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ARTICLE

The Use of Photovoice in Youth Health Education Programs: A Systematic Review

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Aim: The aim of this study was to evaluate the use of photovoice in health education programs designed for young people. ***Methodology:*** Nine electronic databases were systematically searched and screened using specific predetermined criteria. Data, such as intervention characteristics, methodology, and analysis, were extracted and narratively analyzed. ***Results:*** A total of 96 studies were included. Photovoice was used in a wide variety of health programs such as obesity prevention and physical activity promotion. Thematic analysis was generally used to analyze the use of photovoice; other measures of effectiveness and impact were rare. ***Conclusion:*** Visual methods such as photovoice are emerging as a valuable tool to use when delivering health education programs to young people. It is critical that photovoice is chosen and adapted to suit participant needs in order to optimize engagement within the project.

Keywords: adolescents, visual methods, youth participatory action research

Health literacy includes the knowledge, motivation, and ability to assess, understand, appraise, and apply health information to make decisions and judgments related to health in order to promote quality of life (Sørensen et al., 2012). Health behaviors and general health are hugely impacted by health literacy levels (Canady & Larzo, 2023), and subsequently, the concept has received increasing global focus in the last 20 years (Liu et al., 2020). Health literacy is a relational concept that involves addressing both individual and organizational health literacy (Okan et al., 2023). Understanding how best to improve health literacy is important as proactively developing health literacy in young people can offer substantial advantages in developing good health behaviors (Chang, 2011).

Young People's Health

Many health-related behaviors begin at a young age and affect health both at that time and in later years (Sawyer et al., 2012). Globally, addressing noncommunicable diseases, especially for adolescents, is a priority in the Sustainable Development Goals (A call to action to eliminate poverty and inequality, safeguard the planet, and guarantee that everyone experiences health, justice, and prosperity), adopted by all United Nations members in 2015 (Akseer et al., 2020). In Ireland alone, recent research has shown a decrease in the general health and well-being of young people (Gavin et al., 2024). Health behaviors and outcomes are impacted by a vast array of complex and interdependent factors, but, as a modifiable determinant of health (Stormacq et al., 2019), it is crucial that young people are supported in becoming knowledgeable and critical consumers of health information (i.e., develop health literacy) as behaviors and attitudes toward health formed during childhood have a strong influence on adult health trends (Nash et al., 2021). Studies have shown that adolescents with poor health literacy are more at risk for obesity (Chari et al., 2014), sexually transmitted infection (Needham et al., 2010), and lack of involvement in health-promoting behaviors (Chang, 2011), making health literacy development in this population particularly important. As a result, this paper focuses on examining specific approaches to improve the health literacy (and by association, health education and behaviors) in young people between the ages of 4–18 years.

Health Education Programs

While not the only context for health education, research has indicated that interventions set in schools can be an effective way to promote healthy behaviors (Laine et al., 2014) and health literacy specifically (Rudd et al., 2004). Teachers play an integral role in the development of school-age children's intellectual and emotional development as well as their health literacy (Peterson et al., 2001). Videto and Dake (2019) acknowledged, however, that teachers often require pedagogical guidance to deliver health literacy informed curricula. As a result, supporting teachers to acquire skills, resources, competence, and confidence to develop young people's health literacy is vital to advance the field. Furthermore, a recent review by Smith et al. (Smith et al., 2021), focusing on health literacy-related interventions in schools, indicated that successful interventions included practical and interactive learning opportunities and peer-led approaches to promote engagement in health education. Opportunities for practical and interactive engagement do, however, need to be fit for purpose, impactful, in line with curricular demands, and, critically, feasible for use. Peer-led approaches are also key and align with a wealth of work in

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Youth Participatory Action Research (YPAR) (Malorni et al., 2022). Specifically, YPAR has been used to provide opportunities for youth engagement in public health planning, tackling social determinates of health and youth-driven transformative community change (Anyon et al., 2018). Research is also growing on the benefits of YPAR in decreasing risky behaviors, such as drug misuse in youth (Abraczinskas & Zarrett, 2020). Researchers using YPAR have utilized a variety of methods to meaningfully involve young people. This includes a range of creative visual methods such as photo elicitation, audio–visual narratives, and photo-mapping. Such visual methods are used to promote participant engagement and communication in order to gather rich data that can elicit and explore experiences and perspectives on a selected topic (Pain, 2012). One prominent visual method is photovoice, which Trask et al. (2024) identified as a way to prioritize young people's voice in health research.

Photovoice

Photovoice is defined as "a process by which people can identify, represent, and enhance their community through a specific photographic technique" (Wang & Burris, 1997, p. 369). Photovoice helps participants to develop deeper understanding and reflection while also allowing them to feel empowered by the process and a sense of improvement from their expression of views (Brigham et al., 2018). First used by Wang and Burris (1997), photovoice has been used for a wide variety of studies involving a number of different populations as well as a diverse range of health and public health initiatives (Catalani & Minkler, 2010; Dassah et al., 2017; Lal et al., 2012; Trask et al., 2024). As a result of the purported benefits of using photovoice for engaging individuals and recognizing the importance of lived experience, it is important to explore how the method is and can be used in a health education context and specifically how the method could be incorporated to support health literacy development. Conceptually, there appears to be commonality, and while there is research in this area that points to the value of photovoice as a tool in health education (Anderson et al., 2023; Trask et al., 2024), there is limited research evidencing the implementation, the evaluation, and any long-term impact of photovoice on health literacy, behaviors, and outcomes in this context. The aim of this study was to explore the use of photovoice with young people within a health education context, specifically as a community engagement strategy. A secondary aim is to investigate how this method is evaluated and any potential impact this method has on the health literacy and health of young people.

Methodology

A pragmatic approach guided this study. Based on the above aims, a systematic review, which facilitates a comprehensive summary of evidence in relation to a specific research question, was undertaken. Following practical outcomes and allowing for methodological flexibility, a pragmatic approach offers a robust framework for addressing complex research questions in a comprehensive and effective manner (Creswell & Clark, 2017). In line with this, systematic review methodology follows rigorous, predefined steps, and findings will highlight the practical applications and real world relevance of photovoice in this cohort and context. This study was preregistered with PROSPERO (REF:CRD42023451718), and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines for conducting and writing systematic reviews (Moher et al., 2015) were followed. The approach to this study was guided by systematic reviews of a similar nature (Anderson et al., 2023; Trask et al., 2024).

Search Strategy

The search aimed to identify peer-reviewed papers that reported on the use of photovoice with young people in the context of health education. The search strategy was developed through consultation of the authorship team, who have expertise in the field of health education research with young people and previous experience in conducting systematic reviews. This search strategy used Boolean operators (AND/OR) to include the relevant terms related to health literacy, photovoice, and adolescent health (Appendix A). Nine electronic databases were searched including MEDLINE, PubMed, SportDiscuss, British Education Index, Education Research Complete, PsycINFO, PsycARTICLES, Scopus, and Ebscohost. These databases are commonly utilized in systematic reviews in this field of research (Catalani & Minkler, 2010; Dassah et al., 2017; Lal et al., 2012; Trask et al., 2024). The search was conducted between July and August 2023. Covidence, a software for managing and streamlining systematic reviews was used to process the papers (Covidence, 2023).

Eligibility Criteria

Full inclusion and exclusion criteria are detailed in the Population, Intervention, Control, and Outcomes (PICO) table (Appendix B). Studies identified through the literature search, from any region of the world, were included if they described using photovoice with young people aged 4–18 years used in relation to "health literacy," "health education," "health knowledge," "health information," or "health understanding." Only peer-reviewed journal articles published in English were eligible for inclusion.

Data Extraction and Management

Studies were subject to a multistage screening process (title, abstract, and full-text screening) by two researchers (Burke and Goss). Discrepancies were resolved through discussion and/or a third researcher (Smith). Study characteristics (e.g., authors, country, participants, purpose of study, outcome measure) and characteristics of the visual method used were then extracted.

Data Analysis

Data were entered into Covidence by the lead author. Data was then downloaded from the Covidence server and uploaded to Excel for data analysis. The included studies were analyzed based on key headings around the age range of participants, the visual method being used, the context, study design, and outcomes of the intervention. The PICO table (Appendix B) provides more information on this procedure. Selective data extraction was used to fill an Excel sheet with the study demographics. Table 1 details the extracted data. Narrative synthesis (Lisy & Porritt, 2016) was then used to summarize and explain the findings.

Quality Appraisal

The Joanna Briggs Institute tool was used to assess the quality of included studies due to its attention to descriptive, theoretical, evaluative, and interpretive validity (Hannes et al., 2010). Each of the included studies was independently assessed using this tool by the lead author (Burke).

Table 1 Results

Authors (year)	Country	Study duration	Area of focus	Population: participant *N* (age range, sex [females] *n*)
Studies in the school				
Abma and Schrijver (2020)	The Netherlands	8 months	Health and well-being	73 (8–11)
Abma et al. (2020)	The Netherlands	3 school-years	Health and well-being	80 (8–12)
Almughamisi et al. (2022)	Saudi Arabia	Unclear	Obesity	15 (13–15)
Bashore et al. (2017)	United States	7 weeks	Mental and emotional health	8 (11–15)
Bird et al. (2021)	Canada	Unclear	Sleep	45 (9–11, F = 26)
Boonekamp et al. (2020)	The Netherlands	Part of a 3-year study	Physical activity	48 (12–14, F = 24)
Boonekamp et al. (2021)	The Netherlands	Part of a 3-year study	Physical activity	93 (12–14, F = 52)
Brazg et al. (2011)	United States	10 weeks	Alcohol and other drug misuse	9 (14–17, F = 6)
Brown and Dixon (2020)	United Kingdom	6 months	Mental health	65 (12–14)
Browne et al. (2020)	Ireland	Unclear	Dietary behaviors	584 (15–16)
Carney et al. (2020)	Tanzania	8 weeks	Alcohol use	117 (15–19)
Cense et al. (2020)	The Netherlands	Unclear	Sexuality	17 (16–18, F = 13)
Danker et al. (2019)	Australia	Unclear	Well-being	16 (13–17, F = 1)
Darbyshire et al. (2005)	Australia	Unclear	Obesity and physical activity	204 (4–12, F = 114)
Downey and Anyaegbunam (2010)	United States	Unclear	Community health	18 (15–19)
Downey et al. (2009)	United States	Unclear	Community health	18 (14–18)
Enright and O'Sullivan (2012)	Ireland	Part of a 3-year study	Physical activity	41 (15—18, F = 41)
Esau et al. (2017)	Uganda	Unclear	Health priorities of youth	32 (13–17, F = 11)
Evans-Agnew (2016)	United States	Unclear	Asthma management	20 (14–18, F = 11)
Findholt et al. (2011)	United States	3 months	Obesity	6 (15–18, F = 4)
Fitzgerald et al. (2009)	Australia	Unclear	Physical activity	37 (Unclear)
Gaines et al. (2022)	United States	8 months	Cancer	25 (Unclear, F = 18)
Genuis et al. (2015)	Canada	Unclear	Food security and obesity	26 (8–10)
Gupta et al. (2013)	United States	10 weeks	Asthma	228 (11–18, F = 169)
Hannay et al. (2013)	United States	2 years	Physical activity	19 (14–19, F = 19)
Harley et al. (2023)	United States	4 weeks	Drug misuse	12 (14–17)
Hartley et al. (2023)	United States	4 weeks	Mental health	8 (14–17, F = 5)
Heidelberger and Smith (2015)	United States	4 months	Food choices and obesity	29 (9–13, F = 9)
Hidding et al. (2020)	The Netherlands	25 months	All 24-h movement behaviors	24 (9–12, F = 12)
Howley et al. (2021)	United States	12 weeks	Physical education	16 (14–15, F = 8)
Iyassu et al. (2023)	Ethiopia	3 months	Food choices	432 (15–19, F = 216)
Kelly (2017)	United States	Unclear	Food choices	14 (11–14, F = 3)
Leung et al. (2017)	China	5 weeks	Environment and health	12 (11–12, F = 6)
McKernan et al. (2019)	Canada	3 weeks	Health behaviors	25 (9–11, F = 12)
Nyika (2022)	Canada	Unclear	Health education	15 (12–21)
Olumide and Oiengbede (2016)	Nigeria	Unclear	Sexual and reproductive health	112 (15–19, F = 68)
Pawlowski et al. (2022)	Canada	3 weeks	Community health	51 (12–18, F = 25)

(continued)

Table 1 *(continued)*

Authors (year)	Country	Study duration	Area of focus	Population: participant *N* (age range, sex [females] *n*)
Petteway et al. (2019)	United States	Unclear	Tobacco use	14 (10–14)
Philip et al. (2022)	United States	8 months	Health promotion	15 (11–18, F = 6)
Riggsbee et al. (2019)	United States	7 months	Food environments and health behaviors	75 (14–15, F = 34)
Rivard (2013)	Africa	Unclear	Physical activity	196 (11–18, F = 196)
Romero et al. (2019)	United States	Unclear	Food choices	17 (8–12, F = 9)
Sanchez et al. (2021)	United States	12 weeks	Sexual health	17 (11–12, F = 17)
Sastre et al. (2019)	United States	2 months	Nutrition and physical activity	23 (12–17, F = 7)
Soriano-Ayala et al. (2020)	Spain	10 months	Health assets	45 (13–17, F = 22)
Staab et al. (2016)	India	Unclear	Food and activity habits	30 (12–14, F = 15)
Stanley et al. (2018)	United States	Unclear	Substance misuse	10 (12–17)
Torrance and Seehagen (2012)	Canada	Unclear	Determinants of health	18 (Unclear)
Trübswasser et al. (2021)	Ethiopia	4 months	Food choices	26 (14–19, F = 17)
Wilson et al. (2008)	United States	Unclear	Drug misuse	122 (5–10)
Studies in the community				
Abraczinskas and Zarrett (2020)	United States	7 weeks	Physical activity	64 (11–15, F = 41)
Bader et al. (2007)	Israel	1 year	Health promotion	20 (12–14, F = 10)
Balvanz et al. (2016)	United States	2 months	Obesity	7 (15–17)
Bayer and Alburqueque. (2014)	Peru	3.5 months	Health, well-being and sexuality.	13 (12–16, F = 7)
Benninger et al. (2021)	United States	10 months	Health and well-being	14 (13–17, F = 5)
Brown et al. (2012)	Australia	Unclear	Sexual health	88 (15–19, F = 56)
Cardarelli et al. (2019)	United States	8 weeks	Respiratory illness	10 (12–18)
Cueva et al. (2020)	United States	Unclear	Obesity	44 (9–11, F = 21)
Eriksson and Dahlblom (2020)	Sweden	Unclear	Physical activity	41 (11–12, F = 25)
Hamilton et al. (2017)	United States	4 weeks	Physical activity	(Unclear)
Hanemaayer et al. (2022)	Canada	6 months	Food choice	5 (15–22, F = 5)
Heidelberger and Smith (2016)	United States	Unclear	Physical activity	24 (9–13, F = 9)
Helm et al. (2015)	Hawaii	Unclear	Substance misuse	10 (12–18, F = 6)
Irby et al. (2018)	United States	12 weeks	Violence	10 (13–17, F = 5)
Jennings et al. (2020)	United States	Unclear	Obesity	18 (8–12, F = 4)
Johnson et al. (2017)	United States	Unclear	Food choices	17 (10–13, F = 10)
Kovacic et al. (2014)	United States	Unclear	Environmental health and health inequities	10 (18–13, F = 6)
Lam et al. (2019)	Canada	5 months	Food literacy and mental well-being	16 (14–18, F = 9)
Lee et al. (2019)	United States	6 weeks	Tobacco misuse	9 (15–24, F = 5)
Leung et al. (2017)	United States	10 weeks	Food choices	12 (11–14, F = 7)
Liew et al. (2022)	Australia	Unclear	Physical activity	17 (10–14, F = 9)
Lightfoot et al. (2019)	United States	9 weeks	Healthcare	13 (14–18, F = 6)
Lines et al. (2019)	Canada	1 week	Determinants of health in youth	15 (13–18)
Mmari et al. (2014)	United States, South Africa, China, India, and Nigeria	Unclear	Health and well-being	529 (15–19)

(continued)

Table 1 *(continued)*

Authors (year)	Country	Study duration	Area of focus	Population: participant *N* (age range, sex [females] *n*)
Mmari et al. (2014)	United States, South Africa, China, India, and Nigeria	Unclear	Health and well-being	529 (15–19)
Moze et al. (2022)	United States	Unclear	Tobacco misuse	30 (14–17, F = 19)
Nabors et al. (2020)	United States	Unclear	Food choices	30 (8–11, F = 11)
Necheles et al. (2007)	United States	5 months	Health behaviors	13 (13–17, F = 11)
Nichols et al. (2016)	United States	Unclear	Obesity	12 (12–16, F = 11)
Olumide et al. (2018)	Nigeria	10 days	Health and well-being	11 (15–19, F = 6)
Sackett et al. (2018)	United States	2 weeks	Physical activity	5 (11–13, F = 5)
Saimon et al. (2015)	Malaysia	Unclear	Physical activity	36 (13–17, F = 21)
Shea et al. (2011)	Canada	Unclear	Health and body image	20 (13–16, F = 20)
Vaughn et al. (2008)	United States	3 months	General health	7 (8–12, F = 7)
Wilderink et al. (2021)	The Netherlands	Unclear	Healthy environments	28 (8–12, F = 22)
Woodgate and Busolo (2015)	Canada	Unclear	Tobacco misuse	75 (11–19, F = 55)
Woodgate and Leach (2010)	Canada	7 months	Determinants of health in youth	71 (12–19, F = 42)
Woodgate and Skarlato (2015)	Canada	Unclear	Healthy eating and physical activity	71 (12–19, F = 42)
Other setting (or unclear)				
Collins et al. (2015)	United States	5 months	Sexual health	8 (15–19, F = 8)
Greco et al. (2017)	Canada	Unclear	Mental health	4 (9–10, F = 2)
Gubrium & Torres (2013)	United States	Unclear	Sexuality	11 (average age 17, F = 6)
Sackett et al. (2016)	United States	2 weeks	Obesity	7 (14–17, F = 7)
Watts et al. (2015a)	Canada	Unclear	Food choices	22 (11–16, F = 17)
Watts et al. (2015b)	Canada	8 months	Food choices	22 (11–16, F = 17)
Woolford et al. (2012)	United States	Unclear	Obesity	23 (13–19, F = 18)
Young et al. (2013)	India	1 year	Health and well-being	38 (8–18, F = 22)

Study Selection

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses flow diagram (Figure 1) details the search and screening process. A total of 7,567 studies were imported for screening. Then, 4,054 studies were screened after duplicates were removed, with a total of 96 studies included for data extraction. The quality appraisal tool, Joanna Briggs Institute, indicated that all studies included in this paper were of a high

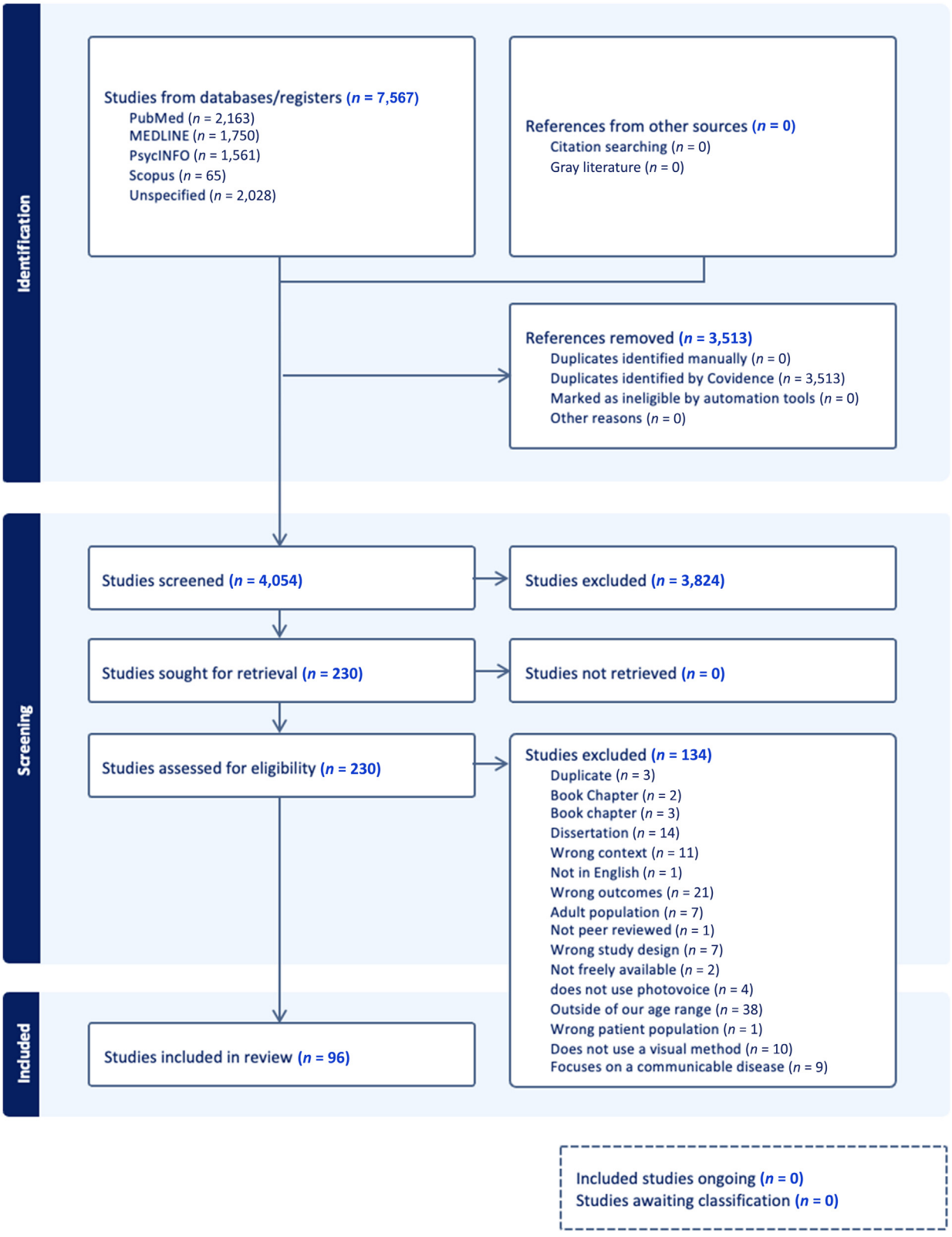

Figure 1 — Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram.

standard. Some studies were unclear in their description of their data analysis; however, overall each study was deemed to adopt congruent approaches throughout.

Results

Intervention Characteristics

Details about the authors (year); country; study duration; and area of focus and population: participant *n*, age range, and sex (females *n*) of the included studies were extracted and are displayed in Table 1. Of the studies included, 51% were set in the United States, 16% in Canada, and 5% in Australia. The dates of the included studies ranged between 2005 and 2023.

The study duration of each project varied from 10 days (Olumide et al., 2018) to being part of a three yearlong study (Boonekamp et al., 2020, 2021; Enright & O'Sullivan, 2012). There were no common trends or recommendations on how long a photovoice project should be. Studies within this review used photovoice with mixed gender groups (90%) and with female only participants (10%) (Almughamisi et al., 2022; Balvanz et al., 2016; Collins et al., 2015; Enright & O'Sullivan, 2012; Hanemaayer et al., 2022; Hannay et al., 2013; Rivard, 2013; Sackett et al., 2016; Shea et al., 2011; Vaughn et al., 2008). The youngest age range was 4–12 years old (Darbyshire et al., 2005), and the oldest age range was 12–21 years of age (Nyika, 2022).

Photovoice and Health Education, Behaviors, and Literacy

Participants were recruited mainly through schools (52%). A broad range of health topics were explored within the included studies (see results in Table 1). Some of the most common health topics included physical activity (16%), food choices (14%), and obesity (9%). Photovoice was mainly used as a tool to promote discussion and engagement around these topics. For example, it was used to generate knowledge and understanding from participants' perspectives regarding health subjects (Hanemaayer et al., 2022). The impact of photovoice directly on generating knowledge and understanding of these topics was not regularly assessed; however, Nabors et al. (2020) suggested that their use of photovoice helped children to improve healthy eating. Photovoice was used as a method of showing gained knowledge from health education programs (Bird et al., 2021). Photovoice, in some cases, was used to create educational content such as videos, which were then assessed to evaluate changes in awareness and behavior through pre- and postmeasures (Gupta et al., 2013; Hamilton et al., 2017). Photovoice was seen as a tool to enable young people to drive health research and social change (Abma & Schrijver, 2020) and was commonly used as a codesign method for future health interventions and programs (Benninger et al., 2021; Cense et al., 2020; Fitzgerald et al., 2009; Helm et al., 2015). None of the included studies focused on health literacy specifically.

Photovoice as a Strategy for Community Engagement With Young People

Ensuring that young people felt seen and heard was a critical consideration of many of the included studies. Some studies encouraged this early on in the process by using initial focus group discussions and interviews to decide what the themes of the assignments for each week would be (Balvanz et al., 2016; Boonekamp et al., 2021; Gubrium & Torres, 2013). Each photovoice project concluded with some form of social action. This ranged from meetings with key stakeholders within the community (Bayer & Alburqueque, 2014; Evans-Agnew, 2016; Hannay et al., 2013; Liew et al., 2022; Lightfoot et al., 2019; Shea et al., 2011) to displaying photos and videos in an area that members of the public could view (Cueva et al., 2020; Helm et al., 2015; Kovacic et al., 2014; Liew et al., 2022; Necheles et al., 2007; Petteway et al., 2019; Sackett et al., 2016; Wilderink et al., 2021) to school exhibitions (Sanchez et al., 2021). Key stakeholders and community groups were commonly engaged as a way for the research team to develop partnerships with the community (Jennings et al., 2020; Johnson et al., 2017; Kovacic et al., 2014; Mmari et al., 2014; Necheles et al., 2007; Nichols et al., 2016; Petteway et al., 2019). Some studies also involved academic institutions (Lam et al., 2019; McKernan et al., 2019) and parents (Nabors et al., 2020; Watts et al., 2015b).

A key feature of the photovoice procedure was use of the SHOWED (a) What do you See here? (b) What is really Happening here? (c) How does this relate to Our lives? (d) Why does this condition Exist? (e) What can we Do about it? method (Wang & Burris, 1997). SHOWED was typically used to guide discussion and/or reflections around the photographs captured by participants within the studies.

Use of Analytic Approaches to Evaluate Photovoice

Studies reported a variety of analysis methods being used. This included open coding (Cueva et al., 2020; Heidelberger & Smith, 2015, 2016; Young et al., 2013), cycle coding (Riggsbee et al., 2019; Trübswasser et al., 2021), content analysis (Bashore et al., 2017; Bird et al., 2021; Browne et al., 2020; Gaines et al., 2022; Jennings et al., 2020), code and retrieve (Brown & Dixon, 2020), participatory group analysis (Brazg et al., 2011), directed content analysis (Abraczinskas & Zarrett, 2020; Nichols et al., 2016; Philip et al., 2022), hermeneutic approach (Abma & Schrijver, 2020), holistic thematic approach (Lam et al., 2019), iterative analysis (Irby et al., 2018; Lightfoot et al., 2019), inductive analysis (McKernan et al., 2019), DEPICT model (Moze et al., 2022), multidimensional scaling analysis (Necheles et al., 2007), ethnography (Woodgate & Skarlato, 2015), and hierarchical cluster analysis (Almughamisi et al., 2022). The most commonly used methods included constant comparative analysis (10%) (Brown et al., 2012; Collins et al., 2015; Harley et al., 2023; Iyassu et al., 2023; Olumide et al., 2018; Olumide & Ojengbede, 2016; Sackett et al., 2018; Watts et al., 2015a, 2015b; Woolford et al., 2012), grounded theory (6%; Danker et al., 2019; Eriksson & Dahlblom, 2020; Genuis et al., 2015; Nabors et al., 2020; Sanchez et al., 2021; Soriano-Ayala et al., 2020), and thematic analysis (24%) for example (Abma & Schrijver, 2020; Bader et al., 2007; Boonekamp et al., 2021; Carney et al., 2020; Enright & O'Sullivan, 2012; Kelly, 2017; Lee et al., 2019; Nyika, 2022; Sastre et al., 2019; Shea et al., 2011).

Very few studies assessed the feasibility of using photovoice within their papers, although some did report the attendance of participants at each session and the completion of activities (Johnson et al., 2017; Leung et al., 2017). Focus groups and/or interviews were conducted in some instances to gather more information from participants about their views of using photovoice (Leung et al., 2017; Olumide et al., 2018; Woolford et al., 2012).

Discussion

This systematic review aimed to evaluate the use of visual photovoice to promote health topics with young people.

Photovoice Within Health Education

Using photography within participatory research has been recommended in order to amplify children's voices and address the imbalance of power between researchers and youth (Wickenden & Kembhavi-Tam, 2014). In a school context, the method has been shown to highlight hidden cultures, which help to understand everyday school life (Prosser, 2007). YPAR is a hugely diverse field, and while other research has found photovoice to be the most common participatory visual arts method, other participatory art methods such as photography, video, and theater, have also been used to tackle health inequities (Ozer et al., 2020; Pain, 2012; Trask et al., 2024). In the current review, photovoice was used and found to be effective in engaging students and enabling participants to be open and creative in their views (Harley et al., 2023). For example, photovoice was used to enable students to provide feedback on curriculum and learning outcomes (Danker et al., 2019) and in student counseling and therapy (Smith et al., 2012).

Photovoice has been used in several physical education studies (Azzaritos 2012; Hidding et al., 2020; Howley et al., 2021; Rivard, 2013). Photovoice was used to generate group discussions and gather feedback from students around physical education programs. Visual methods have been used with students in physical education research to produce rich multilayered data and support physical education's pedagogical purpose (Enright & O'Sullivan, 2012). But health promotion should not be limited to physical education; it should be a whole school approach (Health Service Executive, 2013). Photovoice could facilitate this by linking different subjects and topics, promoting student self-reflection, integrating with classroom-based assessments, supporting curriculum requirements and outcomes, and providing the opportunity for students to display and discuss their results with the wider school community.

Photovoice Evaluation

Participant engagement and the impact of photovoice was infrequently assessed within the studies included in this review. In some studies, adolescents did comment on how photovoice was more engaging and thought-provoking compared with traditional data collection such as questionnaires (Olumide et al., 2016) and as a fun way to promote reflection (Woolford et al., 2012). Photovoice findings provided raw data for future health promotion and education and intervention development (Kovacic et al., 2014). There is a huge variety in current methods of analyzing the data derived from photovoice. While this in itself is not a limitation, researchers need to be mindful in transparently reporting their positioning, their aims, and their methods of their analysis.

The Importance of Action

Photovoice participants highlighted the importance of projects being action-oriented to ensure that the young people felt that their work was valued and impactful (Wilderink et al., 2021). These "actions" varied between projects, for example a school-wide exhibition created by the students which included key stakeholders of the school such as the principal (Sanchez et al., 2021). There was no prescriptive way to facilitate social action, and this was often dependent on the project aims and the participants. The social action within each photovoice project was a key element of the process.

Limitations

The authors acknowledge that there are wider visual methods beyond photovoice available that researchers and practitioners could consider but were outside of the scope of the current review. Furthermore, this review only included peer-reviewed papers that were published in English; other relevant studies may have been missed.

Conclusion

This study highlighted that photovoice is being used within health promotion programs across the world. It highlights the importance of adapting photovoice to the participants' needs in order to optimize engagement within the project and the topic of focus, presenting an opportunity for the development and application of critical health literacy. Photovoice gives young people a voice and a platform to be heard, and young people often reported enjoyment at being actively involved in the research process through this method. Future research is, however, needed to demonstrate the wider effectiveness of using photovoice, and both process and outcome measures should be considered to explore the use of photovoice as a health promotion tool, rather than solely as a method for data collection.

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Appendix A: Search Strand

	photovoice* or "photo-voice*" or "photo voice*" or "photo-novel*" or "photo novel*" or photonovel* or "photo essay*"
OR	"visual research" or "visual method*" or "visual methodology*" or "participatory research" or "community participatory based research"
AND	"health literacy" or "health education" or "health knowledge" or "health information" or "health understanding"
AND	Youth * OR Adoles * OR Boy * OR Girl * OR Juvenile * OR Teen * OR Child* "young people"

Appendix B: PICO Table

	Include	Exclude
Population	Young people age 4–18 (average age of participants needs to be in this range) Primary focus is young people age 14–18	Visual method is not used by young people in this age range Exclude if the adults are using the visual methods to conduct the research on young people
Intervention	Studies will be included if they report on a visual method, for example photovoice or photo novel.	Does not include visual methods
Context	"health literacy" or "health education" or "health knowledge" or "health information" or "health understanding"	
Outcomes	Assessment of health behaviors/outcomes	Focuses on communicable diseases
Study design/publication characteristics	Peer-reviewed journal articles published in English Case studies Protocol papers Primary studies	Studies published in a foreign language Not published in a peer-reviewed journal Duplicate publication Full-text articles were not available Systematic reviews Meta-analysis Review articles Editorials Book chapters Dissertations Conference abstracts Research framework