					
Heroic status	Comment	M	SD	Mdn	M	SD	Mdn	W	p	r_{rb}
Giver	Positive	2.76	2.85	2	0.53	0.99	0	879.00	<0.001	0.95
	Negative	2.81	3.62	1	1.68	2.56	1	484.00	0.045	0.38
Receiver	Positive	2.96	3.03	2	0.36	1.19	0	915.50	<0.001	0.94
	Negative	3.17	3.93	2	1.30	1.99	0	679.00	<0.001	0.66
Self-directed	Positive	0.79	1.94	0	0.30	1.08	0	184.00	0.059	0.46
	Negative	0.68	1.41	0	0.11	0.42	0	166.00	0.004	0.75

Source(s): Authors' own work

Table 6. Heroic status differences in positive and negative fat talk

their productions. In addition, and until media changes its approach, parents and children could be provided with the tools to buffer against fat talk in the media in the same way that interventions have been developed to protect readers against unrealistic images in print media (e.g. Ogden and Sherwood, 2008; Ogden *et al*., 2011).

There are some problems with this study that need to be addressed. First, not all films were coded by more than one person due to the extent of airtime to be reviewed. This raises the possibility of errors in coding. Frequent discussions were held within the research team, however, and the coding was an iterative process which aimed to reduce any possibility of researcher bias. Second, the content analysis produced an absolute count of fat talk rather than using a denominator of talk as a reference point. Therefore, whilst male and good characters were coded as giving and receiving more fat talk than female and bad characters this may have reflected that they spoke more *per se*. Finally, whilst the results indicate the extent of fat talk they do not illustrate its subsequent impact. Future research is needed to explore both the ratio of fat talk for different characters and the consequences of this fat talk.

To conclude, this study presents the first comprehensive analysis of fat talk in Disney animation films and indicates they may not be as benign as often believed. Further, the findings indicates that fat talk can be conceptualised as both positive and negative and relating to both body size and food and that whilst the extent of fat talk has not changed over time, Disney animated films contain more negative than positive body related fat talk; more positive than negative food related fat talk, and that both males and good characters are more likely to be the givers and receivers of fat talk compared to females and bad characters. These findings provide the grounding for further research exploring the consequences of such fat talk and the ways in which children could be protected from any resulting harm.

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"What does well-being mean to me?" Conceptualisations of well-being in Irish primary schooling

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Abstract

Purpose – The purpose of this study is to understand the meaning of the term well-being as conceptualised by parents, grandparents, principals and teachers in the Irish primary education system.

Design/methodology/approach – A hermeneutic phenomenological approach was adopted to understand the nature and meaning of the phenomenon of well-being. Interviews were carried out with 54 principals, teachers, parents and grandparents from a representative sample of primary schools in Ireland. Each participant was asked the same, open, question: "What does well-being mean to you?" Responses were transcribed verbatim and analysed using a combination of the principles of the hermeneutic circle and Braun and Clarke's framework for thematic analysis.

Findings – Three conceptualisations of well-being were identified (1) well-being is about being happy, (2) well-being is about being healthy and safe and (3) well-being is something you "do".

Originality/value – To the best of our knowledge this paper is the first of its kind to describe how well-being is conceptualised by adults in Irish primary school contexts. In particular it highlights how neoliberal conceptualisations of well-being as a "thing", a commodity exchanged on assumptions of individualism, moralism and bio-economism, have crept into the education of our youngest citizens.

Keywords Well-being, Wellbeing, School, Mental health, Curriculum, Teachers, Parents, Grandparents, Principals

Paper type Research paper

Introduction

Well-being is now a substantive component of the Irish school curriculum. Revisions to the Primary Curriculum Framework (Department of Education, 2023) mean that, as of 2025, 10% of a primary school child's (aged 4–12) school week will be devoted to well-being. At secondary level, 20% of a Junior Cycle student's (aged 12–16) curricular time is spent engaging in well-being–related activities (Department of Education and Skills and National Council for Curriculum and Assessment, 2017). This trend towards well-being comprising a significant proportion of curricular time looks set to continue with the forthcoming reform of the Senior Cycle curriculum (aged 16–18). Central to each of these curricular shifts is the belief that "our education system is key to equipping children and young people with the knowledge, skills and competencies to deal with the challenges that impact on their wellbeing" (Department of Education and Skills, 2019, p. 5). This belief has resulted in a shift from well-being as a component of a number of curricular subjects (e.g. Social Personal and Health Education) to well-being occupying at least 10% of curricular time in its own right. While there is no doubt that this increasing recognition of the need to support the well-being

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of children is a positive development, however, questions remain as to how schools can best promote well-being, if they are the best placed to do so, and what exactly is the meaning of this concept that occupies such a prominent position in our education system? It is this latter question that this paper seeks to address.

The mental health and well-being of children has become increasingly represented in national discussions about education in Ireland. Teachers and school leaders have highlighted the levels distress experienced by children in their schools and have called for greater attention and for these children, their teachers and families. For example, the Irish National Teachers Organisation (INTO), the largest primary teacher union in Ireland, suggests that:

> Primary teachers are profoundly aware of the importance of the wellbeing of their pupils. The challenge of protecting the mental health and wellbeing of primary school children must not be underestimated (Irish National Teachers' Organisation, 2022).

This profound awareness reflects the care and concern teachers hold for their pupils but also the increased presence of mental health concepts and language in our education system. This increase has not gone unnoticed or uncritiqued. Timimi and Timimi (2022), for example, suggest that the increasing awareness of mental health and mental disorder in schools has in itself led to the increased number of students thought to have mental health problems requiring professional intervention. They go so far as to propose that "rather than preventing mental health problems, it is likely that this ideology, and the resulting practices it encourages, are creating them" (Timimi and Timimi, 2022, p. 13).

Well-being too has been subject to critical attention. In a recent article, one of the authors (EF) described how the introduction of well-being into the Junior Cycle curriculum in Ireland was more a bargaining chip between warring teacher unions and education officials than a carefully planned curricular reform (Farrell and Mahon, 2022). Furthermore, the authors question the effectiveness of a curricular approach to well-being, suggesting that the relationship between teacher and student, rather than the content of the curriculum, holds the greatest potential for student mental health and well-being (Farrell and Mahon, 2022).

The political nature of well-being in schools can further be seen in the preponderance of diverse approaches to its promotion – each of which focuses, to greater or lesser degrees, on the individual and/or the wider interpersonal, economic, political and social environment in which that individual exists. These approaches include, amongst others, psychosocial approaches (e.g. Barrett, 2004), critical pedagogical approaches (e.g. Freire, 1970; Freire, 1994), welfare approaches (e.g. Allardt, 1976a; Allardt, 1976b), positive psychology approaches (e.g. Seligman *et al.*, 2009) and capabilities approaches (e.g. Sen, 1980, 1983, 1985).

Indeed, even the very onus on schools to promote the mental health and well-being of its pupils has consistently been called into question (Ecclestone and Hayes, 2009a, b; Craig, 2009). Many would argue, as former UK schools minister Robin Walker put it, that the "burden" of responsibility should not "fall on teachers or leaders to address what are, fundamentally, health problems" (Martin, 2023). This reference to mental health and well-being as "health problems" (as opposed to "education problems") offers a helpful insight into just how illusive and divisive the concepts can be.

Well-being is a decidedly nebulous concept. It is a cultural construct and, as a result, a composite of constantly shifting meanings, assumptions and understandings. There is even a lack of consensus around its spelling – wellbeing, well-being or well being – which further highlights the term's ontological instability. When tasked with analysing the meaning and function of the term well-being across the UK's Department of Children, Schools and Families (DCSF) public reports and documents and internal and external communications, Ereaut and Whiting (2008) found five different conceptual understandings or "discourses" of well-being: (1) an operationalised discourse of well-being as outcomes and indicators; (2) what was then

"a (very) new discourse of sustainability"; (3) a discourse of holism; (4) echoes of a philosophical discourse, as well as; (5) contemporary medical discourse (Ereaut and Whiting, 2008, p. 10). They described well-being as "a cultural mirage" (Ereaut and Whiting, 2008, p. 5) and highlighted the implications of "different groups constructing meaning in ways that make sense to them – and in ways that enable their own processes and objectives" (Ereaut and Whiting, 2008, p. 17). The UK's Department of Children, Schools and Families is not alone in its diverse constructions and uses of well-being, with private industry (Dale and Burrell, 2013) and the media (Sointu, 2005) offering similarly diverse, and sometimes conflicting, conceptualisations. The instability of the concept of well-being makes it vulnerable to wide and varying appropriation.

Ireland's Department of Education and Skills (2019) seeks to envelop this instability by referring to the "multi-dimensional nature" (p. 10) of well-being. The Department suggests that well-being "is comprised of many interrelated aspects including being active, responsible, connected, resilient, appreciated, respected and aware" (Department of Education and Skills, 2019; Department of Education and Skills and National Council for Curriculum and Assessment, 2017).

In light of the increasing curricular import of well-being, as well as critiques of its role in education and concerns about its conceptual instability, this study sought to understand how primary school teachers, principals, parents and grandparents conceptualise the term well-being.

Methodology

Research design

A hermeneutic phenomenological research design was adopted to illuminate the conceptualisations of well-being in Irish primary schools. Phenomenology, from the Greek *phainómenon*, meaning "thing appearing to view", showing itself, or flaring up, aims to understand phenomena, or "things", as they appear to others (van Manen, 1990; Harman, 2007). The great strength of such a design in its capacity to bring concepts, words or experiences which have, as Heidegger puts it, "faded" (2010, p. 26) in terms of their meaning, back into full clarity under the phenomenological gaze.

> . . . the fading of meaningfulness. It is not a disappearing but a fading, i.e. a transition into the stage and into the mode of non-primordiality where the genuineness of the enactment and beforehand the renewal of the enactment are lacking, where even the relations wear themselves out and where merely the content that itself is no longer primordially had "is of interest." Fading has nothing to do with "losing something from memory," "forgetting" or with "no longer finding any interest in." The content of factical life experience falls away from the existence relation towards other contents: that which falls away remains available; the available itself can, however, for its part fade as sense character of the relation and pass into that of mere usability. [. . .] i.e. they have fallen away from the primordial existence relation. Heidegger (2010, p. 26)

The very purpose of a hermeneutic phenomenological design is to bring back that which has faded or passed into mere usability. It provides an opportunity to examine, in full colour and attention, a concept we name and use all the time but whose meaning may have long fallen away. A concept upon which we have built something so tacit as a school curriculum. In focusing on conceptualisation, this study seeks to draw forth associations, words, assumptions and examples that come to mind for adults in a school environment when asked to describe the meaning or form of the term well-being.

Recruitment and participants

This study was conducted as part of the Children's School Lives (CSL) study – a national longitudinal cohort study of primary schooling in Ireland. Launched in 2018, the study

follows almost 4,000 children, across 189 schools, as they journey into, through and out of their primary school years (Devine *et al.*, 2020). The study is funded by the National Council for Curriculum and Assessment (NCCA) and received ethical approval from the University College Dublin Research Ethics Committee. A representative sample of schools was randomly generated using a national register, and schools were contacted and invited to participate in the study. All participants were offered clear and informed consent – including the unequivocal right to non-participation.

Of the 189 primary schools in the study, 13 were invited to participate as case study schools. These schools included a representative sample of DEIS (schools in communities identified as disadvantaged and participating in "Delivering Equality of Opportunity in Schools" programme) and non-DEIS schools, urban and rural, single sex and mixed, and all the major denominational and multidenominational patronages within the Irish education system (Catholic, Church of Ireland, Community National Schools and Educate Together Schools). In line with its hermeneutic phenomenological approach, and rally cry of "*zu den sachen selbest*!", or "to the things themselves!" (Husserl, 1965, p. 116), this study focused on the phenomenon at hand (conceptualisations of well-wellbeing) as it is described by this representative sample rather than on sub-dividing conceptualisations by variables such as gender, denomination or socio-economic status. The case study schools offered researchers the opportunity to explore, in-depth, the experiences of primary school children, teachers, principals, parents and grandparents. Researchers spent 2 weeks at a time in each of the 13 schools, immersing themselves in the day-to-day routines and activities of the classrooms and conducting a range of interviews and age-appropriate research activities with consenting participants. As the developmental maturity required to describe how one conceptualises something as abstract as well-being was deemed beyond the abilities of the two cohorts of children, aged 4/5 and 7/8 at the time of the study, just the adults, and not the young children, in the sample were included as outlined in Table 1. Participants did, however, include parents and grandparents from the same families which, combined with the teacher and principal perspectives, offered rich and generationally-diverse conceptualisations of well-being. Case study schools were assigned pseudonyms of well-known Irish lighthouses in order to protect their anonymity.

Data generation

Interviews were carried out by experienced post-doctoral researchers with specialist expertise in qualitative research. Each researcher was assigned a number of schools, and by virtue of spending two weeks in each school community, was afforded the opportunity to build and foster relationships with participants. Interviews were predominantly conducted in the school itself – in classrooms, staffrooms, offices or, sometimes, corridors or other quiet corners – although a number of parent and grandparent interviews were carried out in the home. The foremost priority in scheduling the interviews was the convivence and comfort of the participants which meant that some families were represented by both parents, others by one parent. In some families, a number of grandparents were able to contribute, while in others there were no living grandparents. The majority of interviews were carried out without the child being present yet, in one or two instances, the child was at home or waiting for their parent to take them home. These diversity of conditions represent the pleasant realities of conducting immersive qualitative research in family and school communities.

Principals	Teachers	Parents	Grandparents	Total
12	14	21	7	54

Source(s): Author's own creation/work

Table 1.
Study sample

The question that formed the basis this study of conceptualisation of well-being in primary schools was one of a schedule of ten open-ended questions posed to adult participants in the Children's School Lives Study. Each participant was asked exactly the same question: What does well-being mean to you? This question was carefully worded so as not to guide a response in a particular direction and many participants asked for clarification: "Well-being? For me or for the children?" (Teacher, Ardnakinna). The open nature of the question allowed participants to take their response in the direction that most readily came to mind which, in itself, offered an insight into their immediate associations and conceptualisations of well-being. Some participants chose to describe what well-being meant to them in terms of their role as a principal, teacher, parent or grandparent. Others focused on what well-being meant to them as individuals. A third group focused on well-being activities, while many incorporated aspects of all of the above in their response to this open question.

Data analysis

Interviews were recorded, transcribed verbatim and the relevant sections, relating to the question "what does well-being mean to you?", analysed using a combination of the principles of the hermeneutic circle of interpretation (Heidegger, 1927/1996; Gadamer, 1960/1989) and Braun and Clarke's (2006) six-step framework for thematic analysis. The hermeneutic circle is based on the idea that understanding the meaning of a text as a whole involves making sense of the parts, and grasping the meaning of the parts depends on having some sense of the whole (Schwandt, 2007). As such, interpretive understanding goes forward in stages with continual movement between the parts and the whole allowing understanding to be enlarged and deepened.

The hermeneutic circle, by its very circular nature, suggests that the meaning of a text is not something that can grasped once and for all. Meaning exists in a complex interplay between parts and whole. Braun and Clarke's (2006) six-step process of data analysis provided a flexible framework for analysing the "parts" as well as the "whole" of the text (Figure 1). It is a framework that enjoys "theoretical freedom" (Braun and Clarke, 2006, p. 5) in that it is applicable across a range of epistemological and theoretical approaches without impeding on the particular values of an approach such as hermeneutic phenomenology. As Braun and Clarke (2006) themselves acknowledge, "one of the benefits of thematic analysis is its flexibility" (p. 4).

The first step in thematic analysis was to become familiar with the data which, in this case, involved checking the transcript against the original recording and the carefully reading and rereading the transcript to become (re)familiarised with its content. Step two involved generating initial codes with were descriptive labels and jottings – mainly picking out key words used by the participants. Step 3 involved searching for themes, taking the initial codes and sorting them into potential themes. For example, codes such as "happy" and "content" were tentatively sorted into the theme of "happiness/affect". At this stage codes were neither decided nor discarded. Step four offered an opportunity to review and refine these tentative themes with the "validity" of the prospective themes considered in terms of how accurately they reflected the meanings in the data. Step five involved further refinement and definition of the themes and isolation of the discourses relating to well-being. Quotes across the dataset, relating to each theme or discourse, were compiled at this, fifth, stage. The sixth and final step involved the final analysis of the data as a "whole" and writing up the discourses as presented below.

Results

Three discrete conceptualisations of well-being were identified: well-being as happiness, well-being health and safety and well-being as something one does.

Whole
Step 1: Familiarise yourself with the data
Step 2: Generate initial codes
Step 6: Produce the report

Parts
Step 3: Search for themes
Step 4: Review themes
Step 5: Define and name themes

Source(s): Author's own creation/work

Figure 1.
Braun and Clarke's (2006) six-step method of thematic analysis as aligned with the hermeneutic circle

Well-being is about being happy

The most frequent association drawn forth by participants was the association of well-being and happiness. The word cloud below (Figure 2) provides a visual representation of every word in the dataset relating to positive affective states with the size of the word reflecting the frequency with which it appeared in the dataset.

> To me it means that the children in my class are happy.
>
> Teacher, Ballagh

> That they are happy.
>
> Grandparent, Ardnakinna

Source(s): Author's own creation/work

Figure 2.
Word cloud depicting positive affective states described by participants in this study

> I suppose what it means is that when children come to school, or when people come to work, they should come to a place that they are comfortable in, that they are . . . well, happy
>
> Principal, Tory

> I suppose it's your mental and emotional state, how you're feeling, what you can do to increase the happiness.
>
> Parent 1, Cashla

In addition to happiness, other positive affective states featured prominently in conceptualisations of well-being. These included feelings such as "at ease" (Teacher, Ardnakinna), "calm" (Teacher, Ballagh), "content" (Principal, Fastnet) and "comfortable" (Parent, Tory).

> To me well-being means I suppose a sense of happiness and contentment and not feeling stresses, well I mean we all feel stressed at times but not feeling unduly stressed or overburdened. And that you've a contented, you've peace of mind and that you've contentment.
>
> Principal, Fastnet

While positive affective states were the most ready and resonant response to the question of "what does well-being mean to you?", there was equally a recognition that feeling happy all the time was not always possible.

> What does well-being mean to me? I don't know. Well-being, it kind of means [. . .] I don't know how to say it. That you don't always have to be happy, but you should be more happy than you are miserable? [Laughs]
>
> Teacher, Broadhaven

Well-being is about being healthy and safe

When asked "what does well-being mean to you?", a number of participants most readily drew on association between well-being and health and safety.

> I mean on quite a basic level because they are obviously junior infants. That they are healthy and that they are well.
>
> Teacher, Ballagh

> So, healthy eating should be part of it which is really hard and is another challenge. You want to follow more healthy eating and providing them with healthy options when they are growing up. It is tricky. Parent, Broadhaven

> You have to make a point to get to bed on time, sleep well, eat well. To be physically happy. Parent, Tory

For one principal, the complexity of needs experienced by many children in their school meant that, for them, well-being began at a basic level.

> We've a number of homeless children for example in the school at the moment. And we find that their nutrition is a real concern for us. If they come to school with no lunch as they often do or if they come with a very nutritionally limited lunch. [A number of children] have had a lot of sickness, a lot of illness, been hospitalised, flus, colds, viruses. So, I suppose we find ourselves talking and thinking about their well-being quite a lot and a lot of that is right back to Maslow's hierarchy of needs. You know, they're not sleeping well, they're not eating well at times and so I think whatever we develop as our maybe view of well-being it has to incorporate all of that.
>
> Principal, Broadhaven

> It's not like fairyland here either, life is tough, [. . .] For some children, life is very tough. Principal, Tory

In addition to sleep, diet and the building blocks of physical health, safety emerged as a key component of the concept of well-being for teachers in particular.

> I think the big thing as well that we like to home in on, especially for infants, is the safety word, because the one thing is that nothing is going to work if we are not safe and healthy in school. So, our two big things are; are we all safe when we are in the classroom and are we all happy? So, before anything . . . before any sounds, before any numbers, we have to be those things.
>
> Teacher, Cashla

> I suppose you're worried about too, as a teacher, the duty of care, especially in infants. [. . .] Like if they bump their head on yard, it's their well-being that's at stake. [. . .] And child protection in terms of that as well if there was ever an issue, obviously we know our DLP [School Designated Liaison Person} and our Deputy DLP.
>
> Teacher, Tuskar

> I suppose to me, well-being would be like their safety, their health. But yeah, a lot would have to do sometimes with checking if cuts and bruises come from home. Now, thankfully here we wouldn't have much, but you never know. You don't know. It can happen anywhere, so you never know.
>
> Teacher, Tory

Well-being is something you "do"

A third conceptualisation of well-being was noted throughout the interview transcripts – that od well-being as something one does. While for some the question "what does well-being mean to you?" drew forth associations between happiness or safety, for many it brought forth a list of well-being programmes or interventions such as "mindfulness" (Principal Tory), "meditation" (Teacher, Ardnakinna), "relaxation" (Parent, Tory), "mindfulness colouring" (Teacher, Tory) or "wellness check-ins" (Parent 1, Cashla).

> Well we have our yoga; we have a mindfulness room and we've a yoga teacher that comes in and does sessions with the children so the teachers can pick it up and then the teachers can do it. And have the programme about head, the SPHE programme deals with bullying issues, mental health, we don't call it mental health with the children, but how to cope with things, how to talk things through, strategies, go to somebody, speak to somebody.
>
> Principal, Poolbeg

> During the year we do yoga. All the classes do yoga for a semester and it's really nice, even junior infants absolutely love it, like taking off their socks on their yoga mats and just taking off their shoes and socks and it's really, really nice. And we do a big well-being week as well with meditation. We do meditation at the end of every lesson I end kind of with a meditation, thinking about nice things, bringing them on a journey, they lie on the ground and they close their eyes, just to kind of calm them down and relax.
>
> Teacher, Ardnakinna

> So, between our emotional check-in and then our calming with our mindfulness, it's kind of the bulk of what we'd been doing at this level.
>
> Teacher, Cashla

> In her [case study child] Montessori they used to do yoga and stuff, she wasn't a big fan of it. Relaxation, she hated "laxation" because it's just lying on the floor apparently. But she does a drop-in yoga class sometimes. Don't you do a bit of yoga [child name]? She's very good at the moves.
>
> Parent, Tory

Well-being was often described, not just in terms of something one does, but also as "tools" that one can use or implement.

> [well-being means] giving them the tools to help themselves, to know what they need and how they can get through whatever it is [they are facing].
>
> Principal, Cashla

> I think giving them the tools from a young age is what is going to help them long-term.
>
> Teacher, Cashla

> That she [5 year old child] can take knock-backs. That they have the tools to cope with that.
>
> Parent, Tory

> [Researcher] What does well-being mean to you?
>
> [Parent 1] Ah the wellness check . . . that check-in is . . . when they say, I said "happy thoughts and I was happy today"
>
> [Parent 2]: Ah that . . . yeah!
>
> [Parent 1]: Like, even to check in cause it's great monitoring tool.
>
> Parents, Cashla

These conceptualisations and their implications for education are discussed in the next section.

Discussion

This study sought to understand how well-being is conceptualised in Irish primary schools by inviting parents, grandparents, teachers and principals to bring forth the meanings, associations, ideas and assumptions that come to their minds in relation to the term well-being. Three discrete conceptualisations were identified: Well-being as happiness or other positive affective states, well-being as health and safety and well-being as something one does.

Th association of well-being and happiness is perhaps unsurprising as these concepts are almost synonymous in our culture. The difficulty, however, is that each concept is as nebulous as the other. German philosopher Immanuel Kant observed that "the concept of happiness is such an indeterminate one that even though everyone wishes to attain happiness, yet he can never say definitely and consistently what it is that he really wishes and wills" (Kant, 1785/1981, p. 27). In spite of the absence of definition and consistency, what is clear and inspiring from the accounts of parents, grandparents, teachers, principals in this study is that they wish and will happiness for their children.

Happiness has long been espoused as the purpose of education, indeed life itself (Noddings, 2003; Aristotle, 2009). Aristotle believed that happiness is achieved through living a virtuous life in accordance with one's unique function or characteristic (Aristotle, 2009). Followers of Bentham consider happiness in more utilitarian terms as the maximisation of pleasure and minimisation of pain (McMahon, 2006). More contemporary efforts to reify happiness centre on people's subjective life satisfaction which is often driven by factors such as career and financial security, physical health and community support (Central Statistics Office, 2022). The challenge for educators is that each of these three (and these are just three of many) conceptualisations of happiness require a different curricular and pedagogical approach. Does one offer a moral or philosophical education with a focus on virtue and acceptance? Or perhaps effective strategies to maximise happiness and minimise suffering? Or does one incite students to be active democratic citizens equipped to advocate for the better working, economic and social conditions synonymous with life satisfaction? Lack of clarity or consensus about what well-being, or indeed happiness, is and how best to "teach" it may inadvertently create a conceptual vacuum. Such a vacuum runs the risk, as Timimi and Timimi (2022) point out in relation to mental health, of being filled with ideology and practices that do little to support and may indeed undermine the well-being of children. This conceptual vulnerability aside, the commitment of parents, grandparents, teachers and principals to the happiness of children abounded from the data.

The second conceptual association was that of well-being as health and safety. Ereaut and Whiting (2008), in their study of use of the term of well-being in the UK Department of Children, Schools and Families, found a high usage of the expression "health and well-

being" in official documents and correspondence. They suggest that this "hitching" (Ereaut and Whiting, 2008, p. 11) of well-being to health reflects a shift or comprise by medicine in recent decades in response to criticism of a purely physical, science-based, model of healthcare.

> The very frequent juxtaposition of "health and wellbeing" seems in practice to stand in for this shift – in context it means the extension of concern with physical health to mental or emotional health, and perhaps "relationships". Ereaut and Whiting (2008, p. 11)

Interestingly, teacher responses revealed a keen attunement to child protection, perhaps reflecting the relatively recent legal onus on schools to monitor and report child protection concerns (Children First Act, Houses of the Oireachtas, 2015). The opportunity afforded by a hermeneutic phenomenological approach, and a question that asked "what does well-being mean to you?" as opposed to "what does the term well-being mean to you?", meant that broader meanings and associations, which may appear faded in the light of everyday consciousness, are encouraged to come forth. But in associating well-being and health, participants did more than highlight the expanding reach of the concept of health, as Ereaut and Whiting suggest. They also revealed the ethical and legal responsibilities they countenance towards the health and safety of children in their care.

In conveying conceptualisations of well-being, indeed any abstract concept, people often draw on associations, examples, metaphors or descriptions of meaning. "I suppose to me well-being would be like their safety, their health" (Teacher, Tory) for example or "to me well-being means a sense of happiness and contentment" (Principal, Fastnet). Perhaps the most unexpected and original conceptualisation of well-being was not expressed in terms of meaning or association but rather in the form of a list of well-being interventions or activities. It is important to note that what is under question here is not the programmes or interventions themselves, but rather the readiness with which the concept of well-being was associated with such interventions. Well-being is a "thing" that one "does". This increased reification and operationalisation (and indeed commercialisation) of well-being in western societies has been traced alongside the burgeoning influence of neoliberal capitalism in the late twentieth and early twenty-first century (Sointu, 2005; Dale and Burrell, 2013). What this study reveals, however, is that this conceptualisation of well-being as a "thing", as a "cultural competency" (Bourdieu, 1986), has spread into the education of our youngest citizens. Dale and Burrell (2013), in charting the rise of what they call the "wellness movement", identified three assumptions on which the idea of well-being as something one does is based: (1) individualism – the assumption an individual can the detached and considered in isolation from their context; (2) moralism – the assumption that an individual's choices and actions can been taken as indicators of whether they are a "good" or "bad" employee, citizen or person and (3) bio-economism – the assumption that a person's well-being can be considered a social and economic resource. The range and readiness with which well-being activities, such as yoga, mindful colouring or wellness check-ins, were proffered by participants in this study suggests that these assumptions of individualism, moralism and bio-economism (well-being as a "tool") have crept into our education system. We seek to be really clear that mindfulness, yoga, wellness check-ins and other well-being activities are not under question or review here in themselves, but rather seek to highlight what this conceptualisation indicates about the relocation of responsibility for well-being onto individuals and away from deep-rooted structural and political inequalities and social determinants of well-being (individualisation). The speed and frequency with which teachers and principals reverted to listing well-being activates when asked what well-being meant to them could be perceived as an indicator of the pressures schools are under to offer

these activities to pupils – to offer a "good" education, to be a "good" school (moralism). And the concern expressed by parents for their child's ability to cope in an increasingly competitive world, and their desire "that they [children] have the tools to cope with that" (Parent, Tory), may offer an indication that well-being is seen as a social and economic resource (bio-economism).

This interpretation of the data might be construed as overly pessimistic but, as many authors highlight, a critical engagement with the concept of well-being and its mechanism of action in the school environment, has been notably absent from the literature on well-being education. While authors have critiqued the concept itself (Craig, 2007, 2009; Ecclestone and Hayes, 2008, 2009a; Watson *et al.*, 2012), what this study adds is indication of the degree to which the idea and assumptions of a neoliberal capitalist conceptualisation of well-being, namely individualism, moralism and bio-economism, have seeped into the primary education system. This is perhaps unsurprising as, as Sointu (2005) first pointed out almost 2 decades ago, the idea of well-being as a "normative obligation" (p. 255) has been creeping into the public conceptual lexicon for many years. Sointu charted this creep by analysing the meanings and use of the term "well-being" in two UK national newspapers from 1985 to 2003. In the 1980s well-being tended to be discussed in terms of the functioning of the state. By the late 1980s well-being had come to be conceptualised in terms of pleasure, comfort and happiness. By the late 1990s, well-being was more self-oriented and with the intimation that one's own well-being was ultimately one's own responsibility – what Lynch (2022) refers to as "self-responsibilitisation" (p. 209). Sointu concluded their study in 2003 by suggesting:

> The "wellbeing practices" that today's choosing consumers turn to can be seen as meaningful because they enable people to reproduce themselves who measure up to prevalent social norms and values. Sointu (2005, p. 272)

As education is a central element in the reproduction of social norms and values (Power and Edwards, 2002; Willis, 2016; McDonald, 1980; Illich, 1971), it is unsurprising that in a society that posits well-being as valuable, educators would seek to offer students every possible resource to reproduce themselves as individuals who measure up to the prevalent norms and values of their society. To "give them the tools from a young age [that are] going to help them long-term" (Teacher, Cashla). The question we need to ask is whether this reproduction of neoliberal capitalist values such as individualisation and "self-responsibilitisation" (Lynch, 2022, p. 209) really is improving the well-being of children? Is it really the purpose of education? Is the conceptualisation of well-being as a moral and economic resource for the individual one we want to espouse in our schooling? And finally, if the concept of well-being, as it is varyingly described by participants in this study, should consume such a large focus in our education curricula?

Limitations

As with all studies, this study had limitations. Chief amongst these was the absence of children's understanding of the nature and meaning of well-being. While we piloted a question, similar to the one that formed the basis of this study, with children, we found that the question somewhat beyond the developmental and conceptual capacity of two cohorts we worked with at the time of the study (Junior infants (age 4–5) and second class (aged 8–9)). Efforts to adapt the question invariably resulted in undermining the "open" nature of the hermeneutic phenomenological study as we, as researchers, would inadvertently give the answer to the question in the very explanation of what we mean by the term "well-being"! The older children, who by their very nature desired to please us as visitors to their classroom, visibly struggled to come up with what they perceived as the

"right" answer to our question. In light of this, and the demands of a research question that required respondents to offer a description of their understanding of an abstract concept, we decided to focus on adult participants in this study. Other methodologies and methods, such as the "draw and write" technique employed by Sixsmith and Nic Gabhainn (2007), have successfully garnered childrens' conceptualisations of well-being and their findings offer a helpful adjunct to this hermeneutic phenomenological, adult oriented, appraisal.

Conclusion

This study identified three main conceptualisations of well-being in Irish primary education settings. The first two, well-being as happiness and well-being and health and safety, indicate the ready association between well-being and its two common binomials – happiness and health. Even within these two conceptualisations of well-being, educators are presented with a range of ethical pedagogical challenges which are explored in this paper. The third conceptualisation, that of well-being as something one does, offers an indication of the creeping influence of neoliberal conceptualisations of well-being into primary education. While this may not be a negative thing in itself it certainly warrants noting, reflection and further critique. This paper concludes by raising important questions about the implications of these varying conceptualisations for the purpose and future of primary education in Ireland.

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Empowering children for better health with child-to-child approach: a systematic literature review

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Abstract

Purpose – Child-to-Child (C-to-C) approach is an evidence-based approach that ensures the child's participation in bringing about positive changes in healthcare. By systematically investigating the literature, the study aimed to evaluate the effectiveness of the approach and recognize associated themes, methodologies and outcomes.

Design/methodology/approach – An extensive search on PubMed, ProQuest, Cochrane and Dimensions AI databases was performed for original research articles on C-to-C intervention, with no time and geographical restrictions. Following PRISMA and PICO, the Joanna Briggs Institute (JBI) critical appraisal tool assessed the studies. A data tabulation technique was used to summarize these studies.

Findings – The approach shows promising results in enhancing children's understanding of health issues and their participation in community health promotion. This, in turn, encourages the adoption of better healthcare practices and shows improved health outcomes.

Research limitations/implications – Further research is required to understand the long-term impact of the approach on populations from diverse socioeconomic statuses in different study settings.

Practical implications – The findings will be helpful for practitioners, educators, policymakers and other stakeholders in creating more successful and effective C-to-C intervention programs to make informed decisions, achieve sustainable behavior change and improve health.

Originality/value – The originality of this review paper is evident in its unique focus on the C-to-C approach, which empowers children not only as recipients of health education but also as active contributors to promoting health. Further, the present research also explores the intricacies of how children learn from each other, offering new insights into effective educational practices.

Keywords Child-to-Child approach, Child centered, Health promotion, Well-being, Health literacy, Systematic literature review

Paper type Literature review

Introduction

Children are the cornerstone of a nation's future. They are not just the recipients of knowledge but also active contributors to shaping the present and future of the nation. They are one of the most significant demographic groups and cover a quarter of the world's population (Liu *et al.*, 2022). However, due to their ongoing physical, cognitive, and emotional development, coupled with a propensity for risky physical conduct, and a continuous increase in violent acts children are more prone to morbidities, injuries, and accidents (Stark and Landis, 2016). These childhood morbidities, nutritional deficiencies, and injuries can lead to serious lifelong illness or even death.

In 2019, 1.48 million fatalities were reported in children aged 5–19 years among which, 38% were attributable to communicable, maternal, perinatal, and nutritional (CMPN) disorders, 28% non-communicable diseases, and 32% injuries. The major particular causes of mortality in 2019 were drowning (5.2%), malaria (5.5%), neoplasms (6.4%), road traffic

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injuries (7.8%), and diarrhea (49%). Many of the aforementioned risk factors are avoidable and can be prevented or reduced by acquiring knowledge, imparting a positive attitude, or practicing healthy living conditions. To curtail the mortality rate by confronting these critical determinants, the journey was started in the Millennium Development Goals (MDGs) era (2000–2015), and success was achieved with a noticeable reduction in mortality among children under the age of five (Liu *et al.*, 2022). This resounding success catalyzed the subsequent Sustainable Development Goals (SDGs) that came into existence in 2015, which aspire to eliminate preventable child deaths by 2030 (UNICEF DATA, 2019).

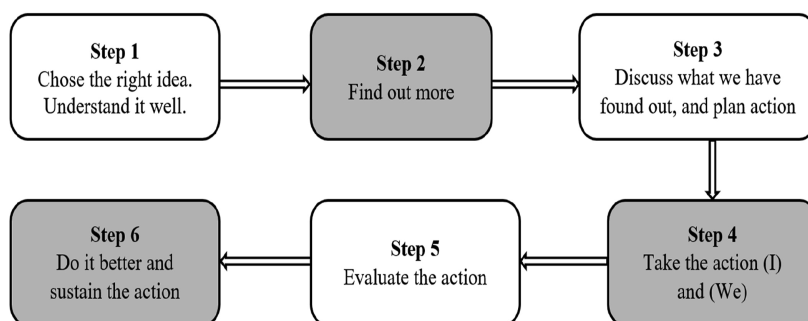
Both the MDGs and SDGs highlight the positive outcomes when people actively participate and contribute to improving healthcare paradigms. Such involvement can occur at various levels of the healthcare system, from decision-making about treatments to service redesign. People play a crucial role in reviewing and proposing interventions, practicing for better health, and motivating others to achieve a quality life. Later on, the concept of participation was extended to children and young people (Ahmad *et al.*, 2014). The UN Convention on the Rights of the Child considers children's participation in the matters that affect them a fundamental right. Articles 12 and 13 which are especially pertinent to decisions regarding care and treatment, state that the child's ideas and opinions should be taken into account following their age and maturity (Alderson and Montgomery, 1996). Empowering the children to participate in bringing positive health changes not only upholds this right but also contributes to their increased confidence in responding to health issues.

Confidence may be imparted through the acquisition and reinforcement of fundamental life-saving skills during the school years (Elewa and Saad, 2017). At school-going age children are more inclined to accept changes in viewpoints and more receptive to changes in their way of life, these life years have been seen as a crucial opportunity to promote health through education. According to the World Health Organization, an effective school health program can hold among the most cost-effective investments, a country makes to simultaneously improve health and education (Elewa and Saad, 2017; McGuire, 2013).

The motive to inspire and equip children to advocate for the overall health development, and well-being of their families, communities, and themselves on a global scale, gave birth to an education strategy, the Child-to-Child (C-to-C) approach. The approach was proposed by Hove Hawz and Morley in 1978 and promoted by the Child-to-Child Trust, housed within the University of London. The program was formally introduced in 1979 (the World Children's Year), and since then numerous nations have adopted it. The program has reached over 70 nations and impacts around a million children annually. The C-to-C approach received the Maurice Pate Leadership for Children Award in 1991, which is the highest honor bestowed by UNICEF, for its "exceptional and excellent leadership in and contribution to the survival, protection, and development of children worldwide" (Woznica, 2013).

Introduced at the turn of the 21st century, the C-to-C approach has become crucial in addressing health issues in communities, particularly in developing nations (Boulton *et al.*, 2019). The approach thrives best in group settings, such as school environments, where children of similar ages can be gathered (Jeong and Frye, 2020). It involves active participation in activities that encourage a healthy lifestyle, with children learning from and helping each other. Children's tendency to learn by imitating their peers is leveraged in this method. Teachers or school health nurses provide instructions to guide children in developing behaviors that contribute to better healthcare practices (Mwanga *et al.*, 2008).

The primary characteristics of the C-to-C approach are the direct participation of children in the educational process and the promotion of health. The technique encourages active "learning" and "doing" by utilizing a six-step action-learning cycle that connects learning to real-world experiences as outlined in Figure 1. Through this method, children utilize mediums



Source(s): Authors' own work

Figure 1. Child -to child approach: six-step cycle

such as songs, skits, games, and other innovative, enduring, and scalable approaches for promoting health and well-being among their peers and adults (Woznica, 2013; Layout 1 (physio-pedia.com)).

Even with the rise of smart gadgets and learning, the C-to-C approach remains appealing when well-facilitated. Amidst the COVID-19 pandemic, there is a need for increased awareness, especially among children who are considered vulnerable. Initiatives, like the release of a COVID-19 awareness comic by PGIMER, Chandigarh, on behalf of the Government of India, have been praised for reinforcing the C-to-C concept in disseminating health information (Khaiwal and Mor, 2020). The program has proved its success in different settings, among varied populations, in different projects, refugee camps, communities, families, and different health areas (Woznica, 2013).

Current study

Numerous studies have been performed worldwide to evaluate the impact of C-to-C interventions on various child health themes. These research studies observed significant improvement in post-intervention mean score in comparison to that of knowledge led by an investigator, training by an educator, by lecture method, by an adult, and education by the teacher in diverse health domains (Leena and D'Sousa, 2014; Farrokhmanesh *et al.*, 2018; Anbazhagan *et al.*, 2016; Sonavane *et al.*, 2012; Karami *et al.*, 2019). However, despite this wealth of evidence, an astonishing gap persists. To the best of our knowledge, the academic landscape remains devoid of a comprehensive systematic review that fully explains the diverse spectrum of C-to-C intervention studies.

The present systematic review is a pioneering effort aimed at integrating the findings of numerous studies investigating the effect of C-to-C intervention across various health areas among children. The goal of this study is to gather, summarize, and critically evaluate data extracted from globally published peer-reviewed publications that examine the effect of the C-to-C approach on knowledge, attitude, or practices. The findings of this review might serve as invaluable resources for program developers and decision-makers to develop more potent school-based health education programs based on the C-to-C approach. Moreover, it may illuminate the ways to adopt them with the regular curriculum. In essence, the findings of the current review will help to decipher and interpret the scientific work and may guide further research toward more influential pathways in the realm of child health education.

Research methodology

The design and methodology to conduct the systematic review were established as per the standards of Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Moher *et al.*, 2015). In February 2023 we registered our review methodology with PROSPERO (CRD42023396317). The PICO guidelines were used to determine eligibility requirements (Jensen, 2018).

Data source

We performed a systematic search of the electronic database for all the published literature since inception through four different data sources, namely, Pubmed, Cochrane Library, Proquest, and Dimensions AI. Reference lists and citations of included studies were also searched to find additional studies. All the studies that analyze the effectiveness of the C-to-C approach in enhancing the knowledge and awareness regarding symptoms, treatment, or preventive measures of a disease or minor ailments were included.

Data search strategy

The search strategy was iteratively created by using different keywords for children, child-to-child education, awareness, knowledge, and practices as presented in Table 1. These keywords were pulled together with "OR" and "AND" Boolean operators to widen or constrict the search. MeSH terms and syntax were used to map the search initially in PubMed, and then controlled vocabulary and syntax were used to map the search to the other selected databases (Proquest, Cochrane, and Dimensions AI). Also, a random search was performed in all the databases to find out more relevant studies. The initial search was conducted on February 17, 2023, and there was no limitation of geographical area and time period. All the articles since inception that follow the inclusion criteria are included in the study.

Eligibility criteria

To ensure the relevance of studies, following were the inclusion and exclusion criteria for study selection:

Table 1. Reproducible search terms for PubMed

Database	Key terms	Boolean operators	Search strategy
PubMed	Children Knowledge Awareness Practice	AND OR	("children"[All Fields] OR ("child"[MeSH Terms] OR "child"[All Fields] OR "children"[All Fields] OR "child s"[All Fields] OR "children s"[All Fields] OR "childrens"[All Fields] OR "childs"[All Fields])) AND ("child-to-child approach"[All Fields] OR "child-to-child programme"[All Fields]) AND ("knowledge"[MeSH Terms] OR "knowledge"[All Fields] OR "knowledge s"[All Fields] OR "knowledgeability"[All Fields] OR "knowledgeable"[All Fields] OR "knowledgeably"[All Fields] OR "knowledges"[All Fields] OR ("awareness"[MeSH Terms] OR "awareness"[All Fields] OR "aware"[All Fields] OR "awarenesses"[All Fields]) OR ("practicability"[All Fields] OR "practicable"[All Fields] OR "practical"[All Fields] OR "practicalities"[All Fields] OR "practicality"[All Fields] OR "practically"[All Fields] OR "practicals"[All Fields] OR "practice"[All Fields] OR "practice s"[All Fields] OR "practiced"[All Fields] OR "practices"[All Fields] OR "practicing"[All Fields]))

Source(s): Authors' own work

Inclusion criteria
(a) Original observational and interventional research published in peer-reviewed journals in English (b) Full-text articles consisting of the Child-to-Child approach to improving the healthcare-related knowledge, attitude, and practices among children (c) The studies that chose a child as a tutor/trainer/educator for peer or other children.

Exclusion criteria
(a) Studies published in a language other than English (b) Studies for which full text was not available (c) All the review articles, field reports, meta-analyses, newsletters, and articles from magazines (d) Studies that do not target any specific health variable (e) Studies that involve the child as an educator for family or community.

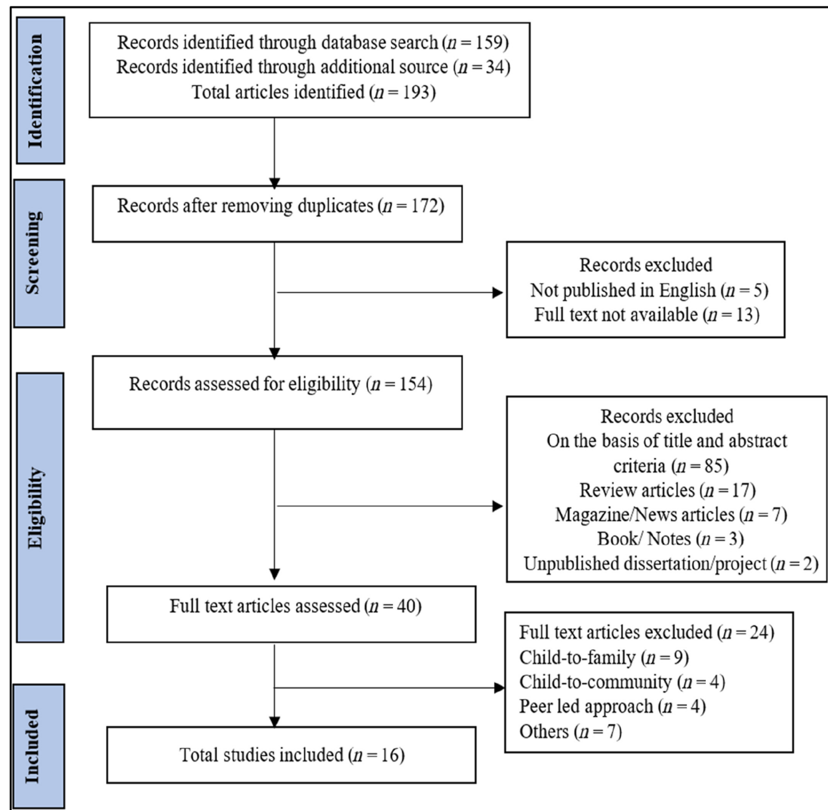
Study selection
Throughout the search, all of the retrieved items from each database were recorded. All the duplicates were eliminated and the remaining articles including the title, abstract, and full text were assessed against the inclusion and exclusion criteria. The PICO guidelines were used to determine eligibility criteria in Table 2 and the PRISMA chart was used to identify the eligible articles in Figure 2.

Quality assessment
The systematic review included a critical evaluation of the studies' methodologies that satisfied the predetermined inclusion criteria. The Joanna Briggs Institute (JBI) Critical Appraisal Checklist for Randomized Controlled Trials which encompasses thirteen evaluation criteria, was adopted to assess the quality of identified Randomized Controlled Trials (Barker *et al.*, 2023). The second checklist, the JBI Critical Appraisal Checklist for

Database	Framework	Search items	Number of articles
PUBMED	Population (P) Intervention or Condition (I) Outcome (O)	("children") OR (child) ("child-to-child approach") OR ("child-to-child programme") ((knowledge) OR (awareness)) OR (practices)	P: 2,997,637 I: 19 P + I: 19 O: 2,658,693 P + I + O: 18
PROQUEST	Population (P) Intervention or Condition (I) Outcome (O)	("children") OR (child) ("child-to-child approach") OR ("child-to-child programme") ((knowledge) OR (awareness)) OR (practices)	P: 1,454,811 I: 18 P + I: 18 O: 2,609,284 P + I + O: 15
DIMENSIONS AI	Population (P) Intervention or Condition (I) Outcome (O)	("children") OR (child) ("child-to-child approach") OR ("child-to-child programme") ((knowledge) OR (awareness)) OR (practices)	P: 15,995,000 I: 18 P + I: 18 O: 3,953.623 P + I + O: 117
COCHRANE	Population (P) Intervention or Condition (I) Outcome (O)	("children") OR (child) ("child-to-child approach") OR ("child-to-child programme") ((knowledge) OR (awareness)) OR (practices)	P: 194,792 I: 10 P + I: 10 O: 192,913 P + I + O: 9

Source(s): Authors' own work

Table 2. Search strategy—PICO table and databases



Source(s): Authors' own work

Figure 2.
PRISMA flow chart

Quasi-experimental Research, comprising nine assessment criteria, was used for the evaluation of Quasi-Experimental studies and Non-Randomized Controlled trials (Tufanaru *et al.*, 2020). The categories "yes," "no," "unclear," and "not relevant" were assigned to each criterion. Every criterion that was answered "yes" earned one point, and the points were added up to determine the study's overall score. The studies that achieved 50% or more on the quality evaluation indicators, were deemed low risk.

Data extraction and analysis

For inclusion, titles and abstracts underwent a single screening. At full-text review, the remaining articles were double-screened. A standard set of data on study and population characteristics, as well as details about the publication, such as the author(s) and year, study location, sample size, study design, and the health area for which the intervention was utilized, was extracted using a spreadsheet. The meta-analysis was not performed as all the included studies reported different health issues or the comparator group for the intervention study was not reported by all the included studies. To gain a better understanding of the interventions the papers included in the systematic review were evaluated by integrating narrative analysis with tabulation, which created a multifaceted approach to comprehending the data. Narrative synthesis combines and interprets findings

from multiple studies in a qualitative manner, focusing on creating a coherent and meaningful narrative that captures the essence of the research. Tabulation introduced an organized visual representation that allowed for a structured comparison of key elements across studies.

A narrative synthesis of studies may be conducted, where studies exhibit considerable diversity whether in clinical aspects or methodological approaches, rendering them unsuitable for aggregation through a meta-analysis. The main objective of the narrative analysis is to formulate a cohesive textual narrative and consolidate the evidence regarding the effectiveness of the intervention. The distinguishing feature of narrative synthesis is the use of a textual method. The narrative synthesis was initiated by constructing a concise, descriptive summary of the studies incorporated in the review, followed by a summary of the individual study findings. The studies were systematically and logically evaluated, encompassing the identification of significant similarities and distinctions among them (Popay *et al.*, 2006).

Results

The results have been presented with a focus on the characteristics and quality assessment of the included studies, as well as the impact of C-to-C intervention.

Characteristics of the study

The initial search across databases yielded a substantial pool of 193 studies. Following meticulous de-duplication and preliminary screening, a focused selection process led to the thorough examination of 40 studies. Eventually, a rigorous evaluation led to the inclusion of 16 carefully selected studies in the final review (Figure 2). The authors' names, publication year, study design, sample size, study setting, the mean/median score pre- and post-intervention, and the *p*-value of the included studies are outlined in Table 3.

A map illustrating the contribution of different countries in publication for the included studies is displayed in Figure 3.

Predominantly, the studies were carried out in developing nations, with India leading the count with ten publications (Anbazhagan *et al.*, 2016; Leena and D'Sousa, 2014; Mathew and Sujatha, 2018; Muneeswari, 2014; Narayani *et al.*, 2021; Priya and Abirami, 2016; Pushpalatha, 2020; Rarichan *et al.*, 2018; Sonavane *et al.*, 2012; Walvekar *et al.*, 2006). This was followed by three studies from Iran (Farrokhmanesh *et al.*, 2018; Karami *et al.*, 2019; Kaveh *et al.*, 2016), and one each from Turkey (Ergün *et al.*, 2013) and Egypt (Elewa and Saad, 2017). The only study from a developed country was from Ireland (Freeman and Bunting, 2003). The spectrum of publication years ranged from the earliest in 2003 to the most recent in 2022. Sample sizes exhibited diversity, ranging between 41 and 460 participants. Predominantly, the study settings were within primary schools situated in rural or village contexts. Most of the studies adopted non-probability sampling techniques for the allocation of participants among intervention and control groups. None of the studies has reported any of the blinding techniques for the participant, researcher, or outcome assessor.

Quality assessment of included articles

The systematic review included two Randomized Control Trials (Farrokhmanesh *et al.*, 2018; Freeman and Bunting, 2003) and fourteen Quasi-experimental studies/non-randomized controlled trials/pretest-posttest experimental design (Anbazhagan *et al.*, 2016; Elewa and Saad, 2017; Ergün *et al.*, 2013; Karami *et al.*, 2019; Kaveh *et al.*, 2016; Leena and D'Sousa, 2014; Mathew and Sujatha, 2018; Muneeswari, 2014; Narayani *et al.*, 2021; Priya and Abirami, 2016; Pushpalatha, 2020; Rarichan *et al.*, 2018; Sonavane *et al.*, 2012; Walvekar *et al.*, 2006).

Table 3. Characteristics of included studies

Studies (reference)	Journal	Country	Study design	Study setting	Inclusion criteria	Sampling technique
Freeman and Bunting (2003)	Health education	Ireland	Randomized Control Trial	Primary Schools (Disadvantaged/deprived) from North and West Belfast	Children attending the selected primary school, age group 5 and 11 years	Stratified-cluster sampling
Leena and D'Sousa (2014)	Nitte University Journal of Health Science	India	Quasi-Experimental	Primary school of Kannada medium from Mangalore taluk	Children of grade five from Kannada medium primary schools of Mangalore taluk	Cluster sampling
Mathew and Sujatha (2018)	Nitte University Journal of Health Science	India	Pretest- Posttest design	The rural school (Aided higher primary school, PavoorHarekala) at Mangalore	Children studying in a rural school in Mangalore, age group 9–10 yrs	Purposive sampling
Walvekar *et al.* (2006)	Indian Journal of Community Medicine	India	Non-Randomized Control Trial	Government primary school of Mastmaradi and Shindoli village of district Belgaum, Karnataka	Children studying in grade six (mean age 11.80 + 0.68) or (mean age 11.95 + 0.56)	–
Ergün *et al.* (2013)	Journal of School Nursing	Turkey	Quasi-Experimental	Primary school at the center of Odemis	Children studying in primary school at the center of Odemis	Purposive sampling
Narayani *et al.* (2021)	Journal of Pharmaceutical Research International	India	Pretest- Posttest	Bhuvana Krishnan Matriculation School, Kelambakkam, Chengalpattu district, Tamil Nadu, India	Children studying in Bhuvana Krishnan Matriculation School, Kelambakkam, age group 13–15 years and having the habit of eating junk foods	Purposive sampling
Farrokhmanesh *et al.* (2018)	Journal of Holistic Nursing and Midwifery	Iran	Randomized Control Trial	Private and public schools of Rasht city	Children studying in grades three, four, and five entrance and lack of disease	Random cluster sampling
Anbazhagan *et al.* (2016)	Journal of Family Medicine and Primary Care	India	Pretest- Posttest	Government school (Lakkur and Kugur) in Sarjapur PHC	Children attending the selected school, age group 10–19 years	–
Karami *et al.* (2019)	Brazilian Journal of Oral Science	Iran	Quasi-Experimental	Elementary schools in Tehran's District	Children studying at grade four and living in Tehran	Simple random sampling

(continued)

Table 3.

Studies (reference)	Journal	Country	Study design	Study setting	Inclusion criteria	Sampling technique
Elewa and Saad (2017)	Journal of Nursing Education and Practice	Egypt	Quasi-Experimental	Governmental primary schools in El-Massara Administration, Cairo Governorate, Egypt	Children studying in fifth grade, age group 11–13 years	Multi-stage random sampling
Sonavane *et al.* (2012)	Al Ameen Journal of Medical Sciences	India	Quasi-Experimental	Government-aided school in urban Bangalore	Children studying in grade six and seven	Simple random sampling
Muneeswari (2014)	Global Journal of Medicine and Public Health	India	Quasi-Experimental	Tamil medium higher secondary school at Dharapuram in Tamil Nadu	Children studying in the eighth standard	Stratified random sampling
Kaveh *et al.* (2016)	International Journal of Medical Research & Health Sciences	Iran	Quasi-Experimental	Public elementary schools in south-west provinces of Iran	Female children studying in fourth grade	Random cluster sampling
Priya and Abirami (2016)	International Journal of Pharmacy and Biological Sciences	India	Pretest- Posttest	Panchayat union middle school, Chengalpet	Children studying in fifth and seventh grade	Convenience sampling
Rarichan *et al.* (2018)	International Journal of Advanced Research	India	Pretest- Posttest	St. Paul"s Bethany School, Kolenchery, Kerala	Children studying in third to fifth grade, aged group 8–11 years	Convenience sampling
Pushpalatha (2020)	International Journal of Science and Research	India	Quasi-Experimental	Government High school, Amalapuram	Children studying in seventh to eighth grade	Convenience sampling

Source(s): Authors' own work

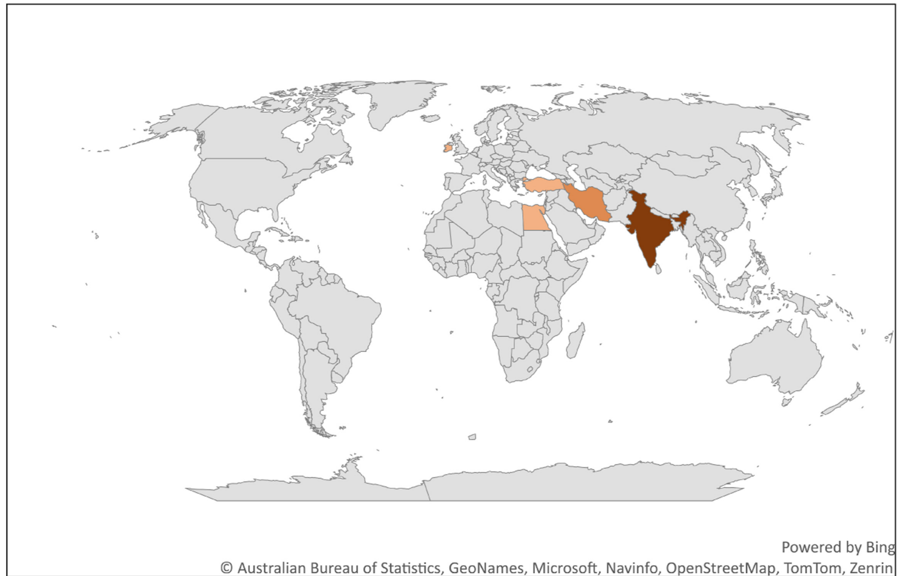


Figure 3.
Country's contribution

Source(s): Authors' own work

According to the JBI Critical Appraisal Checklist for RCTs, one of the RCT studies obtained a total quality score of eight out of a possible 13 (Farrokhmanesh *et al.*, 2018), whilst the other received a total quality score of nine out of a possible 13 (Freeman and Bunting, 2003) (Supplementary file 1a). Seven of the fourteen quasi-experimental studies obtained quality scores of seven (Elewa and Saad, 2017; Ergün *et al.*, 2013; Mathew and Sujatha, 2018; Muneeswari, 2014; Narayani *et al.*, 2021; Priya and Abirami, 2016; Rarichan *et al.*, 2018), and another seven received a score of eight out of nine (Anbazhagan *et al.*, 2016; Karami *et al.*, 2019; Kaveh *et al.*, 2016; Leena and D'Sousa, 2014; Pushpalatha, 2020; Sonavane *et al.*, 2012; Walvekar *et al.*, 2006) (Supplementary file 1b).

Outcome measures

The studies incorporated in the review investigated the effectiveness of the C-to-C approach on different health themes as depicted in Figure 4. These articles evaluated the approach to determine its effect on participants' knowledge, attitude, or practices concerning diverse health determinants or morbidities. Almost all studies utilized a self-structured questionnaire and few had observational checklists in addition to the questionnaire as a tool to gauge the intervention efficacy. It's noteworthy that all the included articles encompassed pretest-posttest study design. Among all, seven studies compared the C-to-C intervention approach with routine teaching, instructor-led, adult-led, or educator-led teaching methods and observed a significant difference (Anbazhagan *et al.*, 2016; Ergün *et al.*, 2013; Farrokhmanesh *et al.*, 2018; Karami *et al.*, 2019; Leena and D'Sousa, 2014; Sonavane *et al.*, 2012; Walvekar *et al.*, 2006). In contrast, six articles did not incorporate a control group for comparison (Elewa and Saad, 2017; Mathew and Sujatha, 2018; Muneeswari, 2014; Narayani *et al.*, 2021; Priya and Abirami, 2016; Rarichan *et al.*, 2018). Among the remaining, a comparison was drawn between the C-to-C approach and a control group that received no educational intervention or training (Freeman and Bunting, 2003; Kaveh *et al.*, 2016; Pushpalatha, 2020).

Freeman & Bunting, 2003
Narayani *et al.*, 2021
Farrokhmanesh *et al.*, 2018
Kaveh *et al.*, 2016
Dietary knowledge/ Eating behavior

Ergun *et al.*, 2013
Elewa & Saad, 2017
Muneeswari, 2014
Pushpalatha, 2020
Road accidents/ Injuries/ First aid

Mathew & R., 2018
Karami *et al.*, 2019
Rarichan *et al.*, 2018
Hand Hygiene/Oral health

Point "Hand Hygiene/Oral health"
Value: 3

Priya & Abirami, 2016
Worm infestation

Sonavane *et al.*, 2012
Ear health

Walvekar *et al.*, 2006
Diarrhea

Anbazhagan *et al.*, 2016
Cancer

Source(s): Authors' own work

Figure 4.
Health theme-wise publications

The child-to-child intervention

The studies contained in the review covered C-to-C intervention for children's self-development and the involvement of trained children as an educator or trainers for other children. Studies represented different mechanisms and modules that have been adopted by the author to equip children with the skills to educate others. Furthermore, the studies detailed various techniques employed by children to effectively educate their peers. The study for investigation of snacking habits adopted a Snack Fact program of six weeks. The initial three weeks were consumed to train students with the help of specific cards. Subsequently, the fourth and fifth weeks were allocated to prepare their plan and materials to educate fellow children. The culmination of this process occurred during the sixth week, wherein the acquired knowledge was shared with their peers (Freeman and Bunting, 2003).

In two studies, the approach involved the use of pictorial and visual representation in the form of pamphlets, posters, pictures, and animations (Farrokhmanesh *et al.*, 2018; Karami *et al.*, 2019). Another two studies combined theoretical sessions with practical training (Anbazhagan *et al.*, 2016; Elewa and Saad, 2017). A different approach was taken in another study, which involved lectures with songs, games, and experiments (Walvekar *et al.*, 2006). In additional studies, innovative teaching materials were introduced to make the study content easily understandable for children. For instance, activity leaflets and illustration cards (Ergün *et al.*, 2013), and flashcards and booklets (Priya and Abirami, 2016). A separate study facilitated learning through group discussions and a comprehensive training manual (Kaveh *et al.*, 2016), whilst yet another introduced a checklist crafted by experts (Mathew and Sujatha, 2018). These diverse materials were thoughtfully designed to engage children effectively and enhance their understanding of the subject matter. One more article within the compilation had employed health education materials and teaching aids as part of their approach (Leena and D'Sousa, 2014). The remaining studies did not explicitly state the particular type of materials utilized for children's training (Muneeswari, 2014; Narayani *et al.*, 2021; Pushpalatha, 2020; Rarichan *et al.*, 2018; Sonavane *et al.*, 2012).

Effect of child-to-child intervention

All the studies included in the current review reported positive outcomes of C-to-C interventions on children's health literacy as outlined in Table 4. A study assessing the impact of C-to-C on knowledge, attitude, and practice regarding diarrhea, reported statistically significant improvements ($p < 0.01$) in all three dimensions of health

Table 4.
Summary of findings of included studies

Studies (reference)	Sample size	Comparison	Instrument	Measurement	Outcomes Pre-test mean (SD)/Median	Outcomes Post-test mean (SD)/Median	*p* value Pre-post test	*p* value Between groups	Quality assessment
Freeman and Bunting (2003)	IG: 240 CG: 242	Control group received no education/ training	Questionnaire, Activity Sheet, and Rubbish Bag	Knowledge	Not mentioned	Not mentioned	Not mentioned	Not mentioned	9/13[a]
Leena and D'Sousa (2014)	IG: 50 CG: 50	Education provided by an investigator	Questionnaire	Knowledge	IG: 21.56(4.78) CG: 23.72(5.57)	IG: 25.9(4.78) CG: 28.14(5.57)	$p < 0.05$	$p < 0.05$	8/9[b]
Mathew and Sujatha (2018)	IG: 60	No Comparison group	Sociodemographic questionnaire & Observational Checklist for Hand washing practices	Practices	IG: 4.91(1.54)	IG: 12.05(1.46)	$p < 0.001$		7/9[b]
Walvekar *et al.* (2006)	IG: 54 CG: 54	Control group received education from health worker	Questionnaire	Knowledge Attitude Practices	IG: 1.44 CG: 4.04 IG: 1.24(1.36) CG: 1.43(1.33) IG: 0.65(2.90) CG: 1.83(2.33)	IG: 23.57 CG: 3.20 IG: 2.96(0.37) CG: 1.07(1.30) IG: 4.17(1.24) CG: 1.48(2.42)	IG: $p < 0.01$		8/9[b]
Ergün *et al.* (2013)	IG: 20 CG: 21	Education provided by the instructor	Sociodemographic questionnaire and scale for students' attitudes toward preventing school injuries	Attitude	IG: 151.95(25.08) CG:161.23(17.75)	IG:180.80(11.64) CG:172.33(20.57)	IG: $p < 0.01$ CG: $p < 0.01$	$p > 0.05$	7/9[b]
Narayani *et al.* (2021)	IG: 150	No Comparison group	Questionnaire	Knowledge	IG: 5.66 (1.36)	IG: 15.69 (0.46)			7/9[b]

(*continued*)

Table 4.

Studies (reference)	Sample size	Comparison	Instrument	Measurement	Outcomes Pre-test mean (SD)/Median	Outcomes Post-test mean (SD)/Median	p value Pre-post test	p value Between groups	Quality assessment
Farrokhmanesh *et al.* (2018)	IG:68 CG(I):68 CG(II):68	CG(I) received education from an educator and CG(II) received no education	Sociodemographic questionnaire & Observational food frequency Checklist	Practices	IG: 11.30(2.21) CG(I): 12.85(1.61) CG(II): 12.81(0.088)	IG: 12.63(1.83) CG(I): 12.99(1.53) CG(II): 12.16(2.04)		IG:CG(I) $p < 0.05$ IG:CG(II) $p < 0.05$	8/13[a]
Anbazhagan *et al.* (2016)	IG: 104 CG: 96	CG received information from the lecture method	Questionnaire	Knowledge	Not mentioned	Not mentioned		Not mentioned	8/9[b]
Karami *et al.* (2019)	IG: 60 CG: 60	Control group educated by teacher	Questionnaire	Knowledge Attitude Practices	Not mentioned	IG:7.23 (2.14) CG: 7.28 (1.70) IG: 34.85(3.40) CG: 30.78(4.92) IG: 3.18(1.30) CG: 2.15(1.64)		$p > 0.05$ $p < 0.05$ $p < 0.05$	8/9[b]
Elewa and Saad (2017)	460	No Comparison group	Questionnaire for knowledge and attitude and Observational Checklist for first-aid practices	Knowledge Practices	IG:10.80 (4.420) IG: 15.03(6.60)	IG: 35.02 (4.84) IG: 31.96(6.33)	$p < 0.001$		7/9[b]

(*continued*)

Table 4.

Studies (reference)	Sample size	Comparison	Instrument	Measurement	Outcomes Pre-test mean (SD)/Median	Outcomes Post-test mean (SD)/Median	*p* value Pre-post test	*p* value Between groups	Quality assessment
Sonavane *et al.* (2012)	IG: 105 CG: 107	Control group received training from adults	Questionnaire	Knowledge	IG: 4.94 (1.29) CG: 4.89(1.3)	IG: 7.01 (1.85) CG: 6.76(1.83)	$p < 0.001$		8/9[b]
Muneeswari (2014)	200	No comparison group	Questionnaire	Knowledge	IG: 10.43(4.13)	IG: 21.55(3.96)	$p < 0.05$		7/9[b]
Kaveh *et al.* (2016)	IG: 89 CG: 84	Control group received no education/training	Questionnaire	Attitude	IG: 5.56 (06.42) CG: 6.82 (82.41)	IG: 4.37 (44.47) CG: 6.77 (41.56)	$p < 0.001$	$p < 0.05$	8/9[b]
Priya and Abirami (2016)	100	No comparison group	Questionnaire	Knowledge	IG: 13.78(2.96)	IG: 29.56(3.29)	$p = 0.000$		7/9[b]
Rarichan *et al.* (2018)	70	No comparison group	Sociodemographic questionnaire & Hand washing checklist by WHO	Practices	IG: 6.5(1.1)	IG: 12.5(1.3)	$p = 0.001$		7/9[b]
Pushpalatha (2020)	50	Control group received no education/training	Questionnaire	Knowledge	IG: 12.52(2.24)	IG: 26.87(2.36)	$p < 0.001$		8/9[b]

Source(s): Authors' own work

improvement in the intervention group. These dimensions encompassed overall knowledge (P_{re} mean 1.44; P_{ost} mean 23.57), including knowledge for causes (P_{re} mean −0.77, SD 3.43; P_{ost} mean 4.96, SD 1.77), signs and symptoms(P_{re} mean −0.24, SD 2.78; P_{ost} mean 5.98, SD 1.52), and treatment(P_{re} mean 0.91, SD 2.01; P_{ost} mean 7.41, SD 1.17), Furthermore, notable improvements were observed in attitude (P_{re} mean 1.24, SD 1.36; P_{ost} mean 2.96, SD 0.37)and practices (P_{re} mean 0.65, SD 2.90; P_{ost} mean 4.17, SD 1.24) after the C-to-C intervention (Walvekar *et al.*, 2006).

Another study focused on oral health education, found significantly improved ($p < 0.05$) attitude (P_{ost} mean 34.85, SD 3.40), and practices (P_{ost} mean 3.18, SD 1.30) amongst children who received peer-led education in comparison to those who received teacher-led education. However, at the same time, the study observed no significant improvement ($p > 0.05$) in the knowledge of children no matter from whom they received training (Karami *et al.*, 2019).

In studies employing the pretest-posttest design, the C-to-C approach led to remarkable improvements across diverse domains. Substantial enhancements with a significance level at $p < 0.001$, were noted in first aid knowledge (P_{re} mean 10.80, SD 4.420; P_{ost} mean 35.02, SD 4.84) and practices (P_{re} mean 15.03, SD 6.60; P_{ost} mean 31.96, SD 6.33) (Elewa and Saad, 2017). Similarly, noteworthy results were observed in two studies on hand hygiene practices ((P_{re} mean 4.91, SD 1.54; P_{ost} mean 12.05, SD 1.46) at $p < 0.001$ (Mathew and Sujatha, 2018), (P_{re} mean 6.5, SD 1.1; P_{ost} mean 12.5, SD 1.3) at $p = 0001$ (Rarichan *et al.*, 2018). Likewise, significant findings were evident in dietary knowledge (P_{re} mean 5.66, SD 1.36; P_{ost} mean 15.69, SD 0.46) (Narayani *et al.*, 2021), knowledge of first aid (P_{re} mean 10.43, SD 4.13; P_{ost} mean 21.55, SD 3.96) at $p < 0.05$ (Muneeswari, 2014), and knowledge regarding worm infestation (P_{re} mean 13.78, SD 2.96; P_{ost} mean 29.56, SD 3.29) at p=0.000 (Priya and Abirami, 2016).

Studies that employed the C-to-C approach to enhance children's knowledge exhibited significant post-intervention knowledge improvements. The study for knowledge enhancement about road accidents had significant findings (P_{re} mean 12.52, SD 2.24; P_{ost} mean 26.87, SD 2.36) at $p < 0.001$ (Pushpalatha, 2020), education on prevention from worm infestation (P_{re} mean 21.56, SD 4.78; P_{ost} mean 25.9, SD 4.78) at $p < 0.05$ (Leena and D'Sousa, 2014), knowledge regarding ear health (P_{re} mean 4.94, SD 1.29; P_{ost} mean 7.01, SD 1.85) at $p < 0.001$ (Sonavane *et al.*, 2012).

Another study presented a significant change $p < 0.01$ in the attitude of school children toward the prevention of injuries (P_{re} mean 151.95, SD 25.08; P_{ost} mean 180.80, SD 11.64) (Ergün *et al.*, 2013). A separate study evaluated the effectiveness of the C-to-C approach for improving the nutritional status within the study group, as compared to the control group, indicated a significant difference $p > 0.05$ (P_{re} mean 11.30, SD 2.21; P_{ost} mean 12.63, SD 1.83) (Farrokhmanesh *et al.*, 2018).

Evaluating the C-to-C approach, a study investigated its effectiveness in fostering a positive attitude among children to improve eating behavior, both before intervention and following one and six weeks (P_{re} mean 5.56, SD 6.42; P_{ost} mean 4.37, SD 44.47; P_{ost} mean 5.13, SD 44.47) respectively at $p < 0.001$. Grounded in the theory of planned behavior, the study demonstrated no substantial shift in perceived behavioral control between the study and control groups before intervention ($p = 0.651$). However, post-intervention, noteworthy alterations in eating behavior were observed at one ($p = 0.015$) and six ($p < 0.001$) weeks later (Kaveh *et al.*, 2016).

Discussion

The purpose of this systematic study was to assess the impact of C-to-C interventions on the knowledge, attitude, or practices for health among children. The review incorporated a total of sixteen studies published spanning from inception to 2022. Notably, the studies reveal a

range of outcomes that align with the principles of the C-to-C approach, facilitating knowledge transfer, attitude improvement, and behavior change among children. The studies exhibited a certain degree of variability or heterogeneity, particularly in instrument/tool, techniques adopted to train the study group, teaching approach used for the control group, and the specific health domain addressed.

The included studies showed an undesirable trend in children's eating frequency and a shift to less regulated grazing or snacking that resulted in dental caries and malnutrition (Farrokhmanesh *et al.*, 2018; Freeman and Bunting, 2003; Kaveh *et al.*, 2016; Narayani *et al.*, 2021). The findings demonstrate that the instructional training program using a C-to-C approach was statistically effective in increasing the knowledge of teenagers since in the post-test, all of them had acceptable knowledge of junk food (Narayani *et al.*, 2021). The improvement in children's attitudes is perhaps due to the result of their enhanced awareness and the beneficial effects of the educational intervention. After the intervention, the mean score for perceived behavioral control increased in the intervention group but stayed unchanged in the control group (Kaveh *et al.*, 2016). The mean nutrition score changes in the intervention group were statistically significant as compared to the educator-to-child and control groups, and they had more educational changes than the control group (Farrokhmanesh *et al.*, 2018).

An article in a global education magazine mentioned how the C-to-C program improved health in Liberia's displaced camps. Kids aged 10–14 years were trained in hygiene, with messages through dramas and talks, and reported fewer health problems post-intervention like fever and diarrhea, depicting children as more impactful agents than outsiders (Mathew and Sujatha, 2018). Several additional studies echoed these outcomes, revealing a noteworthy rise in hand hygiene scores among primary school students who embraced the C-to-C approach (Mathew and Sujatha, 2018; Rarichan *et al.*, 2018).

Beyond hand hygiene, the approach has emerged as a potent tool for promoting oral health. On comparing the effect of the peer-led approach (C-to-C approach) and teacher-led approach on oral health behavior it was observed that the knowledge levels increased in both the teacher-led and peer-led groups, but when comparing the mean knowledge scores before and after the intervention, it became clear that C-to-C was more successful at increasing participants' awareness of oral health (Leena and D'Sousa, 2014). This trend persists as two other studies, focusing on ear health and worm infestation knowledge improvement, validated the C-to-C approach's superiority over Adult-to-Child and traditional teaching methods (Sonavane *et al.*, 2012).

A student project conducted in Karnataka presented an improvement in the knowledge score of the community for the causes of diarrhea after the intervention (Naik, 1994). This positive impact aligns with the findings of another study, which not only revealed an overall improvement in understanding the signs and symptoms of diarrhea but also showcased a shift in attitudes towards treating diarrhea and the adoption of healthy preventive measures, such as washing their hands before eating and after using the toilet and maintaining regular nail trims (Walvekar *et al.*, 2006).

Injury to children is another serious public health issue that needs immediate response and thus the knowledge of first-aid plays a crucial role. To minimize injuries, knowledge of first aid practices and a positive attitude toward the prevention and treatment of injuries is required. Both the C-to-C approach and the instructor-led approach had a similar post-test effect on the student's attitudes (Ergün *et al.*, 2013). Contrary, another study showed a significant improvement in post-test scores for knowledge and first-aid practice among the study group (Muneeswari, 2014; Elewa and Saad, 2017). Moreover, a significant effect on the posttest knowledge score of children to prevent road accidents was also observed (Pushpalatha, 2020). Therefore, C-to-C training might be utilized as a substitute for traditional healthcare training and the strength of the C-to-C approach can be enhanced by using a structured teaching plan.

Building upon the effectiveness of the C-to-C intervention in improving knowledge, it is evident that this approach surpasses conventional teaching methods, even in the context of cancer education. Schools, being a prime location for engaging adolescents, become a valuable platform for disseminating essential information regarding adolescent risks like smoking, and alcohol consumption that can cause cancer (Anbazhagan *et al.*, 2016).

Although maximum studies showed a significant improvement in post-test scores, it's important to note that some studies have highlighted how various factors can influence the degree of improvement. Factors such as resource availability, family education, and participants' age have been found to impact score improvements, For instance, an association between better healthcare practices to prevent worm infestation with the water facility (Priya and Abirami, 2016), more significant improvement in knowledge score among older students may be due to maturity with age (Muneeswari, 2014; Elewa and Saad, 2017) and socioeconomic status as a major predictor of increasing post-test scores for dietary knowledge (Freeman and Bunting, 2003). This implies the necessity of concentrating efforts and resources on those families and kids who are underprivileged to ensure the positive outcomes of the approach. The understanding of these variables could be useful for developing and conducting C-to-C intervention programs that emphasize the overall development of children.

The review suggests that the C-to-C approach is an effective way to improve the health literacy of children and to utilize their potential to impart behavioral change among other children. Apart from the effect of these extraneous factors, the education provided by peers in school is the best way to eliminate any hesitation, enhancing health literacy and ensuring the children's participation to promote health among peers, family, and community.

Conclusion

C-to-C is an effective approach, not merely educating school children about health, but carving pathways for their survival, diminished morbidity, and mortality. Its impact ripples in three directions: their current health, their future health, and the health of the following generation. This strategy combines what is taught in the classroom with what to do outside of class and at home. In this approach, a child spreads health awareness to peer, younger siblings, and friends, as well as work together to form a positive task force for health.

The results revealed that the C-to-C approach has a significant positive effect in terms of improving child competence, skills, literacy, and attitude towards health and their capability of sharing the gained knowledge with others. The approach makes children health agents who can bring about positive change in their families and communities. When children are allowed to participate, it not only allows them to develop skills and gain experience but also provides valuable insights into legislation and policies that affect them directly. Additionally, their participation helps to safeguard them from being silenced or ignored, leading to better protection.

Children develop their verbal and nonverbal communication skills through practicing successful peer conversation. Additionally, they gain the important life skill of learning how to communicate concepts to others in a way that they can understand. Therefore, the C-to-C approach goes beyond conventional education; it catalyzes profound change, akin to an ensemble where children, acting as accomplished artists, synchronize health, awareness, and societal advancement. Ultimately, their involvement in decision-making processes promotes civic engagement and active citizenship, contributing to better governance.

Implications of research

The C-to-C approach has major practical ramifications of contributing to children's empowerment and well-being. Unlike the traditional method of teaching, the approach

incorporates artistic mediums like songs, games, animations, etc. to ensure the maximum involvement of children and thus improve health literacy.

The study's findings hold significant practical value for various stakeholders. Practitioners, educators, and policymakers can leverage these insights to enhance the design and implementation of C-to-C intervention programs. By integrating holistic health education into the curriculum, practitioners may arm children with essential knowledge and skills related to hygiene, nutrition, disease prevention, mental well-being, and other health-related aspects.

This empowerment not only contributes to individual well-being but also lays the foundation for healthier collective behaviors. Through the use of this strategy, children will get actively involved in teaching and learning from their peers, which develops a sense of responsibility and cooperation. It enables children to take ownership of their health, so that they can inspire behavior change in their peers, families, and community, leading to healthier lifestyles. Educated Children can act as a positive health task force not only for the current but also for future generations by educating and taking care of their siblings.

Limitations and future scope

The systematic literature review offers a comprehensive overview; however, certain limitations should be acknowledged. The absence of a control group in some of the included studies limits the ability to draw direct causal relationships between the approach and health outcomes. It's important to note that the review does not conduct a meta-analysis, which could have provided a more quantitative synthesis of the available data. The included studies primarily focus on short-term outcomes, which necessitate further research to explore the durability of behavior changes induced by C-to-C interventions.

The future research scope regarding the C-to-C approach not only acknowledges its limitations but also holds significant promise for advancing the field. One area of exploration is the assessment of long-term impacts. Conducting longitudinal studies would enable researchers to track participants over an extended period, providing insights into the sustained benefits and potential challenges of the approach. Another crucial aspect is evaluating the effectiveness of the C-to-C approach across different contexts. Understanding how this approach can be adapted and tailored to diverse cultural, social, and economic settings would enhance its applicability and efficacy.

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Supplementary file
Assessment of methodological quality of the studies

JBI critical appraisal checklist for randomized controlled trials	Freeman and Bunting (2003)	Farrokhmanesh *et al.* (2018)
Was true randomization used for assignment of participants to treatment groups?	Yes	Yes
Was allocation to treatment groups concealed?	Unclear	Unclear
Were treatment groups similar at the baseline?	Yes	Yes
Were participants blind to treatment assignment?	No	No
Were those delivering the treatment blind to treatment assignment?	No	No
Were treatment groups treated identically other than the intervention of interest?	Yes	Yes
Were outcome assessors blind to treatment assignment?	No	No
Were outcomes measured in the same way for treatment groups?	Yes	Yes
Were outcomes measured in a reliable way	Yes	Yes
Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analyzed?	Yes	Yes
Were participants analyszed in the groups to which they were randomized?	Yes	Yes
Was appropriate statistical analysis used?	Yes	Yes
Was the trial design appropriate and any deviations from the standard RCT design (individual randomization, parallel groups) accounted for in the conduct and analysis of the trial?	Yes	Unclear

Source(s): Authors' own work

Table A1. Assessment of methodological quality of randomized controlled trial

Table A2. Assessment of methodological quality of non- randomized controlled trial/quasi experimental

JBI critical appraisal checklist for quasi-experimental studies	Leena and D'Sousa (2014)	Mathew and Sujatha (2018)	Walvekar *et al.* (2006)	Ergün *et al.* (2013)	Narayani *et al.* (2021)	Anbazhagan *et al.* (2016)	Karami *et al.* (2019)	Elewa and Saad (2017)	Sonavane *et al.* (2012)	Muneeswari (2014)	Kaveh *et al.* (2016)	Priya and Abirami (2016)	Rarichan *et al.* (2018)	Pushpalatha (2020)
Is it clear in the study what is the cause' and what is the 'effect' (i.e. there is no confusion about which variable comes first)?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Were the participants included in any comparisons similar?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Were the participants included in any comparisons receiving similar treatment/care, other than the exposure or intervention of interest?	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Was there a control group?	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes	No	No	Yes

(*continued*)

Table A2.

JBI critical appraisal checklist for quasi-experimental studies	Leena and D'Sousa (2014)	Mathew and Sujatha (2018)	Walvekar *et al.* (2006)	Ergün *et al.* (2013)	Narayani *et al.* (2021)	Anbazhagan *et al.* (2016)	Karami *et al.* (2019)	Elewa and Saad (2017)	Sonavane *et al.* (2012)	Muneeswari (2014)	Kaveh *et al.* (2016)	Priya and Abirami (2016)	Rarichan *et al.* (2018)	Pushpalatha (2020)
Were there multiple measurements of the outcome both pre and post the intervention/exposure?	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No
Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analyzed?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Were the outcomes of participants included in any comparisons measured in the same way?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Were outcomes measured in a reliable way?	Yes	Yes	Yes	Unclear	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Was appropriate statistical analysis used?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Source(s): Authors' own work

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Therapeutic gardening in English prisons post-pandemic: implications for health and wellbeing

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Abstract

Purpose – Greener on the Outside for Prisons (GOOP) is a therapeutic horticulture programme targeting the high levels of complex health and social care needs in prisons in England. The COVID-19 pandemic and resulting lockdowns led to unprecedented disruption in prisons in England. This paper examines the experiences of prisoners both during and post-lockdowns in four prisons, to understand the effects of participation in GOOP on health and wellbeing after the disruption of restrictions, and identify implications for developing this programme further.

Design/methodology/approach – The paper is based on original qualitative data gathered from in-depth narrative-based interviews and focus groups with prisoners and staff in four English prisons. Audio data was transcribed and subject to a thematic analysis, drawing from a realist-informed lens.

Findings – Thematic analysis revealed five key themes: reimagining the GOOP context; increasing empathy between participants; building sense of coherence; reconnecting with nature and a joined-up connection with provider services. The main arguments centre on horticulture in prisons remaining under-utilised as a means of promoting good health and wellbeing, although there is enthusiasm from staff to provide green spaces for the most vulnerable prisoners and develop a range of mechanisms to connect people in prison with nature.

Originality/value – This paper focuses on new knowledge arising from an unprecedented situation in English prisons, from key stakeholders on the frontline of garden activities. Accounts demonstrate the extent of the health and wellbeing benefits of participation in such activities in this challenging environment, which has implications for practice for prisons more widely.

Keywords Prisons, Health and wellbeing, Settings approach, Horticulture, Pandemic

Paper type Research paper

Introduction

Globally there are estimated to be 11 million people in prisons with approx. 87,560 prisoners in England and Wales (Ministry of Justice, 2023). Many are marginalised, experiencing high levels of social disadvantage coupled with disproportionately high incidences of ill health (Ismail and deViggiani, 2018), complex health and social care needs, aggression, violence, substance misuse and histories of trauma (Baybutt *et al.*, 2019). The high prevalence of mental ill health (WHO, 2023) affected by enforced solitude, violence, a lack of meaningful activity and isolation from social networks (Woodall and Baybutt, 2022). Alongside this, the capacity of the prison estate in England and Wales is expanding (gov.uk, 2022) with a changing demography, creating new pressures and demands (Woodall and Baybutt, 2022). For example, an increasing ageing population which brings higher incidences of age-related ill-health requiring involvement from social care and the need for appropriate age-related interventions (Ridley, 2021). Furthermore, social care implications for women's prisons are distinct from men's prisons with, for example, higher incidences of self-harm (HMIP, 2021).

The COVID-19 pandemic imposed global lockdowns and social distancing measures in the community between March 2020 and December 2021 (Institute for Government, 2022) with

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prisons viewed as a setting particularly vulnerable to infection arguably related to multi-dimensional issues of overcrowding and poor ventilation (Montoya-Barthelemy *et al.*, 2020) – acknowledging the propensity for these to accelerate poor mental health and disease (Woodall and Baybutt, 2022) particularly, high levels of chronic respiratory illness among prisoners (Suhomlinova *et al.*, 2022). Prisons have been described as a further social determinant of health for a population group who are already disproportionately affect by deprivation prior to being imprisoned (De Viggiani, 2006). The global initiative of Sustainable Development Goals [SDGs] (United Nations 2015) aiming to ensure health and justice for all acknowledges prisons with the emphasis is on basic human rights such as sanitation and access to healthcare. However, it has been argued that improving prisoner health can contribute to achieving 15 of the 17 SDGs as prisoners are often the most deprived members of populations, therefore prisons need to be brought to the forefront of the SDGs (Ismail *et al.*, 2021).

Since the beginning of the pandemic, 160 prisoners have died in custody with cause of death either suspected or confirmed to be caused by COVID-19 (gov.uk, 2023), a death rate which is 3.3 times higher than the same age and gender demographic in the general population (Braithwaite *et al.*, 2021). Despite these high levels, the pandemic lockdown regime in prisons is argued to have saved lives through social distancing and other measures (Suhomlinova *et al.*, 2022), but has led to concerns regarding long-term effects on prisoners' health and wellbeing (Howard League for Penal Reform, 2020), particularly mental health. At a time when the wider community clamoured to engage with the outdoors with unprecedented interest in nature, pandemic restrictions in prisons impacted on "meaningful" activities including participation in prison-based gardening, in what has been described as a "lockdown under lockdown" (Schliehe *et al.*, 2022, p. 881). Perceived by prisoners as an additional form of punishment (Maycock, 2022), 85% of prisoners reported 23-h lockdowns during the pandemic with data pre- and post-pandemic revealing marked increases in scoring around severe depression and severe anxiety (User Voice, 2022). In England and Wales, local restrictions on prisons–whereby small groups of prisoners formed "bubbles" as in the community with families - (implemented when, for example, and prisoner tested positive for COVID-19) were continued until October 2022, a considerable length of time after lockdowns and restrictions had been lifted in the wider community (Suhomlinova *et al.*, 2022). During this time, prisoners were locked in their cells for up to 23 h a day for up to 100 days, with resulting negative effects on prisoner mental and physical health (Wainwright and Gipson, 2020; Gipson and Wainwright, 2020).

The therapeutic impacts of gardening in prison are well-documented (Moran *et al.*, 2022; DelSesto, 2022), offering benefits such as a self-perceived improvements in aspects of mental health and wellbeing such as confidence, and sociability (Baybutt *et al.*, 2019; Farrier *et al.*, 2019), decreased depression and increased self-esteem (Lee *et al.*, 2021), knowledge and vocational skills (Ascencio, 2018). Research focused on horticulture in prison environments suggests that access to, and interaction with, nature leads to improved physical, emotional and mental health and wellbeing, as well as showing an increase in pro-social behaviour (Stevens *et al.*, 2018; Toews *et al.*, 2018; van der Linden, 2015). Prison horticulture linked with environmental sustainability programs are gaining increased attention (Sustainability in Prisons Project, 2019) although prison gardens (historically) are generally not designed to impact specifically on therapeutic rehabilitative or behavioural outcomes.

As restrictions were lifted, prisons began resuming GOOP activities although with fewer prisoners and more cautiously than prior to the pandemic. During this period of transition, there was a great deal of change in a brief period of time and, arguably many elements of good working practice prior to the pandemic have not fully resumed (Criminal Justice Joint Inspection, 2022). However, as before the pandemic, prisons remain under-utilised as places to improve and promote opportunities for health and wellbeing, tending to focus on physical as opposed to mental dimensions (Woodall *et al.*, 2014). Yet prisons are a prime opportunity to

intervene and promote health by accessing people who would otherwise be hard to engage, acknowledging that the majority of people in prison return to the community, many moving repeatedly between both settings (Kinner and Young, 2018) and thereby serving to emphasise the importance of prison health for broader society, public health and tackling health inequalities. An analysis of health and wellbeing policy suggested that much more could be done within UK prisons to achieve better outcomes for prisoners (Woodall, 2016) and that prison policy has generally focused on managing the spread of disease in prison (Woodall and Freeman, 2020), rather than focus on "upstream" health and wellbeing interventions to harness a holistic conceptualisation of health that moves beyond disease and ill-health to incorporate a salutogenic dimension (Antonovsky, 1979). While this may be more challenging and take longer to implement arguably it would alleviate some of the problems that these multiple health and wellbeing issues generate (Woodall and Freeman, 2020).

Greener on the outside for prisons (GOOP): a health and justice intervention

Greener on the Outside for Prisons (GOOP) is a long-standing asset-based health and justice intervention that focuses on nature-based activities and a broad programme of therapeutic horticulture in prison settings. Starting in all Public Sector prisons in the North West of England in 2008, it has recently been extended to five prisons in the South West (from 2021) and six prisons in the North East and Yorkshire regions (from 2022).

It utilises a "settings-based" approach to health promotion (Dooris *et al.*, 1998) which reflects an ecological model that takes account of the dynamic, complex interactions between personal, organisational and wider environmental factors that influence health and is underpinned by the principles of equity, participation, empowerment, sustainability and working in partnership (Dooris, 2009). GOOP specifically engages the "whole-prison" (Baybutt and Chemlal, 2016) to embed sustainable change within the systems and processes of the prison by using the existing resources within it. It is therefore tailored to the needs of each prison, taking into account culture, resources, environment and specific population and individual health and social care need. For example, irrespective of how much (or little) "green" space is available or indeed whether the prison is rural or inner city, the focus is to create connections to nature utilising the external and internal resources of the particular prison and taking account of the security restrictions when developing activities. With this, there may be specific considerations relating to an ageing population, young prisoners and women in prison. Moving beyond traditional prison "farms and gardens" work which serves to provide meaningful activity and produce to prisons for "enhanced" (most trusted) prisoners, GOOP works with the prison gardens team, residential units and the health (and/or recovery) provider to identify prisoners who may benefit because their (ill) health and behaviour is more challenging and historically considered more risky by prison security. For example, focusing "upstream" on reducing violence and aggression, improving aspects of mental (ill) health or weight management – recognising that there can be unique challenges to engaging people with their health and that what determines health in this setting can be far removed from that in the wider community. Importantly, and in recognition of the need for prisoners to return to the community more skilled and able to work, GOOP engages the prison education provider and other learning partners to embed relevant qualifications for the cohorts needs. Taking a whole prison approach ensures that the benefits to the wider system are captured. For example, reducing violence and aggression with prisoners has a positive impact on the stability of the prison and the physical and mental wellbeing of staff. People with high levels of poor mental health can struggle to engage with the prison regime, The GOOP programme facilitates this intermediate step to build confidence all round that those who struggle the most can eventually engage with the wider regime. GOOP is often a first step

for someone before being able to go to prison education (or education comes to them via GOOP) and/or participants begin engaging with prison workshops. Therefore, the overall objective of GOOP is to improve joined-up working within prisons to enable prisoners (specifically prisoners who are experiencing more complex, challenging health and social care issues) to participate in activities that connect them with nature including therapeutic horticulture and to improve prison environments for the benefit of both prisoner and staff wellbeing.

As part of a current two-year His Majesties Prisons and Probation (HMPPS) - funded evaluation into GOOP (2022–2024), in order to:

(1) explore prisoner experiences of participation in GOOP both during and post the COVID-19 pandemic, in order to better understand the impacts on health and wellbeing after the disruption of the lockdowns

(2) determine what the implications pandemic-related restrictions to activities are for the longer-term health and wellbeing of prisoners and staff

(3) find new ways of working that improve systems and processes delivery of GOOP particularly for those with high levels of complex, challenging need

Previous evaluations (2008–2012; 2014–2015) have focused on the process of developing GOOP and the impact on participants physical activity, healthy eating and mental wellbeing (Authors; Authors) and findings transferred to the development of activities in more recent prison engagement.

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Research methodology

Participants

The data presented in this evaluation uses qualitative methods: focus groups and interviews with prisoners taking part in GOOP and, separately, with key prison staff. The rationale for this approach is that we wanted to capture a diverse range of in-depth perspectives from those engaged in the referral, management and reporting of GOOP participants to those participating. Focus groups/interviews were conducted with a range of participants, chosen using purposive sampling. Staff and prisoner focus groups were conducted separately to enable both sets of participants to talk more openly about their experience, in confidence. Interview schedules were semi-structured and narrative-focused, inviting participants to describe their experiences of participating in the GOOP programme in their prison.

Audio recordings of focus groups and interviews were transcribed verbatim by a member of the research team. Data is reported from three male prison sites in England (local remand, Category C (resettlement), Category D (open)) and one women's prison involving 25 prisoners and 8 staff (see Table 1).

Ethical considerations and approvals

People in prison are considered vulnerable due to potential constraints on their voluntariness, and whether or not they are able to make informed decisions about participation in the environment they are in (Rouf, 2004). This is coupled with high levels of poor literacy in prison, with 57% of adult prisoners having literacy levels below those expected of an 11-year old (HMIP, 2023).

Table 1.
Anonymised list of participants

Prison	Date	Type	Number
A (rural prison, acres of green space)	September 2022	Prisoner	Focus group [n = 9]
		Staff	Focus group [n = 2]
B (rural prison, acres of green space)	October 2022	Prisoner	Focus group [n = 8]
		Staff	Focus group [n = 2]
C (urban prison, small green space)	October 2022	Prisoner	Focus group [n = 5]
		Staff	Focus group [n = 2]
D (rural prison, large green space)	November 2022	Prisoner	Focus group [n = 3]
		Staff	Interviews [n = 2]
Total			Prisoner [n = 25]
			Staff [n = 8]

Source(s): Author's own work

As is required for undertaking prisons research and evaluation in England and Wales, HMPPS National Research Committee (Ref: 2021–179) and University Ethical Committee (HEALTH 0159) approvals were gained before fieldwork commenced. GOOP participants were invited to take part in focus groups/interviews up to two weeks before they took place, by the appointed GOOP "lead" at each prison (e.g. Senior Manager or practitioner), who supplied participants with University-prepared information sheets and consent forms. GOOP participants were informed by this staff member that participation in the evaluation was entirely voluntary and would not affect their participation in the programme in any way. Focus groups and interviews were held on site in each of the prisons. As participation was voluntary, the focus groups consisted of prisoners who were partaking in GOOP activities and who also consented to take part in the focus groups on the particular days that they were arranged in the presence of the researchers prior to the focus groups and interviews taking place. At this stage, participants were reminded that they were voluntary and that should any participants become distressed during the focus groups, we were able to refer them to the GOOP lead or a member of the healthcare team at the prison. A digital recorder approved by each prison in advance, was used to record focus group discussions and interviews. Audio was transferred to a secure university servers as soon as possible post-recording and provided transcripts for analysis. Researchers were DBS cleared and fully HMPS cleared ("vetted") to undertake research in prisons.

Data analysis

Audio recordings were transcribed verbatim by a member of the research team. Transcripts were subject to a line-by-line two-stage thematic analysis (Braun and Clarke, 2021). One team member's initial coding was then refined by a secondary analysis from another member of the research team. The evaluation used a realist-informed lens, with the rationale being that the programme itself is informed by the notion of "what works, for whom, in what circumstances and why?" (Pawson and Tilley, 1997), understanding that all prisons are different (due to population, size and the physical, social and cultural environment) and that the culture and underlying processes in the prison need to be fully understood in order to maximise the potential of the GOOP programme. In the analysis, a number of CMOCs (context-mechanism-outcome configurations) related to GOOP were drawn from interview and focus group data (De Brún and McAuliffe, 2020). These feature the specific contexts of implementation of the GOOP programme (C), the psychosocial mechanisms (M) that trigger intervention outcomes from the programme and the actual outcomes (O) (De Brún and McAuliffe, 2020). Thematic analysis was framed around this realist-informed lens in a two-stage process, whereby initial coding from one member of the research team was refined by another.

Findings

Five distinct but interrelated CMOCs emerged during data analysis. In this section using exemplar quotes, these themes are discussed to explain the experiences and observations of prisoners and staff before returning to them in the discussion section using a realist-informed evaluation lens (Pawson and Tilley, 1997). Anonymised prisoner quotes are distinguished by number and category of prison (A-D). Staff are distinguished by role and category of prison.

(1) Reimagining GOOP

Context:

The COVID-19 pandemic led to the vast majority GOOP participants at all sites having GOOP and related activities suspended. Prisoners, some of whom had been used to participating for half or full days on the programme, were confined to their rooms, many on their own for extended periods as prisons were rigorous in following strict social distancing rules:

> It affected everything [. . .] no one was working [. . .] you were behind your door for 23 hours a day. You got out for 15 minutes a day at the worst time. You got fed at the door, you weren't even able to queue for your dinner. [Prison B, #2].

> Everybody was stressed out and kicking off because you were never out of your pad. [Prison B, #4]

Gardens staff involved in the implementation of the GOOP programme also experienced negative impacts, sometimes having to fundamentally change their role in the prison from one focused on gardens to taking on multiple broader roles within the organisation in order to meet with the requirements of social distancing and isolation:

> I've got PTSD [. . .] if I think back to that time, it was horrible [. . .] It was awful [. . .] we ended up doing the work of the prisoners [. . .] six days a week. And then right at the end when you're actually knackered we had to go make the snack packs [. . .] pull in a truck full of water [. . .] It was horrendous [. . .] If that happened again, there's no way we'd be doing what we did [. . .] I could cry now [thinking about it]." (Prison B, Horticultural Instructor)

All prisons in the evaluation experienced some degree of reduction in activities, so all faced the task of reintroducing GOOP activities when lockdowns ended.

Mechanism:

Some sites (A, B and D) had more flexibility due to the extent of external grounds, although this was contingent on staffing levels. In prison sites where horticultural activity was permitted to continue, limits (determined by social distancing and staff capacity) were placed on the number of prisoners allowed to work outside in certain spaces (e.g. polytunnels, classrooms) at any one time which drastically reduced the number of prisoners able to benefit from GOOP.

Because of variation between sites (not only in terms of category of prison but size of prison population, size of outdoor/green space, staffing levels, etc.) the experience was inevitably different for prisoners and staff in different sites. Post-lockdown, some prisons were struggling to resume GOOP activities whilst others were forging ahead. This has been exacerbated in some instances with a high degree of staff turnover and new staff.

Outcome:

However, the halting and resumption of activities has, in some prisons, enabled staff to rethink about how to approach GOOP. Prisons that have made the most progress post-pandemic were the ones that saw opportunities to come from an apparently negative situation. For GOOP, new staff have brought fresh perspectives which has potential for positive change in prison culture and the potential for GOOP to more effectively benefit the prison as a whole, and to explore new innovation.

> In a weird way, COVID was like a blank refresh [. . .] So it was time to have a look at what was good, what was bad and what needed to change. And that's what happened really fast [. . .] it helped me try and make an action plan [. . .] it was easier to start from fresh rather than stop and start, if that makes sense. The momentum was gone. So, we just started again, made an action plan for each area, looked at most important areas were to restart and improve the staff as well as business. (Prison B, Industries Manager)

(2) Increasing empathy between prisoners

Context:
Once lockdown restrictions were eased, and GOOP recommenced, prisoners went from being largely isolated to once again working in teams in the gardens.

Mechanism:
Requires prisons overcome the "convenience" of prisoners being locked up, and to understand that reintroducing prisoners to the GOOP programme was beneficial, whilst also acknowledging that the ratio of staff to prisoner is less than prior to the pandemic.

Outcome:
The reintroduction of GOOP activities appears to have increased awareness of and empathy towards other prisoners, and in some cases, staff. For prisoners, these opportunities also led to feelings of connectivity with others:

> We never met before [. . .] we've seen them [other prisoners] but we never discussed things with them. And all of a sudden: oh, I know him. Well I don't know him, but I know I've met him. It gives you a good [feeling]. (Prison A, #6)

The understanding that therapeutic horticulture is a collective activity which fosters a degree of camaraderie amongst prisoners and staff was mentioned frequently in discussions with prisoners and staff:

> I think the big thing in [the Gardens] is [the prisoners] looking out for each other [. . .] Noticing when a colleague isn't feeling great (or is feeling great!) or has something good to say and not putting them down. I think once you've got that respect, as a team, and you all enjoy working with each other, then everything else is easy [. . .] So I think once the respect and the bond is there between the whole team then it makes life easy. And it's their workspace, it gives them ownership of this. (Prison D, Horticultural Instructor)

The idea of GOOP being a caring space was mentioned by one prisoner (living in an inner-city local prison with little green space) who explained how the programme had positively affected their mental health:

> It's just that feeling of like normality, and I'm accepted sort of thing, does that make sense? [. . .] there's not that much stress and focus on making people do things in here: At your own pace, in your own time and when you're comfortable to do something. Knowing that is really helpful, I'm not forced to do anything I don't want to do, I wouldn't come here if I was [. . .] that makes a big difference. Everyone gets that help, I really appreciate that. (Prison C, #3)

(3) Building a sense of coherence

Context:
The up to 23 h per day "in-cell" lockdown had eroded a sense of purpose for many prisoners, unable to engage in even basic activities around the prison which could be defined as useful. The GOOP programme was often mentioned as giving the participants a sense of purpose, where often thinking about being incarcerated was seen as undesirable or unbearable:

> It keeps you motivated, it keeps your mind set on something. (Prison A, #1)

Coupled with this, there was a clear sense of ownership and pride in the upkeep of the prison grounds which had become dilapidated during lockdowns:

> The place would be overgrown and looking like shit if we didn't do [the gardening]. (Prison B, #5)

Mechanism:

GOOP goes beyond the traditional sense of gardening in prison to incorporate more therapeutic components – in that it is not just about purposeful activity (tidying the grounds and giving prisoners something to occupy their time), it develops their health and wellbeing by building teams and giving additional responsibilities to participants.

Outcome:

In one prison, activities were described as confidence building for "Red Band" (most trusted [by security]) prisoners who have a mentoring role and an enhanced set of responsibilities within the gardens. This has the added function of enabling the staff to manage increasing workloads:

> I have probably between 10 and 16 [prisoners] with varying degrees of ability. I've got two Red Bands because I don't have a member of staff . . . They're my backbone . . . (Prison D, Horticultural Instructor)

Part of feeling useful is giving the prisoners the opportunities to share skills with others. This process of informal learning both builds confidence for those sharing skills and increases knowledge of other members of the group, which ultimately may be of benefit for release:

> It'd be nice to give them the opportunity to go for a job and [when] they leave here and they can take [the learning] and do well at an interview. So you'd hope that what we do sort of, you know, prepares them a little bit for that . . . sometimes they are surprised at what they are good at and what they know, and they don't realise they know. (Prison D, Horticultural Instructor)

Whilst much discussion around feeling tired has negative connotations in relation to mental health and wellbeing, an element of horticultural work more broadly discussed by prisoners as a positive, is associating feeling tired with satisfaction gained after strenuous physical activity which wasn't possible for most prisoners during the pandemic, and the benefits this has in terms of sleeping well:

> I'm getting up [. . .] coming to work at eight o'clock and I'm given a fair day's work in the gardens and know [that's] keeping me active [. . .] it's keeping me moving, keeping me flexible . . . for me, at my age. That is a good thing [. . .] I'll go back to me cell and I'll feel tired. To me, that's just like going to a good session in the gym, isn't it? [. . .] you feel like you've achieved something throughout the day. (Prison A, #2)

> If you've had a hard day at work you can just get back to your pad and sleep. I feel good in myself. (Prison B, #1)

(4) Reconnecting with nature

Context:

Removal of lockdown restrictions has increased the amount of time prisoners can again participate in GOOP in outdoor/green spaces within the prisons.

Mechanism:

Prisoners involved in GOOP understand that participating in therapeutic horticulture activities goes beyond the instrumental to the prison and enables participants to experience nature. For example, one of the prisons ran a project in which older prisoners with mobility

issues were able to observe nature without being directly involved in physical aspects of horticulture.

Outcome:

Prisoners were given as much latitude as possible in focus groups to describe how they feel when taking part in GOOP activities. One prisoner quote illustrates benefits of connection to nature through the use of their senses, and how rapidly this can have a beneficial effect:

> I just chill out here . . . if I'm stressing, getting anxious, whatever is going on in your head, you can escape . . . My default escape is I can just come out myself [. . .] And I'm not listening to somebody shouting or playing the music on the wing. I'm not listening to the sound of the pool balls clanging together or somebody talking rubbish three foot from my cell door, all I can hear is nature: the grass rustling, the grasshoppers making the noise, the birds tweeting, natural, normal sounds of life. And that is so healing, to spend 20 minutes, half an hour, just sat down there. (Prison A, #5)

Some mental health and wellbeing benefits described by participants were often cross-cutting over many themes listed above. For example, in this excerpt a prisoner discusses how participation has affected their mental health:

> I've had depression for a very long time. I find being out and working with plants digging gardens over or coming up with ideas for the gardens, which plants to put in, where which plans are going to complement other plants. It keeps your mind occupied, it keeps your mind active. It helps control the depression. Now you can find yourself, if you sat in the cell, you can you just go down and the depression can take over. But when you get up in the morning and you know you're going out . . . I don't mind the weather. I don't care. I don't care if it's absolutely lashing it down or snow [. . .] I'll do it. (Prison A, #1)

The notion that participation in GOOP was relaxing or had a positive effect on participants' mood was mentioned frequently:

> Going back to your cell, you don't notice it at the time, but [after GOOP work] you go back to the wing in a better mood. It's a feeling of freedom, a feeling of being yourself instead of just depressed. (Prison B, #5)

> I needed to connect with [. . .] life again [. . .] and reality and things that are happening around me and stop focusing on just one problem. And that's what getting back to sort of basics looking at nature taking the time to look did for me . . . made my escape place and now if I'm having a really bad day I just disappear, [. . .] go and see what I can find. (Prison A, #8)

Evidence to suggested that prisoners without prior experience or interest found benefits from participation:

> I don't really have the slightest bit of interest in horticulture, never have, still struggle with it. But I find positives out of it that have helped me. And I have found that during the weekend, I end up going and sitting in nature, more than I've ever done before. So . . . that is hugely beneficial to . . . people like myself. (Prison A, #1)

(5) A joined-up approach with provider services

Context:

Restarting of the GOOP programme has provided the opportunity for a more formalised "referral pathway" between the established gardens teams,healthcare, mental health and recovery providers, in order to encourage opportunities for participation for individuals who may be most in need of a therapeutic intervention.

One participant discussed how important it was that healthcare staff considered how GOOP might improve the wellbeing of individual participants, noting this requires questions to be asked around previous experience in a related field or interest in working in the gardens:

> I think it was sort of December time, my mental health got really bad. I had to go back on my tablets, I couldn't go to work. I was working inside at this point. And for about four or five months, I couldn't get out of bed [. . .] I haven't had it that bad for a long time. And the only thing that helped me was coming to gardens, it sounds like a bit of a kiss-arse or a cliché, but I know that that helps me [. . .] But if [healthcare staff] didn't have that information to start with, then you might not know that [. . .] being outside actually helps. (Prison A, #3)

Mechanism:

This joined-up approach requires regular, meaningful communication between different elements of the system and some prisons being more inclusive with allowing prisoners to access greenspaces and nature within prisons than previously. This inclusivity reflects the aims of GOOP to target prisoners with challenging complex mental health needs, despite adding greater elements of risk to their role:

> We don't treat them any differently [. . .] they just join the team [. . .] It's a controlled risk and we are pretty aware of it. (Prison C, Horticultural Instructor)

> Everything is a risk. It's a matter of managing the risk. (Prison C, Industries Manager)

Outcomes:

Prisoners and staff argue that participation in GOOP can lead to increased health and wellbeing in the prison population and a decrease in adverse mental health issues. Participating in GOOP activities being the main (or indeed only) activity that helped mental wellbeing was borne out by another prisoner, who found traditional approaches were not helping:

> I lost me mam, couldn't go to her funeral, found myself in front of the mental health team and I was under them for two years. And I got more healing in one session [. . .] than I did with 20 sessions sat in front of a counsellor trying to tell me *everything's gonna be alright and everything's fine*. (Prison A, #8)

Discussion

In analysing themes emerging from the data, a realist-informed evaluation lens has been used (Pawson and Tilley, 1997). Thematic findings are grouped under five related sets of context, mechanism and outcome (CMOCs). On arrival of the COVID-19 pandemic arrived, prisoners were considered especially vulnerable due to the nature of the space in which they inhabit. Government-imposed lockdown and enforced social distancing included prisons. In terms of GOOP activities in prisons, the pandemic had a significant, immediate effect. In some prisons this halting of activities allowed for a rethink about how to approach the GOOP programme. A high degree of staff turnover, with more than a quarter of staff leaving after less than a year in service (Prison Reform Trust, 2022) posed obvious operational problems. From the start of the pandemic prisons in England and Wales have received an influx of new staff. This has brought mixed responses in that many new staff only knew prisons when they were locked down and prisoners weren't mixing in the usual ways. However with the combination of coming through the pandemic and the newly appointed prison staff, there were many examples of innovative ideas they wished to implement, which provided the stimulus for GOOP to be reimagined and to work more effectively with the whole-system, providing reason to optimistic about systemic changes in the longer term.

Social distancing rules meant that prisoners became increasingly isolated. Once lockdown restrictions were eased, and the GOOP programme recommenced, prisoners began interacting together again. This appears to have increased awareness of and empathy towards other prisoners and staff. Although the pandemic was often portrayed in the media as having a veneer of solidarity (Nolan, 2021), (a popular slogan being "we are all in this together"), the disproportionate effects of social inequality on how the pandemic affected people differently soon became apparent. In the wider (non-prison) community this was in the lower socio-economic groups (Nolan, 2021), but in prisons the impacts on health and wellbeing due to social isolation and lack of exercise and access to green space were even greater. This adversity appears to have created a sense of bonding with some prisoners and the subsequent relaxing of restrictions has resulted in an increased appreciation of and empathy towards fellow prisoners and staff.

Additional site-based restrictions based on COVID-19 outbreaks within individual prisons alongside 23 h per day "in-cell" lockdowns had eroded a sense of purpose for many prisoners, unable to engage in even basic prison activities which could be defined as useful. The re-emergence of the GOOP Programme enabled prisoners to return to activities which provided a sense of coherence beyond the traditionally understood concept of "purposeful activity" in prison. In the name of COVID-19 safety, traditional prisoner roles had been undertaken by staff, eroding the sense of coherence (Antonovsky, 1990) prisoners might have had previously, defined as an "adaptive dispositional orientation . . . that enables coping with adverse experience" (Hammond and Niedermann, 2010, p. 79). This deprived prisoners (and in some cases, staff) of the psychological mechanisms needed to protect one's own health and wellbeing during such an unprecedented pandemic.

Rigid lockdown rules had reduced the access of prisoners to green spaces within the prison, with a resulting negative impact on mental health and wellbeing. Post-pandemic, the removal of lockdown restrictions has increased the amount of time prisoners can again work on GOOP activities within the prisons and have access to nature and green spaces, with a resulting positive impact on the health and wellbeing of the prisoners and staff. Similar positive outcomes have already been observed in prisoners (Moran and Turner, 2019) and staff (Moran *et al.*, 2022).

Prisoners with mental health issues may benefit from therapeutic horticulture, but they are not necessarily being given the opportunity within prison to benefit from this intervention. A more joined-up approach is needed between healthcare, mental health and recovery providers and the gardens team, in order to flag potential participants (with the highest level of complex health need) and refer them to nature-based interventions such as GOOP, which may provide opportunities for increased health and wellbeing in the prison population and a decrease in adverse mental health issues. Therapeutic gardening has already been trialled as a form of social prescribing in community-based settings (Garside *et al.*, 2020). One aspect of the programme being trialled in some prisons is a "GOOP on prescription" social prescribing model, to direct some prisoners with identified mental health and more challenging, complex needs to participate in therapeutic gardening (GOOP) activities when otherwise they would not have had the opportunity (an example of this is demonstrated in participant quotes in CMO#2). If this model was rolled out more widely across the prison estate, then the findings of this aspect of evaluation would suggest that the benefits that could bring to the prisons outweighs the risk involved in encouraging prisons to engage more challenging prisoners with GOOP.

In summary, the analysis has highlighted that post-COVID-19 lockdowns, prisons are beginning to re-engage with GOOP with vigour and enthusiasm, but some are facing challenges with high turnovers of staff, and have to prioritise safety has meant that in some situations the gardens/GOOP have not been accessible to prisoners. However, there are aspects of best practice and adaptation of the GOOP programme to the individual

circumstances and contexts of individual prisons which have impacted positively on the health and wellbeing of both prisoners and staff. Unfortunately, currently there are many examples throughout the prison estate of the assets within prison sites being under-utilised, both in terms of the skills and abilities of prisoners and the facilities available. However, this aspect of the evaluation has also highlighted much enthusiasm from HMPPS and provider organisation staff to develop green and natural spaces for the prison setting as a whole, but also to the specific benefit of prisoners with more challenging health and social care needs.

Strengths and limitations

The strengths of this evaluation lie in the access the research team were able to have to engage with prisoners who are actively involved in GOOP and the ability to explore with them in depth their experiences of prison during and post-COVID-19 lockdown and the impacts of GOOP on their health and wellbeing during this period. This was thanks to the organisation of key prison staff and the willingness and enthusiasm of the participants who gave the research team rich qualitative data from their narrative accounts. The thematic analysis of this data has provided unique insights into the needs of specific cohorts within a prisoner population and the challenges they face regarding recovery from the pandemic, which remains in many instances at a slower rate within prisons than in the wider community.

The limitations of this evaluation lie in the small number of prisons ($n = 4$) involved in the data collection (although they were selected on the basis of each being different categories of prison and also to include a women's prison) and the inherent challenges in interviewing a vulnerable participant group who may be concerned with voicing criticisms in case this has repercussions for their participation in the intervention. The evaluation will continue until 2025 and expand to cover all additional North West prisons involved in the programme. This paper presents findings from the qualitative aspect of the evaluation so far. The research team are also collecting quantitative health and wellbeing monitoring in prisons using the Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) combined with data using the Connectedness to Nature Scale (CNS). This is not currently at a statistically significant level to publish. When available, it will be presented in a future paper. The broader geographical roll out of GOOP over the next two years (to the North East, Yorkshire and South West of England) offers further opportunities to contribute more substantially to a greater understanding of the benefits and implications of connecting prisoners with nature via GOOP at a national scale by taking account of a wider range of contexts for impact in future research, policy and practice.

Conclusion

The prisons landscape in England and Wales has changed dramatically since the beginning of the COVID-19 pandemic, with HMPPS having to change it's entire operating system overnight (HMIP, 2023) and a greater understanding of how these changes have impacted the prisoners, staff and the prison setting is required. The paper is based on original data gathered from qualitative in-depth interviews and focus groups with prisoners and key prison staff and the findings have implications for future policy and practice, exploring: what works for whom, in what circumstances. Prisons in England and Wales remain under-utilised as sources of health and wellbeing improvement via nature-based interventions such as GOOP. First-hand accounts demonstrate the extent of the health and wellbeing benefits of participation in such an initiative. Other prisons which are not currently engaged with GOOP or utilising any form of therapeutic horticulture can

discover the potential benefits and can learn from different approaches offered in participating prisons. The evaluation highlights the importance of whole system, joined up working, using the environment as a tool for health improvement (individual)/public health benefit (community/societal) and the imperative for both policy and practice changes to secure novel ways in this unique environment that can improve prospects and opportunities for skills and employability that enhance health improvement and impact positively on resettlement for some of societies most disadvantaged and excluded individuals. It would be in the best interests of prisoners with high levels of complex health and social care needs to be able to continue with outdoor nature-based interventions and therapeutic horticulture such as GOOP. Whilst the pandemic was an unprecedented situation in our lifetime, the experiences of key staff and prisoners demonstrate that should such a situation arise again, it would not be in the best interests of either to follow the same protocols in prison, where a particularly vulnerable group were treated on an inequitable level in comparison to the wider community regarding their opportunities to maintain a level of mental wellbeing by experiencing nature-based activities.

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Peer health coach experiences promoting a nondiet approach in a university health coaching program

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Abstract
Purpose – Research shows peer health education programs on university campuses can support students in pursuing sustainable health-related behavior changes. However, few programs deliver peer health education through a nondiet, weight-inclusive framework. Research shows that health educators who challenge the status quo of diet culture and weight-focused health interventions may face unique challenges when sharing this perspective with others. Thus, the purpose of this study was to examine the experiences of peer educators who provided critical health education by introducing a nondiet, weight-inclusive approach to health.
Design/methodology/approach – Five health coaches from a university health coaching program at a mid-sized southwestern university participated in a semi-structured interview. The data were analyzed through interpretative phenomenological analysis.
Findings – Peer educators faced numerous challenges when introducing nondiet, weight-inclusive approaches such as lacking credibility as a peer to challenge weight-centric messages, feeling conflicted about honoring clients' autonomy when clients are resistant to a weight-inclusive approach and feeling uncomfortable when discussing client vulnerabilities. Peer educators also identified several strategies that helped them navigate these challenges such as being intentional with social media, using motivational interviewing to unpack clients' concerns about weight, and seeking group supervision.
Originality/value – Given the reality that health coaches will face challenges sharing weight-inclusive health approaches, educators and supervisors should explicitly incorporate strategies and training methods to help peer health coaches prepare for and cope with such challenges. More research is also needed to examine effective ways to introduce weight-inclusive approaches to college students.

Keywords Weight-inclusive, Health coaching, College health promotion, Motivational interviewing
Paper type Research paper

Due to the prevalence of body dissatisfaction in college students and society's idealization of thin and muscular builds (Thomas and Warren-Findlow, 2020; Webb *et al.*, 2016), providing

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college students with critical health education on diet culture is warranted. Educating college students on weight-inclusive approaches is one way to facilitate critical reflections related to health, weight, and the body. The development of weight-inclusive approaches, such as the Health at Every Size® (HAES®) paradigm, arose from the critique of dominant weight-centric and neoliberal health discourses. Such weight-inclusive approaches to health offer alternative ways of conceptualizing and pursuing holistic and collective health and wellbeing (Clifford *et al.*, 2015). Research on the outcomes of a weight-inclusive approach to health education has been encouraging. Recipients of weight-inclusive health education have shown improvements in biopsychosocial health outcomes such as improved body esteem (Clifford *et al.*, 2015), eating based on the needs of one's body (Humphrey *et al.*, 2015), and a critical awareness of society's influence on body image (Rich *et al.*, 2020).

One way to provide weight-inclusive health education on college campuses is through a peer-led approach. Peer-led health education is common practice on university campuses and can be as effective as clinician-led health education (Stice *et al.*, 2020). Peer education provides three main benefits: (1) they support the health and well-being of the student community being served, (2) they improve the scalability and sustainability of health education programs (Becker and Stice, 2017), and (3) they offer practical, field-based training for students to develop and refine their knowledge of weight-inclusive health education. For instance, Lee *et al.* (2021) found that a peer-led weight-inclusive health coaching program successfully promoted meaningful health-related behaviors amongst college students. Despite conceptual differences between health education and health coaching (American College Health Association, 2020), in this paper, we use these terms interchangeably to describe one-on-one sessions led by peer health educators/coaches in which they support their peers' health behavior changes.

Initial research on weight-inclusive peer health education programs hold promise, though researchers have yet to explore the experiences of those who provide this weight-inclusive health education. This is an important gap in the literature because critical health education, like any other topic or skill, requires continuous learning, application, and reflection from the learner. Although several interventions have successfully taught students about weight-inclusive health promotion (e.g. O'Hara and Taylor, 2022), whether these students perceive themselves as effectively applying these approaches to educate others has yet to be examined. Moreover, given the pervasiveness of weight-normative approaches and diet culture, nondiet health educators may experience more ambivalence than the typical amount in any behavior change process (Krebs *et al.*, 2018). Those practicing from a weight-inclusive framework may experience challenges to their expertise and educational approach as they encourage their clients to reflect and challenge dominant societal narratives (Cameron, 2016). In fact, Jovanovski *et al.* (2023) found that, even as dietitians and psychologists embraced a nondiet paradigm shift, they felt ambivalence sharing this approach with their patients because they felt they were making excuses for their own "big body" (p. 11) or because they were new to their roles. This suggests that mere exposure to new information is insufficient and that intentional practice opportunities and continuous supervision are also needed. For these reasons, we respond to Tylka *et al.* (2014)'s call to qualitatively investigate the challenges and barriers of shifting to a weight-inclusive approach in health care and other applied settings, especially among students who are undergoing intentional training to implement a nondiet weight-inclusive approach.

One way to address the anticipated challenges of peer health coaches providing weight-inclusive health education is to use motivational interviewing (MI). Motivational interviewing is a client-centered conversation that is collaborative, goal-oriented, compassionate, and nonjudgmental, with specific attention directed at eliciting the client's personal reasons and plans for change (Miller and Rollnick, 2023). Given MI's focus on client-centered, compassionate, conversational strategies and attention to client autonomy, MI may be an

effective way to facilitate weight-inclusive health education that is meaningful and thought-provoking to the client. Research on students' experiences using MI to facilitate weight-inclusive health education, however, is scarce.

Therefore, the purpose of this study was to examine the experiences of peer health coaches providing weight-inclusive health education on university campuses. Specifically, the research questions were, (a) what are peer health coaches' experiences learning about weight-inclusive approaches to health and (b) what are peer health coaches' experiences providing weight-inclusive health coaching? This study is part of a larger project on health coaches' experiences with peer-led health coaching, and expands upon our previous findings on health coaches' perceptions of MI (Fogaça *et al.*, 2023).

Methods

Participants

Participants were recruited from a university health coaching program at a mid-sized southwestern university. Participants were five former and current peer health coaches who had participated in the university health coaching program in the past two years. Because participants came from a small peer health coaching program, we have decided not to provide specific demographics to maintain their confidentiality. In this paper, the term "participants" refers to these health coaches, and the term "clients" refers to individuals from the university at large who participated in the health coaching program (i.e. college students, faculty, and staff). We also refer to first-time health coaches as either first-time coaches or novice coaches, whereas we refer to health coaches who served for more than one semester or continue to conduct health coaching in their current jobs as returning or advanced coaches.

University health coaching program

The health coaching program we drew from to interview peer coaches is a university program that serves students, faculty, and staff at a mid-sized southwestern university. The students who are selected into this program go through a training and application process (described in the section below). The application includes submission of a sample health coaching video session along with a written description of how their personal philosophies about health and well-being align with the program's weight-inclusive philosophy. Of the students who apply, five-to-eight health coaches are selected each semester. They receive one credit of independent study for three hours of weekly service.

The university health coaching program offers health coaching on a wide range of topics such as sleep, nutrition, physical activity, and stress management. Clients can sign up for a free single 45-min session, a $5 follow-up session, $10 for three weekly sessions, and/or $20 for six weekly sessions (one session per week for six weeks). Each health coaching session lasts up to 45 min and health coaches spend 10–15 min charting after each client session. Coaches spend one hour per week in a weekly supervision meeting, where client cases are reviewed with their faculty supervisors who have expertise in MI and the HAES® approach [for further program details see Papini *et al.* (2023)].

Training of nondiet weight-inclusive approaches and motivational interviewing

Prior to serving as health coaches, participants in this study (and all health coaches in the university health coaching program) were required to complete a semester-long course that included at least 45 h of MI training before applying as a health coach. This training included didactic and skill-building activities. At the end of the course, students had to record at least two appointment sessions and code their own recordings, using the Motivational Interviewing Treatment Integrity (MITI) coding tool (Moyers *et al.*, 2016) to assess their MI

proficiency and reflect on their developing skills. Students learned how to use the MITI tool as part of their 45 h of MI training.

Some health coaches were exposed to a weight-inclusive approach to health during this initial MI training while others were not. Thus, before serving as a health coach, students were required to read materials that introduced the HAES® paradigm and provided concrete examples of weight-inclusive behavior change experiences (e.g. Scritchfield, 2016). Then, students received an additional five hours of training at the start of the semester in order to revisit MI concepts learned in the previous semester and discuss how these concepts could be applied to introduce a weight-inclusive approach to clients.

Interviews

Participants completed a semi-structured interview that ranged from 75 to 120 min. The interviews were conducted by the first and second authors, who were not involved with the teaching or supervising of the peer health coaching program. The interviewers explained to the participants that the program's supervisors (co-authors) would not know who amongst the recruited peer health coaches participated in the interviews.

The interview questions asked about participants' experiences being trained in weight-inclusive health coaching, conducting weight-inclusive health coaching, and receiving supervision for their coaching. Specifically, we asked about their understanding of the HAES® approach and their experiences as peer health coaches serving in a weight-inclusive health coaching program.

Procedure

Upon approval from the Institutional Review Board, former and current peer health coaches were identified by the current supervisor of the university health coaching program. Next, all potential participants were invited to participate in the study via email. Interested participants emailed the first author back to schedule an online interview via Zoom. The online interviews were conducted by two members of the research team who were not involved with the program. Upon completing the interview, participants received a $25 electronic gift card.

Data analysis

Interviews were transcribed verbatim and analyzed through Interpretative Phenomenological Analysis (IPA) by two members of the research team. A third member served as an auditor. IPA was chosen because it focuses both on individual participant experiences and identifying patterns of meaning across participants (Braun and Clarke, 2019). All three members of the data analysis team were not involved in the program (e.g. supervision). Moreover, all three had expertise in exercise psychology and two of the three had experience managing a health coaching program or serving as a peer health coach at other universities.

The members analyzing the data followed the processes suggested by Smith *et al.* (2009). First, the two members listened to the recordings to familiarize themselves with the interviews. They also independently took initial notes of meanings and patterns while listening to the interviews. Next, one member started sharing their analytic notes by adding descriptive, linguistic, and conceptual comments to the interview transcripts. Then, the next member reviewed these comments and added their own analytic notes to the transcript. Next, the two members met to discuss potential overarching themes and potential relationships between the themes.

Subsequently, a third member audited the analysis by reading all interviews, analytic notes, and the summary of potential themes, while adding their own comments. These

comments indicated agreement with codings, themes, and meanings, as well as additional insights to some of the themes. The original analysis members reviewed the auditor's comments together and revised the themes for clarity. Finally, the entire research team discussed the themes during an online meeting and finalized the themes. Processes that helped this refinement included abstraction (i.e. finding superordinate themes), polarization (i.e. contrasting cases and themes), and contextualization (Smith *et al.*, 2009). After finalizing the themes, the members described the characteristics of each theme and identified quotes that represented each theme's meaning.

To establish trustworthiness, the team engaged in the principles suggested by Smith *et al.* (2009): sensitivity to context, commitment and rigor, and transparency. Sensitivity to context was sought through thoughtful, homogeneous sampling to answer the research question; interviews that engaged participants and allowed them to describe their experiences; immersion into the interviews for data analysis; and using verbatim materials to support the interpretations. Our commitment and rigor were evidenced by the inclusion of analytic note taking and subsequent auditing of the entire data analysis process. Finally, we sought transparency by describing our process in detail.

Results

We identified two overarching themes in the interviews: (a) learning and living the weight-inclusive approach, and (b) implementing the weight-inclusive approach in health coaching. For each theme, participants discussed challenges as well as the strategies and solutions they adopted to navigate these challenges. All five participants discussed various aspects of these two themes. These results are summarized in Table 1. The names used in the sections below are pseudonyms chosen by the participants to ensure confidentiality.

Learning and living the weight-inclusive approach

Participants described the HAES® approach in various ways, such as taking a nondiet "weight doesn't matter" approach, focusing on intuitive eating and healthy behaviors, being comfortable with one's self, and appreciating one's own body. All peer health coaches expressed an appreciation for learning about a weight-inclusive philosophy. Participants identified several factors that helped facilitate their learning of, and adherence to, a weight-inclusive approach in their personal lives. Participants' personal experiences with weight loss and body image, in particular, seemed to affect their understanding and adoption of weight-inclusive approaches. Four of the coaches mentioned that the weight-inclusive approach resonated with them because of their own negative experiences with weight loss attempts and also from witnessing dieting failures by those around them. Alex, for example, mentioned that it was a relief to be introduced to an alternative approach to predominantly weight-centric messages:

> Everyone sees all the social media and . . . I mean 9 times out of 10 you have parents who have been dieting so it's all around and being able to realize that it doesn't have to be like that is kind of relieving.

Similarly, Hailey stated: "Honestly, I kinda like needed it for myself, like for my own psyche. I definitely think of it as really beneficial to just hear it in a professional setting."

On the other hand, Ben explained that his own previous weight loss journey initially solidified his support of dieting because he believed, "if I can do it, anybody else can." For Ben, it was a process of unlearning and relearning that different bodies can be healthy and that effort and dedication may not be enough for everyone to lose weight. He explained:

Table 1. Summary of results

	Challenges	Lessons learned
Learning and Living	• Learning weight-inclusive approaches has personal benefits • Learning takes time because weight-inclusive ideas go against the weight-centric status quo • Adhering to a weight-inclusive approach is difficult even if you appreciate and agree with its message because weight-centric ideas remain dominant in your life (e.g. friends, family, social media, health professionals)	• Use personal reflections about your own experiences with weight and body image to facilitate learning • Be intentional in your use of social media • Adopt self-talk and/or, cognitive restructuring to reframe/counter ineffective body talk • Read research on weight science • Use personal reflections to reflect on how your thoughts about weight/health intersect with your personal values
Implementing	• Practicing a weight-inclusive approach is challenging because it feels like peer mentors lack credibility to challenge the weight-centric status quo • Adhering to the spirit of motivational interviewing and honoring client autonomy can be challenging when clients are indifferent or resistant to weight-inclusive messaging • Having limited time and training makes it difficult to talk about weight • Discussing clients' vulnerabilities (e.g. body image, eating disorder referrals) can be uncomfortable	• Create more opportunities for clients to learn about a weight-inclusive paradigm on campus • Extensively engage and unpack by inviting clients to share the etiology of their weight concerns (see Table 2) • Use and develop motivational interviewing skills when facilitating conversations about weight and the body • Help clients focus on health-related behaviors rather than weight • Group supervision helps normalize/validate challenges and provides useful resources • More training on body image topics could be helpful • As supervisors, continuously and explicitly normalize that adopting a weight-inclusive approach is a gradual process for all. Planting a seed of weight-inclusivity is still beneficial

Source(s): Authors' own work

> So, going through a weight loss journey myself, I definitely had my own, my own understanding, my own personal biases when it came to it. Thinking, 'if I can do it, anybody else can,' but I guess what I really like about Health at Every Size® is that every human is built differently and that really took some time for me to really understand. Like, everyone has a different body type, you know? Like, we can't. You can't diet yourself or over exercise yourself into becoming one specific person.

Challenges. Despite appreciating learning about weight-inclusive approaches, the participants identified several challenges to adhering to weight-inclusive approaches in their personal lives. This is because weight-centric ideas remained dominant in most aspects of their lives including in social media, health professionals' advice, and personal interactions with friends and family. Various coaches reported that images of the "perfect body," weight loss, and dieting were pervasive in social media, which made it challenging to adhere to a weight-inclusive approach despite their appreciation of it. RJ shared:

> I mean, you see it when you go on social media. You see it when you watch TV. You see it in the media, everywhere, you know? So it's really hard even as a person who advocates for that type of stuff.

Another coach, Brooke, shared that her entire family struggled with dieting and reinforced weight-centric ideas at her home. Although she introduced weight-inclusive approaches to

her family multiple times, she observed that they were largely opposed to the weight-inclusive message. She also noticed that even in a body positivity club to which she belongs, she encountered peers who would center their body positivity discussions on weight. For example, she noticed some of her peers saw body positivity as one way to lose weight. Although she tried to remind the group of weight-inclusive approaches, she found it difficult to counter weight-centric approaches as they were pervasive amongst her peers and in society.

These personal challenges around adhering to weight-inclusive approaches affected the coaches in different ways. Hailey, for example, commented on how it was difficult to tell clients to engage in certain healthy behaviors that she could not sustain herself saying: “I felt like half of the things that I was like telling my clients and half of the things that I was like suggesting, I was not doing myself.” Alternatively, Brooke mentioned that it was easier to discuss weight-inclusive approaches with clients compared to family and friends. When reflecting on why that was, she shared that using MI was helpful because she could explore the client’s experiences and own motivations for change that aligned with a weight-inclusive philosophy. Other participants also identified strategies that helped them overcome challenges related to adhering to weight-inclusive approaches, which we describe in more detail in the section below.

Lessons learned. For all participants, learning and living a weight-inclusive approach to health was described as a process. Due to the pervasiveness of weight-centrism, the participants developed several strategies to recognize and navigate the weight-centric messages they encountered in their personal lives. For example, two coaches mentioned that it helped them be intentional in their choices of social media accounts to follow, so they had more reminders that counter dominant weight-centric messages. RJ said:

> For myself, I follow other people who believe in that message, like Anti-Diet Riot Club and like RD’s who believe in that same message uhm, and. And then whenever I can, I preach the message (. . .) and just reminding myself that you know. Why I do the healthy things I do is for bigger reasons than weight loss and looking a certain way. Which is hard! It’s hard! I mean, because, you know, everybody cares about what they look like and. Uhm. And we also- and trying to remind myself that it’s more about like, uh, the intrinsic factors. Like, how I feel after I eat a healthy meal or exercise rather than how I look. And just constantly reminding myself, uhm, even though those thoughts creep up . . .

Ben also found it helpful to use self-talk and restructure his thoughts when he recognized he was being weight-centric saying: “I just had to rewire the way I would think and make those small adjustments to my mindset. So if I had one of those bad [dieting] thoughts, I’d just have to restructure.” Participants also mentioned that learning about the research behind weight-inclusive approaches, observing dieting failures by those around them, and relating the weight-inclusive approach with their personal struggles with body image helped them develop an appreciation for a weight-inclusive approach and to adhere to it despite barriers. The participants also recognized that a weight-inclusive approach aligned with their personal values. For instance, Ben, who was personally and professionally interested in fitness and exercise, recognized that appreciating what his body could do was more important to him than staying weight-centric. As seen in the passages above, despite the dominance of weight-centric messaging in society, participants appreciated learning about the weight-inclusive approach and explored ways to adhere to the paradigm in their personal lives.

Implementing a weight-inclusive approach in health coaching

Participants had a variety of experiences implementing weight-inclusive health coaching. Overall, all the participants discussed several challenges to conducting health coaching in a weight-inclusive manner but also identified solutions to these challenges.

Challenges. One challenge reported by participants was that, despite introducing a weight-inclusive approach, the clients did not always show an interest in its philosophy. Participants were aware that facilitating critical health education through MI meant they could not force clients to adopt weight-inclusive approaches so they reported that they did not force anything onto the clients. Nevertheless, the participants described that the client's indifference to the weight-inclusive approach was personally challenging. For example, RJ described:

> And if they accept [the weight-inclusive approach], they accept. If they don't, they don't. But uhm, for me it was, I guess, it was, I guess it was just a challenge. Just because. I wanted people to know that (laughs) you know, I was so passionate about things and anti-diet.

Providing critical health education that counters dominant societal messages was seen as particularly challenging given their status as a peer mentor. At times, participants questioned their ability to effectively introduce a weight-inclusive approach to their peers because the message contradicted doctors or researchers who were considered more legitimate sources of health information. Three coaches described their lack of credibility as a peer as one of the reasons why some clients did not express interest in the weight-inclusive approach even after they were introduced to the paradigm.

Another perceived barrier to facilitating weight-inclusive health education was the limited time they had to spend with the clients. The participants described that a single 45-min session was not enough time to fully introduce the weight-inclusive approach, especially when its ideas contradicted what clients had learned about health and weight up to that point. They described needing more time or needing a more effective way to introduce the weight-inclusive message in a concise manner. Ben explained:

> And we're talking about just having one, one-hour session at a time. So, it's kind of hard. I struggled with trying to condense it [the weight-inclusive approach] in a way that would make the most sense to the client I was talking to. Uhm, and maybe that was a little bit too forward, trying to just explain everything right away and upfront.

Even when the clients signed up for a six session series of coaching appointments, the participants observed that it was difficult to communicate the weight-inclusive approach in a way that was engaging or sparked interest from the client.

One factor that affected interaction with clients was the coaches' own MI skills and knowledge of weight-inclusive approaches. Specifically, peer health coaches who were newer to health coaching adhered to the program protocol in an incorrect or rigid manner. The program's protocol toward weight talk was not to give advice, but to elicit the client's motivation and guide them to develop a behavioral change plan in line with this motivation. The coaches were encouraged to facilitate client's reflections about health and weight using the elicit-provide-elicit strategy, where they would ask the client what they knew about the HAES® approach (elicit), ask permission from the client, then give information about the HAES® approach (provide), and then ask the client what they thought about the information (elicit). However, first time coaches viewed talking about weight with clients as a red flag altogether and redirected the client to talk about other behaviors instead of using MI to elicit client reflections around weight and health. For example, Alex described:

> Yeah, so when, I think the couple of weeks in the beginning of the semester, [supervisor] taught us how to go about talking about weight, so asked like "what makes you think you have to be a certain size?", you know? "Who made you think like this? When did you feel like this?" And like ask those questions and really unpack it and then you can let them know at least with [the program] we don't, we do the HAES® [approach] so we don't talk about weight. So, we will try to change the conversation into something else afterwards. Like "this is more what we do, does anything sound interesting?"

Another first-time coach, Ben, described adhering to the program's protocol, but in a rigid manner that limited his effectiveness:

> Sometimes, I felt like I was trying to follow it [the program's protocol for weight talk] too hard? To - where I started to give, to where I didn't feel like I was giving really authentic advice. (. . .) So yeah, never did I feel like I was straying too far away from it [weight-inclusive approach], sometimes I felt like I was way too strict.

Engaging in critical health education, however, became more natural over time. Coaches observed that as they developed their MI skills and gained more experience, they could be more fluid and skillful in their coaching rather than rely on pre-prepared questions. For example, Brooke, who was a returning health coach, described her approach to discussing weight:

> To ask, like, if someone is going off saying like, "this diet that I'm doing, I'm going to lose five pounds per week" or something. And instead of being like, "no you're not! That doesn't work!" like going off on them, to take a pause. And ask them questions and just ask, "oh, why do you think that?"

The ability to stop and avoid, what is known in MI parlance as the righting reflex or the urge to redirect the client to health behaviors, came with time and practice.

Beyond the challenges of promoting a counter-cultural message like weight-inclusive approaches as a peer with limited credibility, coaches also described feeling uncomfortable engaging in conversations like weight loss struggles or eating disorders because they touched on clients' vulnerabilities. One coach specifically referred to talking about weight as "difficult conversations," which illustrates the challenge weight talk presented to the coaches. Due to this discomfort, client's weight-centric desires were labeled as red flags and referred out at times rather than unpacked in the sessions. This was especially the case for first time health coaches. For example, Alex, perceived discussions about weight to be almost taboo:

> Uhm, some people. Don't like this approach at all. They don't think it's real (laughs) so sometimes when you're working with people they're like "okay, but I still want to lose weight" and at that point like "okay, well, I can refer you to someone else, but I can't really talk much about" you know. Uhm, well I guess if they said they didn't like it, then I could say well [the program] doesn't really focus on weight, we're really weight-inclusive and we don't talk about weight loss at all . . . So if they would like, we could talk about other health strategies like nutrition or fitness.

Whereas some coaches felt comfortable with referrals, other coaches described referrals as challenging, especially if it was a referral for an eating disorder. Even though the coaches received training on how to recognize eating disorder symptoms and refer such clients to dietitians and mental health providers, they stated that it was challenging to actually perform the referral due to the topic's sensitive nature and their lack of experience. For example, RJ described finding eating disorder referrals challenging due to her fear of blowback from the client or exacerbating an already awkward conversation about weight and diet.

Lessons learned. Participants identified several strategies and solutions that could help them navigate these challenges. One suggestion for the program was to proactively disseminate weight-inclusive messaging and its supporting research widely on campus. This would increase the likelihood of clients having already been introduced to a weight-inclusive approach before their health coaching sessions. The participants perceived that this would be one way to enhance their credibility in the eyes of their peers. RJ explained:

> Ideally, spreading that [weight-inclusive] message just like on campus in general. (. . .) I mean having-having literature available (. . .) have like something that they [client] could read or look at or uhm, just so they knew that it wasn't just coming from me. Or like, it was coming from a place of like science.

Another strategy to provide weight-inclusive health coaching was to rely on their MI training. Adhering to the relational dimensions of MI (referred to as the spirit of MI) allowed health coaches to treat their clients with compassion and nonjudgment. Brooke explained:

> I can definitely tell with clients that there's a struggle and they're like "okay, this [weight-inclusive approach] is true, like I believe you" but like it's still really hard cause it's like uhm, they're just constantly seeing and hearing about diet culture. And, that's totally understandable as well. Uhm, but they definitely do believe what I have to say. Uhm, they try to make steps towards practicing living a life that's more aligned with Health at Every Size®.

The more experienced participants also described that focusing on clients' strengths and recognizing their progress no matter how small helped them feel more compassion and appreciation for the client. They recognized that their clients were not always able to change their lives to align with the weight-inclusive philosophy, but were also able to recognize that change was difficult even for themselves. Thus, they focused on the fact that clients were exploring alternative approaches and, as RJ said, "I mean, just trying to plant seeds wherever I can with whoever I can."

Another strategy that coaches adopted to support clients in a way that aligns with the weight-inclusive approach was to help them focus on health-related behaviors such as eating or exercising rather than on weight. One coach said: "Not necessarily demonize weight-loss, but just steer away from it and think about sustainable habits she could be doing [instead]." For instance, two coaches talked about sustainable health habits by helping clients reflect on how they felt when they ate different foods or engaged in exercise. On the other hand, some other coaches appeared to lose nuance of the weight-inclusive approach when discussing health-related behavior change. Two coaches inaccurately suggested that health-related behavior changes could not promise weight loss but could promise improved health. For example, one coach described this strategy as: "just kinda being upfront and saying that I can't promise weight loss, but I can promise a healthier life."

Finally, group supervision appeared to be an important resource to help coaches deal with many of their challenges. Coaches explained that in group supervision they could brainstorm ideas on how to approach a client whose mindset was aligning with a weight-centric approach, identify clients who might need a referral, see how other coaches approached their clients, and normalize the struggles of implementing a weight-inclusive approach to coaching when realizing that everyone struggles. Coaches perceived it as helpful to have a group supervision structure where coaches were expected to share both what was going well and what they needed to improve with each client, opening space for sharing their vulnerabilities and normalizing them. However, this openness to vulnerability was still a point of ambivalence for coaches - sometimes participants felt okay to be vulnerable and expressed that it was nice to receive others' support; other times they described it as embarrassing to ask a question when they thought that they were the only ones to not know.

Discussion

The purpose of this study was to examine the experiences of peer health coaches who provided critical health education on weight-inclusive approaches using MI in a university setting. Results from conducting five semi-structured interviews indicated that although peer health coaches reported hurdles to learning, living, and implementing a weight-inclusive approach, they also learned various lessons that helped them navigate these various challenges.

Experiences learning, living, and implementing a weight-inclusive approach to health

The health coach participants appreciated learning about the weight-inclusive approach and found it personally and professionally beneficial. Despite this appreciation, they also shared

several challenges they experienced learning, living, and implementing a critical weight-inclusive approach to health (see Table 1).

The participants appreciated learning about weight-inclusive approaches while understanding that it is a continuous process that requires time and reflection. This was consistent with Jovanovski and colleagues' (2023) findings that dietitians and psychologists who practiced from a nondiet approach embraced the paradigm shift gradually and overtime. In fact, they continued to experience ambivalence about sharing the approach at times. This was especially the case if the clinician themselves had a larger body. Most participants in our study also shared that it was difficult to navigate their own beliefs about health and weight because of the dominant sociocultural messages in the U.S. that stress thinness for women and muscularity for men, especially in the media. Previous research has found that media exposure impacts one's body image (Juarez *et al.*, 2012). Social media may be particularly damaging not only due to its prevalence but also because it can influence people to strive for digitally manipulated (e.g. photoshop, filters) bodies that are unreal and unattainable in the first place.

The prevalence of weight-centric approaches in society also created challenges when providing critical health education as a peer, especially as the participants worried about lacking credibility in the eyes of their peers. The thoughts and opinions of health coaches may not be viewed as valid compared to health or medical professionals, who tend to adopt weight-centric approaches and policies (Hunger *et al.*, 2020). While on the one hand this awareness may help peer health coaches make sense of client reluctance to pursue behavior changes that align with a weight-inclusive approach, they also felt discouraged at times given the differing power dynamics between health coaches and other healthcare professionals.

The personal and professional challenges the health coaches faced illustrate how the demonization of fatness impacts everyone. People with larger bodies are stigmatized and discriminated against due to the dominance of diet culture. For example, Mensinger *et al.* (2018) found that body-related shame was associated with healthcare stress which ultimately contributed to people in larger bodies avoiding healthcare visits. Health coaches also had to navigate how to address their personal and clients' desires for weight loss that stem from a yearning to avoid the real stigmatization and marginalization experienced by those in larger bodies within our society. This illustrates that the consequences of sizeism, such as negative body image or the desire to lose weight, are not solely personal problems to solve (e.g. "ignore the haters and just love your body!") but the consequences of societal problems that require social solutions (e.g. dismantle systems of oppression).

Despite viewing weight-inclusive approaches as counter-cultural, all participants expressed positive attitudes about learning and implementing a weight-inclusive approach in their personal and professional lives. In fact, participants expressed a sense of relief after learning that they could take their focus off of weight. This led health coaches to experience internal conflict between wanting to support client autonomy if the client chose to continue a dieting mindset (an MI adherent strategy) and desiring for their client to pursue what they believed to be a better path - to discontinue intentional weight management. Coaches in this study were not the first to report this conflict. In 2005, focus groups were conducted with 104 Canadian dietitians who shared a similar dilemma (Chapman *et al.*, 2005). Chapman and colleagues emphasized the importance of having clients set their own goals to enhance client motivation (again, MI adherent). Even with that awareness, the researchers found that "most participants [eventually] tried to change the client's viewpoint through negotiation, compromise, and education (MI non-adherent), so the client would adopt the dietitian's goals for behavior changes" (p. 1277). However, such an approach would not work for the health coach participants in our study, as such a direct approach does not align with MI-based health coaching and education strategies. Thus, the participants also learned various lessons while navigating their challenges such as to extensively explore clients' weight loss motivations and to use MI to facilitate such conversations.

A final challenge to implementing a weight-inclusive approach in health coaching was the health coaches' lack of skill and experience as well as the lack of perceived time they had with the clients. As previously described, the health coaches were trained to address misinformation about weight and health using MI strategies. This means health coaches were encouraged to elicit clients' previous knowledge prior to providing information about a weight-inclusive approach. Nevertheless, participants' ability to effectively facilitate critical reflections amongst their clients through the use of MI was largely dependent on their level of knowledge and skills. More experienced coaches were more comfortable facilitating reflections fluidly through evocation and with compassion. It is also interesting to note that time was a barrier to sharing a weight-inclusive message even in a six-session setting, and future work could investigate if other health professionals (primary care providers, nurses, personal trainers/fitness instructors, etc.) may be less inclined to share a weight-inclusive approach in settings where time is limited.

Lessons learned while learning, living, and implementing a weight-inclusive approach to health

In addition to sharing the challenges of implementing a weight-inclusive approach, health coach participants shared the lessons they learned that could inform practices moving forward. First, to address the challenges of countering perceived cultural messages, the participants shared the importance of creating opportunities for clients to hear a weight-inclusive paradigm within other campus contexts. Other campus-based weight-inclusive interventions that demonstrated effectiveness might be worth exploring. For example, Humphrey *et al.* (2015) studied how a HAES®-aligned general education course influenced anti-fat attitudes, dieting behaviors, body esteem, and eating attitudes as compared to general nutrition courses. They found that the students in the HAES® course experienced improvements in body esteem, intuitive eating, and a reduction in anti-fat attitudes, besides reduced dieting behaviors, compared to those in the general nutrition courses. Weight-inclusive health coaching along with courses and student clubs that critically discuss topics of health and the body could create synergy to challenge diet culture on university campuses. Intentional campus-wide weight-inclusive programming would allow students to arrive at health coaching appointments being more primed for weight-inclusive messages. Such comprehensive, multi-leveled interventions are most likely needed to effectively promote change among college students.

As previously mentioned, the health coaches' personal struggles with body image helped them develop an appreciation for a weight-inclusive approach. This finding provides another possible solution to the challenges they faced when sharing a weight-inclusive approach: the importance of relating the information shared to the individual's previous dieting and weight loss experiences. This requires health coaches to use extensive reflective practice while inviting their clients to share the etiology of their weight concerns. For example, it might help to first have clients share the why, when, who and how of their weight loss journeys (see Table 2) followed by reflections that denote understanding and acceptance.

Table 2. Unpacking weight concerns while supporting client autonomy

Unpacking weight concerns questions	
Why?	Why do you want to lose weight?
When?	When do you first remember experiencing discontent with your body weight, shape, or size?
Who?	Who in your life, if anyone, has contributed to you feeling discontent about your body?
How?	What have you tried in the past to lose weight and what have you learned about yourself in the process?

Source(s): Authors' own work

Although some mentors shared that they asked these questions, supervisors in peer health coaching programs can offer additional training and feedback in helping coaches feel comfortable unpacking weight concerns with clients through the "why, when, who, how" method. As clients respond, health coaches can incorporate that information to introduce the components of a weight-inclusive paradigm through reflective practice, personalizing the message to their clients. Future training can include a more rigorous rehearsal of the engaging and evoking process for exploring clients' weight concerns.

At the same time, the concept of "trying to change a client's viewpoint" is nonadherent with MI practice, which emphasizes partnership and acceptance, including autonomy support (Miller and Rollnick, 2023). Therefore, the health coach participants in the current study were trained to navigate conversations related to weight by supporting client autonomy, instead of trying to change client viewpoints by directly providing information. This means health coaches were asked by their supervisor to share a weight-inclusive approach to clients expressing weight concerns while simultaneously continuing to work with the client on preferred topics, even if the client rejected the presented nondiet framework. Even if the client was not interested in aligning with a weight-inclusive approach, there were often changes that the client expressed interest in making that the coach could use MI to increase motivation, for example, meal planning and increasing physical activity. Researchers and health and fitness professionals often report weight loss as a behavior when in fact weight loss is an outcome that may or may not occur in response to health-supporting changes (Gordon-Larsen and Heymsfield, 2018). Furthermore, weight outcomes are much more complex with variables that are often not considered by clients and professionals such as genetics, environment, and the social determinants of health (Hunger *et al.*, 2020). It may help for supervisors to continuously and explicitly normalize that adopting a weight-inclusive approach might occur gradually over time for both clients and for coaches and, in some instances, all coaches can do is plant a seed, especially given the limited amount of contact they may have with some clients.

The strategies the health coach participants adopted to navigate the conflicts that arose when a client was hesitant to adopt a weight-inclusive approach were varied, and experience appeared to influence their choice. For example, health coaches who had served in the program for at least one previous semester seemed to navigate this dynamic more fluidly, aligned more closely with MI, and noted less hesitation to unpack and explore weight concerns and body image. On the other hand, newer health coaches felt safer sticking to protocols or redirecting the conversation when these topics arose. This development among peer health coaches from a rigid, uncomfortable delivery to an integration of knowledge and skills to their practice aligns with what is known about the development of counseling trainees (Stoltenberg and McNeill, 2010). Stoltenberg and McNeill (2010) explained that novice counselors start with high self-focus and difficulty in showing empathy, due to a difficulty in listening to the client and connecting what they know about theory to what is happening in the session. With time and experience, counselors develop the skills to reflect in action and listen to the client, becoming more client-centered (Stoltenberg and McNeill, 2010).

Group supervision also appeared as an important resource to support health coaches with many challenges related to practicing from a weight-inclusive approach. In other work examining undergraduate counseling trainees' perceptions of group supervision, some perceived benefits included increased counseling competencies and self-awareness and seeing similar experiences resulting in normalization (Atik and Atik, 2019). Through group supervision, supervisors could normalize the difficulty in helping clients engage in weight-inclusive thinking when surrounded by weight-centric messages, which would help trainees comprehend that it is common to go through this change slowly and not blame themselves when clients fall back into weight-centric thinking. Future work should investigate the mechanisms of group supervision that most support practitioners who are looking to develop a weight-inclusive practice.

A final lesson health coaches shared was using the weight-inclusive approach as a way to help clients focus on health behaviors rather than weight. While focusing on health behaviors for people in all bodies is aligned with a weight-inclusive approach to health, an important consideration is healthism, defined as the preoccupation with personal health as the primary focus for the definition and achievement of well-being, i.e. making health appear to be a personal/individual responsibility rather than a nuanced construct (Crawford, 1980). Health coaches in this study shared sentiments that border healthism in how they shared that in taking the focus off of weight they should focus on health behaviors instead. Weight- and size-inclusive practices should aim to create an accessible and safe environment for people at all weights and sizes to make meaningful health behavior changes, to the degree that they choose, rather than offer promises of health or create the impression that lack of good health is a personal problem or moral failure (Hunger *et al.*, 2020). This finding suggests that more training is needed on the topic of healthism for future health coaches aiming to practice through a weight-inclusive lens.

Study strengths and limitations

There are several strengths in the current study. First, a methodological strength is that interviews conducted with health coaches were conducted by someone not involved with the health coaching program or affiliated with the program university. Having a third-party interviewer can reduce the potential of asking leading questions, uneven reporting, or participants experiencing acquiescence bias. Another study strength includes the use of IPA with two independent coders as well as an audit by a third coder. Having two individuals separately code and resolve discrepancies with codes assigned and main themes generated along with an audit of the analytic process improves the interpretation, reliability, and quality of the data (Church *et al.*, 2019). A final strength of this study is the novelty of this work. To our knowledge, this is the first paper to examine training experiences and application of weight-inclusive approaches within practitioner-client interactions.

This study is not without limitations. First, the sample size was constrained because the available pool of health coaches was already small. Despite the limited number of health coaches available to interview, we still observed signs of theme saturation which is consistent with justification of sample sizes in qualitative research (Vasileiou *et al.*, 2018). On average, the health coaching program operates with five to eight health coaches each semester. While the majority of health coaches chose to participate in this study, generalizability cannot be assumed. Another limitation is that the program did not measure the health coaches' fidelity of the weight-inclusive approach. In other words, health coaches could subscribe to the use of weight-inclusive approaches but may not actually be implementing it in appointments with clients. Thus, future research should continue to research the complex processes of peer education and examine the multitude of factors that can impact client outcomes when delivering a peer-based critical health education intervention.

Conclusion

Given the prevalence of body dissatisfaction, physical inactivity, and dieting amongst college students, providing critical health education that helps college students develop body respect and sustainable health habits is warranted. To address this problem, a service-learning program at a mid-sized southwestern university trains peer educators to provide critical health education on weight-inclusive approaches to health through the use of MI-based health coaching. Our goal was to examine their experiences serving as peer health coaches in the program, given the potential challenges peer educators face when providing weight-inclusive health education. Specifically, this study addresses what Tylka *et al.* (2014) listed as a future direction of research:

to qualitatively investigate challenges and barriers of shifting to a weight-inclusive approach in health care and other applied settings. This project was part of a larger research study that examined health coaches' experiences with peer-led health coaching (Fogaça *et al.*, 2023).

Through semi-structured interviews, we found that college students in health coaching positions found the weight-inclusive approach to be a personally meaningful paradigm shift after their own negative experiences with dieting and weight loss. We also learned of specific challenges that peer health educators faced when conducting weight-inclusive health coaching as well as the strategies they adopted to navigate these challenges. The current study specifically allows for greater insight into barriers and facilitators of offering weight-inclusive health coaching. Given the rising interest in weight-inclusive health coaching as well as the reality that health coaches will face challenges sharing weight-inclusive approaches due to the status quo of weight-centric approaches in society, training and supervision could help them prepare and cope with such challenges.

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A mixed-method study of parents' views of food and nutrition in Australian primary schools

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Abstract

Purpose – Schools have long been perceived as an ideal setting to support the healthy eating behaviours of children. The aim of the study was to examine the views of Australian primary school parents regarding school food and nutrition, including education, practices and policy.

Design/methodology/approach – An online survey was conducted among 787 parents in March 2021, which included closed and open-ended questions.

Findings – The results indicated the inconsistent implementation of policies and/or varying practices among different schools. Parents' views were slightly associated with some demographic and personal measures including their SES levels, education, age, the main language spoken at home and universalism values. Parents viewed healthy food provision through canteens, policies and informing parents, fruit and vegetable breaks and kitchen and garden programs as the main contributors to the promotion of healthy eating. They believed unhealthy options in canteens, school fairs, events and birthdays are the major contributors to the formation of unhealthy eating habits among children at schools. Results revealed the efforts to establish health promoting school food environments in Australian primary schools; however, inconsistencies and discrepancies among schools should be addressed to ensure equity among all children.

Practical implications – The findings may provide directions for policymakers and school managers and can inform future reforms and initiatives in Australian primary schools and elsewhere.

Originality/value – This is the first study that has examined Australian parents' views of school food policy, practices and environments using a mixed-methods design.

Keywords Food and nutrition, Primary school, Parents, Healthy eating, Mixed-methods, Food environment

Paper type Research paper

Introduction

Children's poor eating habits pose risks for their current and future health in many regions of the world (World Health Organisation, 2021). Similar to diets of children in many other countries (Eliason *et al.*, 2020; Goh and Jacob, 2011; Lynch *et al.*, 2014), Australian children's low fruit and vegetable intakes and excessive discretionary food intakes have been reported as a non-optimal dietary pattern that needs to be addressed (Australian Bureau of Statistics, 2018b). These eating habits are one of the major contributors to childhood obesity which is regarded as "one of the most serious public health challenges of the 21st century" (World Health Organisation, 2021) that causes various non-communicable diseases (Daniels *et al.*, 2005; Kaikkonen *et al.*, 2013; Maynard *et al.*, 2003).

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Diet should be considered in the context of social, cultural and environmental influences, in addition to personal food preferences (Velardo *et al.*, 2020). Several environments influence children's eating behaviours and diets. Schools have long been perceived as an ideal setting to support healthy eating behaviours through continuous contact with children (Harrison and Jones, 2012). The Health-Promoting Schools Framework developed by WHO in the 1980s advocates that school environments have the potential to foster health through a whole-school approach (Langford *et al.*, 2015). According to this approach, schools deliver a formal health curriculum, influence health behaviours by policies and practices through its ethos and supportive environments and engage with families and recognise their influence over children's behaviours (Langford *et al.*, 2015; St Leger, 2000).

To encourage healthy eating among children, the Australian Federal and State Governments have taken steps so far, such as implementing canteen nutrition policies in primary schools, which are typically not mandatory (Rosewarne *et al.*, 2020). Small-scale school interventions promoting healthy eating habits have been carried out in partnership with local governments (Laurence *et al.*, 2007; Newell *et al.*, 2004; Sanigorski *et al.*, 2008), and some aspects of food and nutrition education (FNE) that are included in the Australian curriculum (ACARA, 2021) as well as in various state curricula including Victoria (VCAA, 2021). It is crucial to investigate the current situation at schools and whether these efforts lead to changes in children's food and nutrition related knowledge and skills and their eating behaviours. The views of key stakeholder groups such as parents and teachers are crucial for successful implementation and evaluation of the programs and policies as well as for future programs and reforms. As one of the major stakeholder groups, the views of parents are essential, as many programs and policies involve their cooperation (Chaleunsouk and Kutsyuruba, 2014; Middleton *et al.*, 2014; Van Ansem *et al.*, 2013). The involvement of parents in changes in school food and nutrition education and school food environments can increase their effectiveness (Pérez-Rodrigo *et al.*, 2001) as top-down policies have little effect if they are not coupled with, and sensitive to, local implementation (Moore *et al.*, 2010).

However, to date, there have been few investigations of Australian parents' opinions about school food practices and food environments and their effects on the dietary habits of children. Their views have been investigated in a limited number of studies which only focussed on a particular school health interventions (Bouterakos *et al.*, 2020; Nash *et al.*, 2020) or one aspect of the school food environment such as the canteen (Abery and Drummond, 2014; Lawlis *et al.*, 2017), school gardens (Block *et al.*, 2012; Gibbs *et al.*, 2013) or the FNE curriculum (Aydin *et al.*, 2021; de Vlieger *et al.*, 2020). In addition to these narrowly focussed studies, in our previous qualitative study, parents' and teachers' expressed their views of primary school's role in the promotion of healthy eating through FNE, food environments and food policy *(Anonymised)*. Since the qualitative findings are limited in terms of generalisability, a more extensive comparative study is necessary to examine the current role of Australian primary schools in promoting healthy eating habits among children. Therefore, the current study explored the views of a wide range of Australian parents' about primary schools' role in the promotion of healthy eating through the FNE, its policy and physical environment, in particular schools' strengths and weaknesses in the promotion of healthy eating among children.

The second aim of the study was to explore potential predictors of parents' views on school food and nutrition, including demographic factors and personal values, such as universalism and hedonism. These values can potentially impact views and expectations related to food and nutrition (Lee *et al.*, 2014; Thomson *et al.*, 2017; Xiao and Kim, 2009). Universalism value refers to "understanding, appreciation, tolerance, and protection for the welfare of all people and nature" and hedonism value refers to "pleasure or sensuous gratification for oneself". In 2012, in revised Schwartz values, universalism was presented through three subtypes, two of which were included in this study, namely universalism-concern (e.g. equality, social justice), and universalism-nature (e.g. protect the environment).

Our hypothesis was that both parents' demographic characteristics and personal values would be linked to their attitudes towards school food and nutrition.

Methods

Design and sampling

Our study was a mixed-methods design in which quantitative component aimed to identify consistent patterns and demographic associations in parents' views, while the qualitative part aimed to shed light on complex concepts that may not have been captured by closed-ended questions (McEvoy and Richards, 2006). We adopted a critical realistic approach, recognising that while there is a reality to observe and document, the researchers' perspectives may influence the research (Sims-Schouten *et al.*, 2007). Within this approach, to explore parents' views, we employed a descriptive theoretical framework which aims to present a summary of a phenomenon in everyday words as stated by the participants without interpreting their responses (Sandelowski, 2000). This approach was appropriate for the analysis, given the limited amount of data collected from parents in response to two brief open-ended questions.

We administered an online cross-sectional survey using the Qualtrics platform to obtain parents' views on primary school food environments, practices and policies. Eligible participants were parents or primary caregivers of children attending an Australian primary school and currently living in Australia. We utilised paid and unpaid recruitment strategies on social media platforms such as Facebook and Twitter, and offered parents the opportunity to win one of five $50 shopping vouchers as an incentive for survey participation.

Survey questionnaire

The survey comprised 31 closed-ended questions and five sub-questions, as well as seven open-ended questions. Previous qualitative studies conducted by the authors in relation to parents and teachers' views of primary school food and nutrition education and environments *(Anonymised; Anonymised)* and previous literature related to school food environments informed the development of the questionnaire. This cross-sectional study was designed to confirm the generalizability of these findings within a large population sample. The present paper reports the results from 18 close-ended and two open-ended questions that focused on primary school food environments, practices and policies. Eighteen statements were used to elicit parents' perceptions on school food environments, policy and practices. All these items used six-point response scales ranging from "strongly disagree" (1), "disagree" (2), "neutral" (3), "agree" (4), "strongly agree" (5) and "unsure" (6).

The other questions in the questionnaire explored parents' views of school food and nutrition education and their relationship and communication with their children's classroom teacher on food and nutrition-related issues. Additional details about the survey design are available elsewhere *(Anonymised; Anonymised).*

Personal values. Nine items from the Schwartz Personal Values inventory were selected and modified to make them relevant to both male and female respondents (Schwartz *et al.*, 2012). The values of universalism-nature, universalism-concern and hedonism (three items each) were included in the survey because they have been linked to people's beliefs and practices related to food (De Jong *et al.*, 2017; Farragher *et al.*, 2016; Nijmeijer *et al.*, 2004; Worsley, 2003). Previous studies have shown that people with higher universalism values consume healthier food (Farragher *et al.*, 2016), and are more likely to support healthy eating policies (Worsley, 2006) and initiatives that promote fruit and vegetable consumption (Worsley *et al.*, 2011). In accordance with previous findings, we predicted that parents with high universalism values would be more critical of food policies and practices, whereas hedonists would be more lenient.

Parents were asked: "*To what extent do the following statements describe you and your approach to life*?" On a 5-point Likert scale, they were asked to rank the importance of each

scale independently. For each personal value, internal reliability was measured and found to be 0.79 for hedonism, 0.80 for universalism-concern and 0.82 for universalism-nature. The mean ratings given to the items for each personal value were used to calculate the respondents' personal value scores.

Parental demographic characteristics. The study collected demographic data from respondents through six questions which included their gender, age, marital status, highest level of education completed, main language spoken at home and residential postcode. The respondents' residential postcode was used to determine their level of remoteness based on the Accessibility and Remoteness Index of Australia (ARIA+) (Australian Bureau of Statistics, 2016a). Their socio-economic status (SES) was determined by mapping their residential postcode to the Socio-Economic Indexes for Areas (SEIFA) (Australian Bureau of Statistics, 2016b). The study defined "low SES" as decile 1–3 and "high SES" as decile 8–10.

Survey administration

Before taking the survey, participants were provided with a Plain Language Statement to read and were asked to confirm their consent to participate. The survey was pre-tested by nine parents who were not included in the final study to identify any issues with question wording or structure (Grimm, 2010). The pre-test also helped to determine the length of time needed to complete the survey. Two sections were removed, and minor modifications were made to the remaining questionnaire based on the pre-test feedback. The study was conducted in March and April 2021 and was approved by the Human Ethics Advisory Group at Anonymised University's Faculty of Health (HEAG-H 13–2021).

Data analysis

We analysed the responses to the closed-ended questions using IBM SPSS Version 27 (Chicago, IL). After inspection of the data distribution, the six categories for the 17 statements were aggregated into three categories as *Disagree, Agree and Neutral/Unsure*); Table 1. An exploratory principal component analysis (PCA) with varimax rotation (Pallant, 2020) was performed on the non-aggregated data (*only unsure was recoded as 3*) associated with the 17 items. The Kaiser–Meyer–Olkin (KMO) measure of 0.868 was above the recommended value of 0.6, and Bartlett's test of sphericity indicated that the dataset was suitable for PCA (Pallant, 2020). The PCA derived three components (Table 2). Cronbach alpha coefficients were calculated to assess the components' internal reliabilities. The cut-off for rotated factor loadings was 0.3 (Tabachnick and Fidell, 2007). To generate total component scores, the items loading on each component were summed, and then the mean component scores were calculated by dividing the sum by the number of items. The three mean component scores were stored as separate variables, and stepwise multiple regression analyses were performed using these component scores to identify the predictors (demographics and personal values) for each PCA component. Preliminary analyses were conducted to ensure that the assumptions of normality, linearity, multicollinearity and homoscedasticity were not violated (Pallant, 2020). A two-sided type 1 error of 0.05 was considered as a significant difference.

We extracted the open-ended responses to the questions "*What is the best thing school does in promoting healthy eating?*" and "*What is the worst thing your child's school does in promoting unhealthy eating?*" from the Qualtrics database and loaded them into the Leximancer software (Version 5, Leximancer Pty Ltd, 2021). Leximancer is a machine learning-based tool for qualitative data analysis that automatically generates themes and related concepts from textual data (Smith and Humphreys, 2006). The software identifies concepts and themes through word occurrence and co-occurrence frequencies, allowing for faster and more efficient analysis than manual coding (Cretchley *et al.*, 2010a, b). In the final analysis step, the identified concepts were presented as a concept map (Figures 1 and 2), with the themes represented by large circles and the concepts represented by dots. Leximancer

Table 1. Parents' agreement with statements regarding the school food and nutrition ($N = 787$)

To what extent do you agree or disagree with the statements below?	Disagree	Neutral/ Unsure	Agree
My child's school provides parents up to date healthy eating information	35	41	24
My child's school has food education programs (such as a kitchen garden program)	34	20	45
My child's school does not provide healthy eating resources that are appropriate for children from various cultural backgrounds	23	44	33
My child's school has limited time available to teach food and nutrition-related topics	17	40	43
My child's school has a healthy eating policy	15	28	58
My child's school has a healthy food environment (e.g. having a healthy canteen)	24	30	46
Food is often used as a reward or punishment at my child's school	54	22	24
My child receives conflicting messages about healthy eating at school (e.g. healthy eating messages versus poor canteen food)	40	28	32
My child is not given enough time to eat lunch	28	18	54
Birthday parties are allowed that include junk food at my child's school (e.g. lolly bags)	27	19	54
School fairs promote junk foods and drinks at my child's school (e.g. sausage sizzles)	14	23	63
Fundraising events encourage parents to sell junk food at my child's school (e.g. chocolate drives)	31	23	46
My child's school canteen often lists unhealthy options on the menu	30	29	42
There is a lack of facilities for food preparation at lunchtime in my child's school (e.g. few microwaves, fridges, dining rooms)	10	22	69
My child's school has passionate staff when promoting healthy eating among children	16	48	36
Teachers lack the required knowledge and expertise about healthy eating at my child's school	25	44	31
Teachers are not motivated to promote healthy eating at my child's school	34	41	24

Source(s): Authors' own work

labels the most prominent concepts as themes in terms of their interconnections with other concepts (Harwood *et al.*, 2015) and these themes are heat-mapped to visualize their relative connectivity with other concepts (Angus *et al.*, 2013). To ensure that the themes were named in a meaningful way, we renamed them by repeatedly reviewing the parents' responses for each theme (Cretchley *et al.*, 2010a, b; Indulska *et al.*, 2012).

Results

Parental demographic characteristics

The survey link was clicked on by 1,259 participants, but 787 completed the survey, resulting in a completion rate of 62%. The parents who responded represented diverse categories in terms of age, education, geographical region and socio-economic status. The majority of the respondents were female (96%) and married (86%), with a mean age of 40 years. Most parents had completed at least a university degree (72%). Although the survey had responses from across Australia, more than half were from Victoria (56%). The distribution of respondents living in major cities (66%) was similar to that of the Australian population (71%) (Australian Bureau of Statistics, 2018a). English was the main language spoken at home for the majority of respondents (93%). Based on the Socio-Economic Indexes for Areas (SEIFA) mapped to residential postcodes, the majority of respondents were from high (54%) and mid (37%) socio-economic backgrounds (Australian Bureau of Statistics, 2016b). Further details regarding the demographic characteristics of the respondents have been previously presented *(Anonymised).*

Table 2.
Principal component analysis components

Items	Factor loadings
Component 1. Unhealthy environments and practices (Cronbach's alpha = 0.761)	
Fundraising events encourage parents to sell junk food at my child's school (e.g. chocolate drives)	0.77
School fairs promote junk foods and drinks at my child's school (e.g. sausage sizzles)	0.74
Birthday parties are allowed that include junk food at my child's school (e.g. lolly bags)	0.66
My child's school canteen often lists unhealthy options on the menu	0.65
My child receives conflicting messages about healthy eating at school (e.g. healthy eating messages versus poor canteen food)	0.62
Food is often used as a reward or punishment at my child's school	0.50
Component 2. Healthy eating promotion (Cronbach's alpha = 0.773)	
My child's school has a healthy eating policy	0.69
My child's school has a healthy food environment. (e.g. having a healthy canteen)	0.69
My child's school provides parents up to date healthy eating information	0.66
My child's school has food education programs (such as a kitchen garden program)	0.63
My child's school has passionate staff when promoting healthy eating among children	0.63
Component 3. Lack of resources and time (Cronbach's alpha = 0.702)	
Teachers lack the required knowledge and expertise about healthy eating at my child's school	0.77
Teachers are not motivated to promote healthy eating at my child's school	0.75
My child's school has limited time available to teach food and nutrition-related topics	0.69
My child's school does not provide healthy eating resources that are appropriate for children from various cultural backgrounds	0.61
There is a lack of facilities for food preparation at lunchtime in my child's school (e.g. few microwaves, fridges, dining rooms)	0.35
My child is not given enough time to eat lunch	0.30

Source(s): Authors' own work

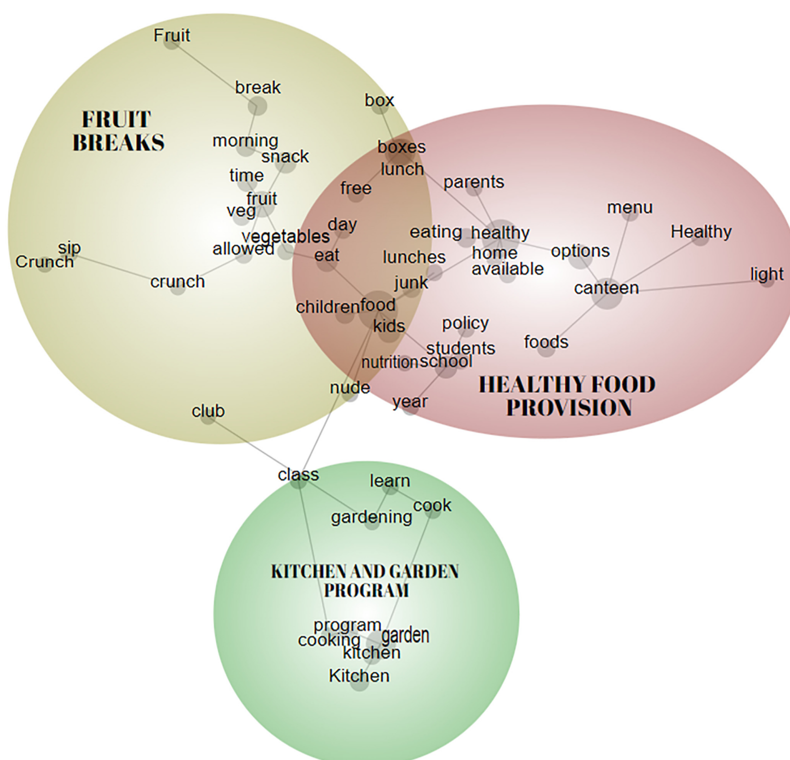
Parents' agreements of the school food environments, practices and policy

Parents' agreement with 17 statements about school food and nutrition, including education, practices and policy are presented in Table 1. The results demonstrate the diverse opinions of parents and the lack of consensus about the statements.

Results of the factor analysis of the agreement ratings

Exploratory factor analysis (principal components with varimax rotation) derived three components. We provisionally named these three components by considering the highest loading items on each of them as follows: (1) Unhealthy environments and policies, (2) Healthy eating promotion (3) Lack of resources and time. The three derived principal components accounted for 47% of the variance in the parents' ratings of school food environments, practices and policy. Table 2 displays the factor loadings of each item on the three identified components.

Linear multiple regression analyses revealed that scores for the Universalism-nature value, education, age and SES-level significantly predicted the parents' Component 1 (*Unhealthy environments and policies*) scores, as shown in Table 3. Younger parents, parents with higher universalism nature values, parents with a university degree and parents from low-SES levels were more likely to have higher mean component scores for Component 1. "The main language spoken at home" was associated with scores for Component 3 (*Lack of resources and time*). Native-English speaking parents had higher mean scores for Component 3. None of the demographic variables emerged as significant predictors of Component 2 (*Healthy eating promotion)* (Table 3)



Source(s): Authors' own work

Figure 1. Leximancer concept map 1

Qualitative findings

Parents were asked: "*What do schools do best to promote healthy eating?*" and "*what do schools do worst to promote unhealthy eating?*". Results are given below, along with original parent quotes and concept maps created through Leximancer analysis (Figures 1 and 2). Identified themes and subthemes are also presented in Table 4.

What do schools do best to promote healthy eating?. Parents provided responses, and three themes were identified via Leximancer analysis.

Theme 1 enabling healthy food provision. Parents discussed how schools demonstrate an effort to ensure healthy food provision through canteens and lunchbox policies and by supporting parents by providing resources and information regarding healthy eating.

a. Healthy canteen policy

Many parents expressed their satisfaction with the options at their children's school canteen. They mentioned that healthy options dominated the canteen menus. They frequently referred to colour coding, a traffic light system or star rating used in the canteens. A few parents added that canteens had informative posters on healthy eating.

> The canteen has no "red" foods, only "green" and "orange".

> Has traffic light system posters in the undercover area

Some parents mentioned a recent positive change in their schools' canteen menus such as provision of home-cooked options or healthier options.

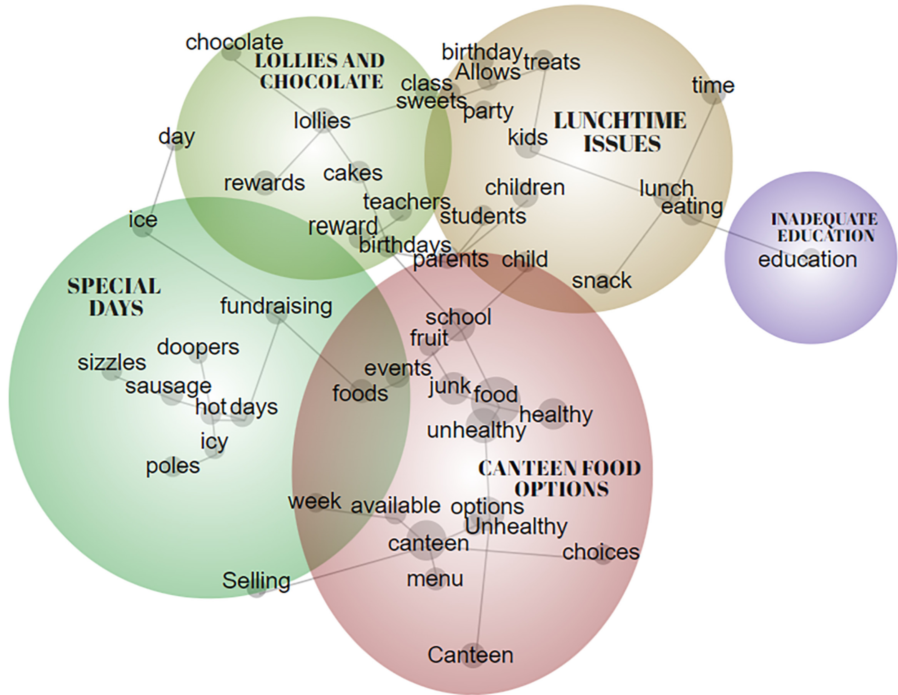


Figure 2.
Leximancer concept map 2

Source(s): Authors' own work

Table 3.
Predictors of parents' component scores in linear multiple regression analyses

	Unhealthy environments and policies $R^2_{adj} = 0.03$ $F(4,779) = 5.789$ $p < 0.001$		Lack of resources and time $R^2_{adj} = 0.01$ $F(1,782) = 6.247$ $p < 0.01$		Healthy eating promotion $R^2_{adj} < 0.001$ $F(11,772) = 0.891$ $p > 0.05$	
	Std.β	*p*	*Std. β*	*p*	*Std. β*	*p*
Universalism-Nature	0.077	0.030				
Low-SES	0.101	0.005				
Education-University	0.90	0.011				
Age	−0.070	0.050				
Main language spoken at home			−0.089	0.013		

Note(s): Only statistically significant associations were outlined in Table 3
Source(s): Authors' own work

Have changed canteen to an external source that's healthier

New canteen menu, which is all homemade and healthy

b. Health policies and encouragement for healthier lunchboxes

Many parents also commented on policies or rules for lunchtime at their children's schools. They stated that healthy lunchboxes were encouraged. Nude food policy was frequently

What do schools do best to promote healthy eating?
Theme 1. Enabling healthy food provision
a. Healthy canteen policy
b. Health policies and encouragement for healthier lunchboxes
c. Informing parents
Theme 2. Fruit and vegetable breaks
Theme 3. Kitchen and Garden program
What do schools do worst to promote unhealthy eating?
Theme 1. Unhealthy canteen food options
Theme 2. Lunchtime
Theme 3. Special days
Theme 4. Lollies and chocolate

Source(s): Authors' own work

Table 4. Summary of themes identified in the study

mentioned, which encourages students to bring package-free lunches from home. Some also reported that the schools had a drink policy that only allowed water along with the lunchbox.

> Fairly strong rules about no junk food allowed even for lunches

> Nude food Tuesday's encourages fresh food and no waste

> Only water in drink bottles

A few parents mentioned that children were rewarded for having healthy lunchboxes or received some feedback if the content of the lunchbox was regarded as unhealthy.

> They give kids behaviour reward points if they bring fruit or veg in their lunch box.

> If a child has unhealthy food, they send it back home in a zip lock bag with unhealthy written on it

Some parents appreciated the use of lunchtime to try new food that parents had packed and start a discussion about healthy eating.

> Mystery food day- parents pack new foods and blindfolded, kids taste each object, familiar or unfamiliar—a fun way to start the food conversation

> They also ask students to talk about their lunch and what is in it.

c. Informing parents

Some parents also believed that one of the best things schools do to promote healthy eating was to support parents to help their children practise it, specifically for the lunchbox preparation. They listed different ways of assisting parents, such as running information sessions and sending brochures.

> Provide occasional sessions for parents on lunch box ideas

> Parents received a generic pamphlet about packing a healthy lunchbox at the start of the year.

Theme 2 fruit and vegetable breaks. Many parents appreciated their children's school for having a designated time to have fruit or vegetables. They referred to the programs using different names such as "crunch and sip", "brain food", "munch and crunch" due to the differences between the States of Australia.

> They have fruit break in the mid-morning session to encourage fruit and vegie consumption.

> Only fruit and vegies allowed for the first crunch n sip snack of the day.

Some parents also reported that their children's schools provided fruit for free for every child or when a child did not have any.

> They do a fruit break at school in the morning, and they offer student's a piece of fruit or let them eat a fruit or vegetables from their lunchbox in the mornings.

> Free fruit in the classroom for all children to eat

Theme 3 kitchen and garden program. Many parents expressed their appreciation of the kitchen and garden programs at schools. Some also stated that their children loved these programs. However, some mentioned that these programs no longer run in their children's schools.

> In previous years, they had Jamie Oliver's healthy eating program come into the school, so the students got to cook with fresh garden ingredients, and they loved it!

> The teacher who runs the cooking is a Registered Dietitian, and we also have a gardening program where the children learn about caring for food which is then used in cooking.

What do schools do worst to promote unhealthy eating?. Theme 1 unhealthy canteen food options. This theme was the most prominent one. Some parents highly criticised school canteens. These parents reported an abundance of "unhealthy" options in the menus, whereas others criticised the inadequate availability of "healthy" choices. They believed school canteens failed to reflect the teaching on healthy eating in classrooms.

> 99% of canteen food available is junk.

> Unhealthy foods still available at the canteen and via lunch orders.

Parents also believed the options were presented misleadingly, and unhealthy choices were presented as if they were healthy. On the other hand, they stated that healthy options on the menu were usually more expensive and not appealing for primary school children.

> Sells carbonated fruit juices (Juice bombs), which are marketed as "healthy" but they're extremely high in sugar.

> Really unhealthy canteen options and the healthy options are not prepared to be liked by a primary school-age child.

> Healthy food is more expensive and less available.

Theme 2 lunchtime issues. The inadequacy of eating time received high criticism from parents of both older and younger children. They stated that eating time competes with class time, and not enough time was given to their children, or their children had to choose between playing or eating.

> Lack of eating time at lunch only get 10 mins to eat lunch before they can

> Not allowing preps adequate eating time to refuel their growing bodies and support their learning

Some parents criticised the lack of or insufficient implementation of food policies at schools regarding food brought from home.

> The policy is there, but many parents don't follow it, and the teacher doesn't follow up with those parents sending junk food that's against the policy.

> Still allows processed food in lunchboxes (out of the packet), meaning my child is curious about the foods that she doesn't get at home

On the other hand, "policing lunch boxes" was criticised by some parents as well. They believed teachers policing lunch boxes is inappropriate and shaming children and parents. Also, they argued that teachers could reach wrong conclusions when observing lunch boxes.

> Commenting on something is unhealthy when they don't know it's homemade and healthy made with natural ingredients.

> Shames the parents for packing an occasionally treat

Theme 3 special days. Parents discussed the food environment on special days or events at school, including fetes, sports events, fundraising days and movie nights. They reported the lack of healthy options or abundance of unhealthy options on these days. Sausage sizzles (*BBQed sausages*) and icy poles/doopers (*frozen flavoured liquid on a stick*) can be observed on the concept map (Figure 2). Prize options on these events were also criticised.

> Conflict of interest when it comes to fundraising options as often based on the purchase of unhealthy foods

> School events run by parents have a lot of junk food.

Theme 4 lollies and chocolate. Parents highly criticised the excess availability of sweets such as lollies (*candy*) and chocolate at schools. Birthdays were regarded as one of the days associated with an excess amount of sweet options. Some parents criticised the abundance of sweet options on these days as they believed birthdays might become very frequent when the number of students in a class was high.

> School allows cakes to be brought in on birthdays instead of sharing fruit.

> Children are allowed to bring in a lot of junk food to celebrate birthdays.

> Allowed lolly bags with lots of lollies for birthdays (one would be plenty)

In addition, some parents reported that teachers might reward learning in the classroom with lollies or chocolate.

> Teachers reward learning with junk food.

> Some teachers use lollies as rewards on a regular basis.

Discussion

As far as we are aware, this is the first study that has examined Australian parents' views of school food policy, practices and environments using a mixed-methods design. The findings, despite being based on a convenience sample, are crucial for health policymakers as they develop and implement strategies to improve children's eating behaviours. Parents varying ratings for the statements about school food environments, practices and policy indicated the inconsistent implementation of policies and/or varying practices among different schools across Australia. Results indicated there had been some positive public health efforts at schools which can also be evident from junk food consumption reduction among Australian children from 2010 to 2015 (Boylan *et al.*, 2017). However, besides these promising trends, the consumption of discretionary food still contributes to 40% of children's daily energy intake (Australian Bureau of Statistics, 2018b). According to a recent assessment, Australian States and Territories differ in the way healthy school food provision policies are applied and the extent to which implementation is monitored and supported (The Australian Prevention Partnership Center, 2017). This was in line with previous studies which reported varying school nutrition policy compliance levels among schools (de Silva-Sanigorski *et al.*, 2011; Dick

et al., 2012; Woods *et al.*, 2014; Yoong *et al.*, 2015), although adherence has been shown to increase in some states (Hills *et al.*, 2015). Moreover, a recent Australian study reported that the prices of unhealthy food were less than healthy options at schools (Wyse *et al.*, 2017). Therefore, policy efforts in this area should continue with an emphasis on mechanisms to raise awareness and ensure adherence to existing healthy food provision policies.

The study also demonstrated parents' views' associated demographic and personal factors. Parents' ratings for *Component 1* – Unhealthy environments and policies scores were positively associated with having a low-SES background, a university degree and higher Universalism values but negatively associated with parents' age (Table 4). It can be claimed that events and food-related practices in schools in low-SES areas might tend to be less healthy. Parallel to our findings, the consumption of discretionary food has been reported to be higher among students from lower SES levels and Middle Eastern backgrounds (Boylan *et al.*, 2017). Unhealthy food environments could be contributing to these high consumption rates in low-SES areas. In addition, in a state of Australia, NSW, the overweight and obesity rate was significantly higher in children from low socio-economic areas (Bravo *et al.*, 2020). Therefore, it may be wise to prioritise economically disadvantaged communities in future programs and interventions.

Moreover, parents with a university degree had higher ratings for *Component 1*-**Unhealthy environments and policies**. These parents can be more likely to criticise these events and practices due to their higher literacy than parents without a university degree. Lastly, parents with higher universalism values had also higher ratings for *Component 1*-**Unhealthy environments and policies**. Previous studies have shown the association between people's universalism values and their support for healthy eating policies (Worsley, 2006) and initiatives that encourage fruit and vegetable consumption (Worsley *et al.*, 2011). In line with these previous findings, it supported our hypothesis that those with high universalism values would be more likely to report unhealthy practices or environments at their children's schools.

Higher ratings of parents who speak English as their first language for *Component 3*-**Lack of resources and time** (Table 4) indicated these parents were more critical than their non-native English speaking counterparts. These parents can be more familiar with the current school system in Australia and likely to be more critical about the current resources or inadequacies. Non-English speaking parents' low ratings could be due to their relative unfamiliarity with the Australian primary education system and their lesser involvement compared to their English-speaking counterparts (Antony-Newman, 2019; Hagiwara *et al.*, 2007). It is worth noting that the highest agreement (69%) among all parents was on a statement under this component: "There is a lack of facilities for food preparation at lunchtime in my child's school". This inadequacy in schools has also previously been reported as a barrier by parents from various countries in the promotion of healthy eating at schools (Clarke *et al.*, 2013). In addition, 54% of parents agreed with the statement that "my child is not given enough time to eat lunch." This echoes the findings of a recent Australian study in which 58% of participating parents believed that given lunchtime was inadequate in primary schools (Burton *et al.*, 2021).

Parents provided open-ended responses identifying what they perceived as the most significant factors contributing to healthy eating promotion in schools. These included schools' efforts to enable healthy food provision through canteens, policies and informing parents; fruit and vegetable breaks and kitchen and garden programs. These results can be interpreted as parents acknowledge the healthy food availability at school the most and the support they receive for their efforts in facilitating healthy eating at home. As earlier studies have demonstrated that the eating habits and feeding methods of parents are the primary and most influential factors determining a child's food choices and eating behavior (Scaglioni *et al.*, 2018), supporting parents is a key strategy for schools in the promotion of healthy

eating among children. Fruit and vegetable breaks and kitchen and garden programs, although well regarded by parents and reported to be effective in influencing children's food choices (Ohly *et al.*, 2016), can be costly to parents and schools (Nathan *et al.*, 2011; Ohly *et al.*, 2016), thus may not be well implemented or maintained in some schools. Therefore, schools should be financially supported to be able to run and maintain these programs.

Parents' open-ended responses also indicated they view the abundance availability of unhealthy options in canteens, school fairs, events and birthdays as the major contributors to the promotion of unhealthy eating. Similarly, a recent Australian study reported the criticism of parents on fundraising and fete days where school food policies were seen as at odds with (Maher *et al.*, 2020). In Australian educational settings, it is common to see nutritionally deficient foods feature as a part of school celebrations or events, such as sports days, for fundraising campaigns, or used as prizes or rewards (Velardo *et al.*, 2020). Australia was not unique in this matter; for example, fundraising, celebrations and classroom rewards were reported to be substantial sources of unhealthy foods and beverages on American public school campuses as well (Caparosa *et al.*, 2014). However, there are national and international efforts to establish healthier fundraising or school celebration options. For example, in 1,700 Canadian schools, fresh produce was used in fundraising events after 2013 (Buccino and Whittington-Carter, 2020). In addition, Australian organisations, including the Healthy Eating Advisory Service (Healthy Eating Advisory Service, 2021) and Cancer Council (Cancer Council NSW, 2021) are sharing ideas online for healthier fundraising and fete events.

When interpreting the study findings, it's necessary to take into account various methodological limitations. The cross-sectional design of the study limits the ability to draw conclusions about the cause-and-effect relationship. Nonetheless, the results can be used to identify the necessity of conducting further research using alternative research designs that involve measuring changes over time, such as longitudinal studies or pre- and post-intervention studies. Secondly, although efforts are made to recruit parents from various SES levels, there was a high skew of sample to high-income families. Lastly, parents' views of food offered in school and the healthfulness of the school food environment might misalign, as some previous studies highlighted (Martinelli *et al.*, 2021).

Conclusion

This preliminary study has outlined how Australian parents view the current school food environments, practices and policies. The findings suggest directions for policymakers and school managers and can inform future reforms and initiatives in Australia and elsewhere.

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