

A scoping review of the Photovoice method: Implications for occupational therapy research

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Abstract

Background. Photovoice is a participatory action research method combining photography and group work to give people an opportunity to record and reflect on their daily lives. **Purpose.** To review the use of Photovoice in health research and consider the implications for occupational therapy research. **Methods.** Literature review, guided by a scoping framework, reveals the purposes, rationales and populations with whom Photovoice has been used. **Findings.** From 351 documents retrieved, 191 original studies were surveyed; 68% were peer-reviewed. The majority of studies (76%) occurred within the public health domain and a smaller percentage (24%) with individuals experiencing a specific illness and/or disability, with very few (2%) documented in the occupational therapy literature. **Implications.** Photovoice provides a useful framework to apply a participant-centred research approach on occupational participation. It is important to consider and further examine ethical and methodological issues related to stigma, physical and cognitive capacities, mobility and technical accessibility related to using this method.

Abrégé

Description. Photovoice est une méthode de recherche active basée sur la participation, qui combine la photographie et le travail en groupe pour donner aux gens la possibilité de capter et de faire une réflexion sur leur vie quotidienne. **But.** Examiner les façons dont Photovoice est utilisé en recherche dans le domaine de la santé, de même que les conséquences pour la recherche en ergothérapie. **Méthodologie.** Une revue de la littérature, effectuée à partir d'un cadre délimitant la portée, a permis de mettre en relief les buts, les raisons d'être et les populations avec lesquelles Photovoice a été utilisé. **Résultats.** À partir des 351 documents recensés, 191 études originales ont été analysées; 68 % étaient des études révisées par les pairs. La majorité des études (76 %) ont été menées dans le secteur de la santé publique; un plus faible pourcentage (24 %) d'études ont été effectuées auprès de personnes ayant une maladie ou une invalidité spécifique et un très petit nombre (2 %) d'études ont été recensées dans la littérature en ergothérapie. **Conséquences.** Photovoice fournit un cadre de travail utile pour appliquer une recherche sur la participation occupationnelle centrée sur les participants. Il est important de considérer et d'examiner davantage les questions éthiques et méthodologiques relatives aux préjugés, aux capacités physiques et cognitives, à la mobilité et à l'accessibilité technique qui sont associées à l'usage de cette méthode.

Occupational therapy scholars are increasingly advocating for participatory principles to be adopted in rehabilitation research (Hammell, 2006, 2007; Letts, 2003). A participatory approach to research occurs through partnership and collaboration with study populations across various stages of the research process. This approach necessitates a focus of attention on the power dynamics that exist between researchers and participants as well as consideration of the types of research methods that are used. Applying participatory methods can help researchers create knowledge that is more closely centred on the experiences of individuals with illness and disability (Letts, 2003) and their interactions with the environment. This type of an approach is also consistent with the tenets of client-centred practice, which is a fundamental guiding principle for occupational therapy (Townsend et al., 2007).

To facilitate the aim of conducting participant-centred research, health researchers have turned towards the use of visual-based media and activities such as cameras and photography.

The use of photography as a tool for conducting research is rooted in anthropology (Collier, 1957; Collier & Collier, 1986). Researchers first used photography to capture images during their fieldwork (Prosser & Schwartz, 1998). The details of their observations could be recorded “without fatigue” and the resulting photos were valued for their assistance in providing “extra-somatic memory” during the analytical process (Prosser & Schwartz, 1998, p. 122). Eventually, researchers began to use photos as a way to facilitate dialogue with participants through which the meaning of the images was co-constructed. Collier (1957), a pioneer of using photographs during interviews, found that this approach helped trigger participant memories and reduce fatigue, repetition, and misunderstandings between researcher and participant. In recent decades, researchers have transferred the activity of image capturing to participants so that photos are taken from a more “emic” (insider) perspective. Photographs taken by participants are also integrated into venues (e.g., articles, exhibits, websites) where research findings are translated to wider audiences. Thus, photographs are used in different ways across the stages of research: as a tool to elicit data; as data to analyse; and as a vehicle through which findings are represented and communicated (Mathison, 2008).

Researchers use photography in different ways and for different purposes. Amongst the many approaches that have been developed with photography as a central component are photo elicitation (Harper, 2002), auto photography (Aitken & Wingate, 1993; Noland, 2006), auto driving (Clark, 1999), participant photography (Miller & Happell, 2006), participatory photographic research (Aldridge, 2007), hermeneutic photography (Hagedorn, 1994), and Photovoice (Wang & Burris, 1997). The proliferation of such approaches is unsurprising given that visual-based methods have developed within several disciplines including sociology, anthropology, humanities, psychology, and education. Terms adopted to describe how photography is used in research reflect a number of factors including the discipline of the researcher; the theoretical stance of the researcher or research tradition in which the work is situated (e.g., hermeneutic photography); how photography is used (e.g., “photo elicitation” conveys that photography was used as a reference point to elicit interview data but does not specify the source of the photos); and who is taking the pictures (e.g., “auto driving” and “participant photography” indicate that participants, as opposed to researchers or archives, are the sources of the photos).

Amongst the various visual-based approaches that have been developed, Photovoice (Wang & Burris, 1997) is exceptional in that it is associated with a well-delineated, replicated, developed, and established framework that embodies participatory research principles. Photovoice combines photography and group work to provide people with the opportunity to record and reflect on their daily lives. Thus, given its activity and group-based focus, this approach may resonate for occupational therapy researchers interested in adopting participatory, visual-based methods.

Caroline Wang and Ann Burris (1997) developed Photovoice as a participatory action, health-promotion research tool in the context of working for a women’s reproductive health and development program in rural China. They were influenced by critical education and health-promotion principles, feminist theory, and nontraditional documentary photography, and they endeavoured to develop a method that engaged and empowered marginalized populations in a reflective analysis of their social circumstances. According to Wang and Burris, the purpose of Photovoice is “1) to enable people to record and reflect on their community’s strengths and concerns, 2) to promote critical dialogue and knowledge about important community issues through large and small group discussion of photographs, and 3) to reach policymakers” (p. 370).

There are several steps involved in using Photovoice as a research method (Wang & Burris, 1997). First, researchers partner with key stakeholder groups to identify issues of concern related to a particular population or community and negotiate the research questions. This process could take place with patients, family members, service providers, community residents, decision makers, and others. Next, participants are recruited to participate in two to six group meetings. During the first meeting(s), participants are engaged in a discussion related to the topic of interest and potential research questions. Participants are trained in basic camera/photography techniques and introduced to the ethical use of community photography. They are then given cameras and directions to take pictures based on the research topic (e.g., take pictures of activities you enjoy doing, things in the environment that prevent you from doing the activities you would like to do). Participants then come together in a group, select and describe the pictures they have taken in terms of what the content in the picture means to them, and participate in a group discussion regarding the broader meanings and ideas represented in the pictures. The discussion is facilitated by the following key questions: What do you see here? What is really happening here? How does this relate to our lives? Why does this problem or strength exist? What can we do about it? The photos, accompanied by short narratives, are then presented to stakeholder groups of interest, such as decision and policy makers, through a photo exhibit, for example, for the purpose of facilitating change processes based on the knowledge gained in the project.

Since its inception in 1997, Photovoice has gained much popularity and appeal with researchers working within a variety of disciplines including, but not exclusive to, education, public health, community development, nursing, and social work. However, despite having been developed 15 years ago and having gained increased popularity, only two other reviews have been conducted on Photovoice. The end dates for inclusion of articles in those two reviews are April 2008 (see Hergenrather, Rhodes, Cowan, Bardhoshi, & Pula, 2009) and December 2007 (see Catalani & Minkler, 2010); thus, there is now a four-year gap in terms of having a current synthesis of the Photovoice literature. Given that the majority of Photovoice studies have been documented in the last six years, those two reviews omit a significant amount of Photovoice literature. As a result, the two reviews focus on a small number of papers ($n = 31$ and

$n = 37$). Authors of both reviews state that they limited their reviews to peer-reviewed literature excluding graduate theses. In doing so, the reviews exclude information that can provide further contribution to understanding the extent, range, and nature of how the method is being used as well as the ethical and methodological implications of its use across different populations and contexts. Moreover, neither of the reviews has a specific focus on the field of occupational therapy.

Thus, the purpose of this paper is to provide an up-to-date understanding of how Photovoice has been used in health research and based on the results consider its potential applications as a research method in the occupational therapy field. We therefore conducted a descriptive review to examine and summarize the documented use of Photovoice as a research method in the health literature. The main objectives of the review were to (1) describe how Photovoice has been applied as a health research method, (2) explore the substantive, ethical, and methodological issues associated with using Photovoice with individuals experiencing various forms of disability, and (3) consider the application of Photovoice in occupational therapy research.

Methods

Our approach was informed by the scoping review framework articulated by Arskey and O'Malley (2005). A scoping framework is a useful way to facilitate a systematic approach to surveying the literature. It enables "mapping a field of study" and examining "the extent, range and nature of research activity" (Arskey & O'Malley, 2005, p. 6) in a particular area of interest. Both empirical and nonempirical sources of information were considered, and quality appraisal was not generally an objective given the extent and range of documentation that is typically identified in this process. Others in occupational therapy (e.g., Colquhoun, Letts, Law, MacDermid, & Missiuna, 2010; Levac, Colquhoun, & O'Brien, 2010) have applied Arskey and O'Malley's framework and suggested that scoping reviews may be particularly relevant in situations in which reviewers are interested in questions that extend beyond those related to intervention effects or in fields of research that have only emerging levels of evidence. Thus, given the increasing documented use of Photovoice in the health research literature, a scoping review that systematically maps the extent, range, and nature of this activity is a useful and necessary starting point from which scholars can begin to delve deeper into specific ethical and methodological questions.

Arskey and O'Malley (2005) proposed a five-stage framework for conducting a scoping review: (1) identification of the research question, (2) identification of relevant studies, (3) selecting studies, (4) charting data, and (5) collating, summarising, and reporting results. Reporting results includes the use of numerical summaries that describe study characteristics (e.g., study location, year of publication, methods). It is important to note that in contrast with other types of reviews (e.g., systematic review), a scoping review does not consider the quality of studies as a basis for inclusion; rather, the objective is to map and understand the extent of work within a defined area.

Identification of the Research Question

The main question guiding this scoping review was: "With whom, when, where, why, and how is Photovoice used as a method in health research?"

Identification and Selection of Studies

We searched for English, peer-reviewed documents in the following electronic bibliographic databases: Medline, Cumulative Index to Nursing and Allied Health Literature, ERIC, PsycINFO, Social Science Citation Index, and Social Work Abstracts using the key word Photovoice. Grey literature was searched from ProQUEST Dissertations and Theses using the key word Photovoice and limited to abstract (as opposed to full text). We limited the search term to Photovoice to contain the search and to address our interest in surveying studies that were informed by Wang and Burris' framework as opposed to other types of visual-based methodologies. At this point in the search process no limitations were placed in terms of publication date, language, and publication type. The search, which yielded 351 individual abstracts and titles, was originally conducted in June 2009 and updated in December 2011.

Inclusion criteria. The retrieved titles and abstracts (and, if necessary, the full text) were then screened to identify documents for the review based on the following inclusion criteria: (1) the document reports on a primary study that applies Photovoice as a research method; (2) the document provides a description of how Photovoice was used (instead of just naming it in passing); (3) at a minimum, the study involves a key aspect of Photovoice, that is, participants taking photos and engaging in interviews based on those photos; (4) the study pertains to a health-related topic; and (5) the study is written in English. We included all types of study designs (e.g., qualitative, quantitative, mixed methods).

Exclusion criteria. Documents were excluded based on the following: (1) the document describes the main use of Photovoice for purposes other than research, such as a pedagogical tool or a health-promotion intervention (without a research component); (2) the document mainly contains descriptive, methodological, or conceptual content (versus empirical); and (3) the Photovoice content of the document is duplicated in another source that was retrieved. For example, if a retrieved, peer-reviewed paper was based on dissertation work, and the dissertation itself was also retrieved as a result of the grey literature search strategy, the same work was not counted twice.

Charting the Data and Reporting Results

Selected documents were then reviewed and information was extracted and tabulated using a data extraction form, facilitated by Excel software. The following categories of information for each study were extracted: publication date, location of the research, sample population characteristics (e.g., age, gender), health issue, purpose of the study, and research approach. A content analysis approach (Namey, Guest, Thairu, & Johnson, 2008) was used for summarizing the purpose of all the studies meeting the inclusion criteria, using the following steps. First, all the studies were reviewed in terms of their purpose

and objectives, and these data were extracted verbatim and added to an Excel file. Next, each purpose and objective statement from 25% of the studies ($n = 48$) was coded, and these 48 codes were then categorized into 11 broad study purposes. Then, the remaining studies were categorized into the 11 broad study purposes, followed by a tabulation of frequencies. The study search, selection, and data extraction process is outlined in Figure 1.

Results

General Description of the Literature:

“When and Where?”

Following the application of the inclusion criteria to the 351 documents retrieved, a total of 191 studies that were identified involved the use of Photovoice as a research method. (A complete list of the 191 studies is available from the first author). Of these studies, 68% were peer reviewed and 32% represented grey literature (i.e., master’s and PhD theses). The documents were published between January 1998 and December 2011, with the majority (85%) published in the last

six years. These results suggest an increasing trend of interest in using Photovoice as a research method in health research (see Figure 2). Many of the studies (69%) originated in Canada and the United States, while 17% were conducted in developing economies such as China (excluding Hong Kong), India, Guatemala, Mexico, and the remaining took place in Westernized and other developed economies such as the United Kingdom and Australia. Peer-reviewed papers were published in a wide range of journals that spanned across several disciplines, including, but not exclusive to, public health, health promotion, occupational therapy, nursing, education, social work, nutrition and dietetics, as well as journals devoted to qualitative health research and methodology. Few ($n = 8$) were published in disability- and rehabilitation-focused journals, of which, four were in the occupational therapy literature, four in other disability- and rehabilitation-focused journals, and none in the physical therapy literature.

Sample Population Characteristics: “With Whom?”

Photovoice was used as a research method with a wide range of populations, mostly with adults (57%). The second most popular age group for which Photovoice was used is with children and adolescents (24%). The rest of the studies involved mixed age groups (12%) or were with adults over the age of 55 (7%). Almost one third of the studies (27%) were focused exclusively on females, a small proportion focused on transgendered or transsexual populations (1%) and males (5%), and the rest involved both males and females (67%). Some of the studies recruited only immigrants or visible minorities (19%) or Indigenous populations (7%). A proportion of the studies (24%) were conducted with individuals who had specific health conditions or disabilities (e.g., Huntington’s disease, HIV AIDS, mental illness, spinal cord injuries, brain injuries, chronic pain), whereas the majority (76%) were conducted within the context of a public health/health-promotion issue (e.g., prevention of obesity, homelessness).

Research Purposes: “Why?”

Researchers used Photovoice to address a range of interrelated purposes and questions. For example, Kramer et al. (2010) used Photovoice to identify community perspectives regarding the effects of a health-promotion program pertaining to eating and physical activity; at the same time they used Photovoice as a tool to assess the ongoing health-related needs of the community. In another example, researchers used Photovoice to develop knowledge and understanding around a specific topical area and at the same time explored participant perspectives on the process of engaging in the Photovoice method (Drew, Duncan, & Sawyer, 2010). The majority of papers used Photovoice to address purposes related to understanding the experiences and perspectives of activities and roles, meanings and experiences of health concepts, and perspectives and experiences of the environment. Further details are outlined in Table 1, which illustrates 11 different purpose areas that the 191 studies addressed along with the frequencies observed for each type of purpose.

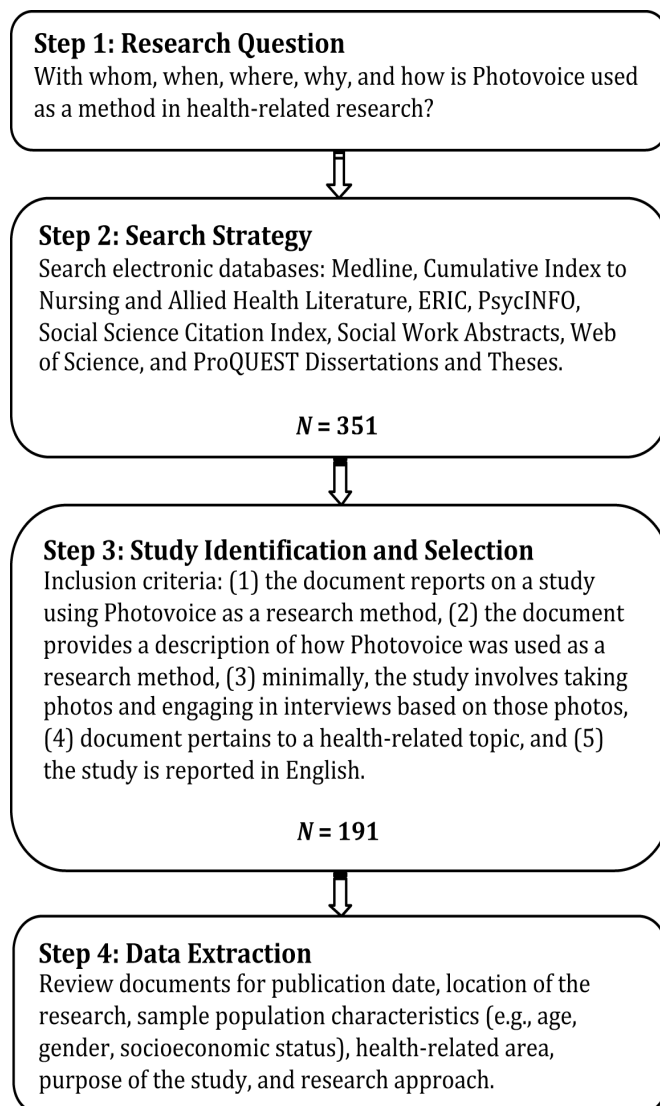


Figure 1: Study search and selection process.

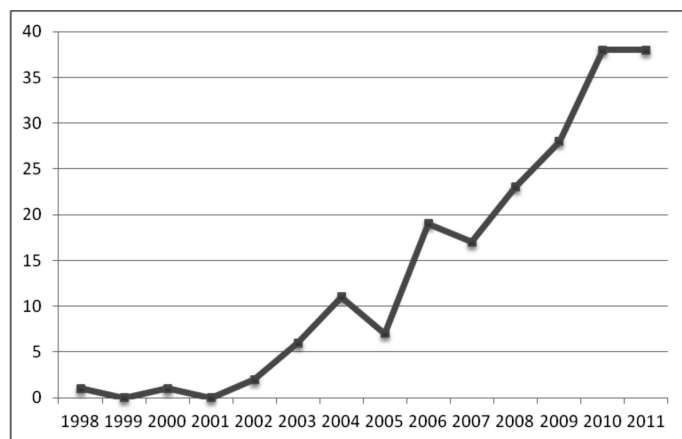


Figure 2: Number of studies using the Photovoice method.

Research Approaches and Photovoice Adaptations: "How?"

While over half of the studies (55%) involved Photovoice as the sole research method, a significant proportion (38%) combined Photovoice with some other kind of qualitative method or methodology, such as participant observation or phenomenology. Moreover, a small percentage of studies (7%) involved using Photovoice in combination with quantitative methods such as survey questionnaires. In most of the studies reviewed, research designs involved modified applications of the Photovoice method in comparison with how Wang and Burris (1997) originally conceptualized it. Examples of these modifications included not engaging decision or policy makers in the process; discussing pictures taken by participants in individual interviews rather than in a group format; not involving partici-

pants in the process of analysis; and not having a photo exhibit. A rationale for modifying the Photovoice framework was provided inconsistently; however, a few notable exceptions were observed. For example, Nykiforuk, Vallianatos, and Nieuwendyk (2011) opted to conduct individual interviews with participants instead of focus groups to facilitate a more profound exploration of their research question. In their reflections on the effects of this decision, they concluded that it enabled participants to feel comfortable, safe, and open for self-expression. In another study, researchers opted for individual interviews to allow participants to discuss all of their photos rather than a select few, which often occurs in the group format (Castleden, Garvin, & First Nation H., 2008). They also rationalized that it was timelier and logistically favourable to organize individual interviews as soon as participants had completed taking the pictures rather than waiting for several members to complete the picture-taking task and then organizing a group meeting. A third group of authors conducting research with individuals with spinal cord injuries combined group meetings with individual interviews at participants' homes to reduce the inconvenience and burden of transportation on participants (Newman & Spinal Cord Participants, 2010).

Photovoice Studies Identified in the Occupational Therapy Literature: "When and Where, With Whom, Why, and How?"

Only four studies that document the use of Photovoice were identified in the occupational therapy literature (see Andonian, 2010; Andonian & MacRae, 2011; Berinstein & Magalhaes, 2009; Zecevic, Magalhaes, Madady, Halligan, & Reeves, 2010). Three were conducted with populations located in developed economies (i.e., the United States, Canada) and all four were

Table 1
Purpose and Examples of Using Photovoice as a Research Method

Purpose of study	Examples of topical areas addressed	N ^a
Experiences and perspectives of activities and roles related to self care, work, leisure	Eating, caregiving, physical activity	40
Meaning and experiences of health-related concepts	Weight, cardiovascular health, leisure, identity, wellness, aging, empowerment	36
Perspectives and experiences of the environment	Place, space, setting	31
Assessment of needs, strengths, and assets	Health needs of homeless women	28
Daily life/life experiences in relation to health/social issues	Poverty	18
Daily life/life experiences in relation to specific illness or disability	Mental illness, chronic pain	16
Identifying solutions to an issue	Stigma	14
Program evaluation	Exploring perspectives and experiences of organization/ intervention/service	11
Understanding process	Identity construction	9
Experiences, strategies, barriers, facilitators of community participation	Community programs for youth	6
Process and impact of using Photovoice	Exploring potential use/impact /process /effect of Photovoice	2
Total		211

^aN = the number of articles found addressing each purpose. Some of the 191 articles corresponded to more than one purpose and focus.

published in the last two years. In terms of sociodemographic characteristics, each study involved mixed genders and different age groups: children aged 10–13 (Berinstein & Magalhaes, 2009), older adults from age 55 onwards (Andonian & MacRae, 2011), young adults (Zecevic et al., 2010), and adults (Andonian, 2010). Only Andonian's (2010) study is focused on a population that is affected by a specific type of illness or disability (i.e., mental illness). The types of purposes addressed by these studies varied. For example, two of the studies used Photovoice to examine meanings and perspectives related to phenomena such as play (see Berinstein & Magalhaes, 2009) and aging (see Zecevic et al., 2010), while the other two studies examined experiences related to community and social participation more broadly (see Andonian, 2010; Andonian & MacRae, 2011). Photovoice constituted the main method of all four studies although the extent to which each study adopted the participatory principles of Wang and Burris' (1997) framework varied. For example, Berinstein and Magalhaes (2009) mainly used Photovoice as a visual method of data collection, whereas Andonian and MacRae (2011) applied the participatory principles and steps outlined in the Photovoice method more closely.

Discussion

This review provides an up-to-date synthesis on the extent, range, and nature of how Photovoice has been used in health research. We identified a total of 191 studies that document the use of Photovoice either as the main research method or in combination with other qualitative or quantitative methods. The number of studies identified by our search was significantly higher than what has been documented in previous reviews of Photovoice (see Catalina & Minkler, 2010; Hergenrather et al. 2009). This is not surprising as the majority of the studies identified in our review were published in the last five years, suggesting a striking increase in popularity of the method. The majority of studies occurred in Canada and the United States, a finding that is similar to what the two previous reviews found. Our results suggest a trend towards increased use of Photovoice with populations located in developing economies; that is, in Hergenrather's review, only 10% of studies were conducted in developing economies in comparison to our findings which report 17%. Photovoice has been used with populations representing a wide range of demographics (e.g., age, gender, geographic location, socioeconomic status, and ethnicity). Of note, our review found a higher percentage of studies conducted with an exclusively female population when compared to Hergenrather et al.'s results (27% versus 19% respectively).

In terms of age, a significant proportion of the studies involved the application of Photovoice with children and adolescents (24%), which is comparable to the results of Hergenrather et al. (23%) and higher than Catalani and Minkler (19%). Photovoice may be an appealing method to use with youth because it addresses ethical and methodological issues related to doing research with this population. Drew et al. (2010) examined the feasibility of using Photovoice with adolescents diagnosed with chronic diseases and found that participants were engaged throughout the data collection pro-

cess. Photovoice promoted the youths' ability to participate in interviews by reducing pressures of verbal interaction through the intermediary of a prop. The authors noted that because of adolescents' stage of personal and developmental growth, they may have difficulties in reflecting upon and articulating complex phenomena and experiences. The visual storytelling that occurs during the Photovoice process can help them in considering and communicating their experiences. In addition, Moletsane et al. (2007) observed that Photovoice provided youth with a "fun" experience through which they could participate in the identification and discussion of strategies related to reducing the stigma of HIV, and enhance their sense of agency and self-efficacy.

Most of the studies in our review were conducted within the fields of public health or health promotion with individuals who did not have a specific illness or disability. Very few of the 191 studies (i.e., 4%) were published in rehabilitation- or disability-focused journals. Only 24% of the total sample focused on individuals with chronic disease, intellectual disabilities, physical disabilities, and mental illness. This result is consistent with those of the previous two reviews and that Photovoice was originally developed within, and for, community-based health promotion (Wang & Burris, 1997). This smaller percentage suggests that the application of Photovoice beyond strictly public health/health-promotion contexts, such as with individuals receiving rehabilitation services for specific illnesses and disabilities, continues to be an area of limited application.

Implications for Occupational Therapy Research

The limited number of published Photovoice-based papers in the rehabilitation and occupational therapy literature is surprising and noteworthy. It may reflect a lack of knowledge and use of the method that results in missed opportunities to develop emic-based, action-oriented research that can directly influence the lives of people affected by illness and disability. Alternatively, researchers may be deterred by the additional ethical and methodological considerations associated with using Photovoice (e.g., Drew et al., 2010). At the same time, the highest frequency of study purposes observed in this review indicate that Photovoice is especially deemed pertinent to researching topics that are relevant to occupational therapy. The four occupational therapy studies we surveyed demonstrate the potential of Photovoice to further knowledge about core concepts of interest to the profession and, in doing so, show how to operationalize empowerment with this research method. Through these studies, the researchers learned about the essence of play for Tanzanian children (see Berinstein & Magalhaes, 2009); the understanding of health sciences undergraduate students on spirituality as an occupation in later life (see Zecevic et al., 2010); and experiences of social participation in urban environments for people with mental health issues (see Andonian, 2010) and well elders (see Andonian & MacRae, 2011). It is interesting to note that these studies ($n = 3$), with the exclusion of Andonian (2010), were conducted with individuals who did not have an illness or disability suggesting that Photovoice

appeals to occupational scientists and occupational therapists working within the public health domain.

Photovoice is also of potential interest for occupational therapy researchers interested in conducting research with individuals whose verbal or expressive abilities are limited. As Levin et al. (2007) reported, photos can serve as an alternative to verbal and written methods, providing participants with other means of self-expression and, thereby, increasing opportunities to engage in the research process. The authors concluded that the modified use of Photovoice with individuals with stroke aphasia facilitated the identification of health-related needs of participants that had not previously been raised. In an exit interview, participants stated that they found that participation was helpful in increasing their ability to express themselves and consequently enhancing their relationships with peers in the group and with family and friends (they also talked about their photographs outside of the group). In addition to reducing communication barriers, our review highlights how Photovoice can provide occupational therapy researchers with opportunities to do research that is engaging, reduces power imbalance, and is action oriented in ways that interviews or focus groups do not generally manifest. As such, it has particular potential for use with younger populations as well as those whose perspectives are traditionally marginalized from research (see Andonian, 2010).

Photovoice can be used to identify environmental barriers and facilitators to participation; understand the daily lives and experiences of individuals with disabilities; comprehend their experiences and perspectives in relation to the activities and roles they engage in; illuminate the strategies and processes they employ to maintain health and well-being; understand their perspectives in relation to participation, health, and well-being; and, gain insight into how they experience rehabilitation services; empower them to engage in a process of considering and expressing important aspects related to their daily lives, and in communicating findings to key stakeholder groups. Any of these purposes are relevant to conducting client-centred occupational therapy research.

Photovoice facilitates redressing power dynamics that can be acutely present when doing research with populations that have historically experienced various forms of marginalization by society, such as individuals with mental illness, physical disabilities, or intellectual disabilities, and those facing factors such as poverty, younger/older age, immigration, or Indigenous status. It enables participants to communicate and reflect upon their occupational performance needs in supportive, peer-based environments. It provides a framework for partnering with populations commonly served by occupational therapists and for engaging them throughout the research process in a participant-centred way. It also facilitates the possibility for the identification of participant-generated solutions to barriers experienced in occupational participation. The feature of engaging stakeholders (families, service providers, decision makers, communities) in the research and dissemination process creates an environment in which participant-generated solutions can be considered and applied. The specific outcomes of change obtained from using Photovoice are future directions for research.

Methodological considerations. The findings from the four occupational therapy studies reviewed were developed using Photovoice as the sole research method; two of these studies in particular incorporated most of the established procedures of Photovoice (see Andonian, 2010; Andonian & MacRae, 2011). Andonian and MacRae (2011) adopted Photovoice procedures by partnering with a government agency on ageing, then recruiting participants through community groups and seniors' networks, conducting two participant group meetings, and producing the findings in booklet form for participants. In between the two group meetings, the researchers added individual interviews to the usual Photovoice procedures, and the project culminated with a city-sponsored photo exhibit to which legislators and other stakeholders were invited.

Deviations from these procedures included not presenting findings to key stakeholder groups through photo exhibits (see Berinstein & Magalhaes, 2009), and data analysis without benefit of a focus-group discussion (see Zecevic et al., 2010). While conducting interviews individually as opposed to in a group can be accommodating to the logistical, mobility, and social barriers that participants may face, it can also detract from the positive effects fostered by a participatory, consciousness-raising, transformative, group context. According to Andonian (2010), not only can Photovoice empower individuals in contributing to knowledge, it can also help foster the development of relationships amongst individuals participating in the study, which in itself is a transformative outcome consistent with the tenets of participatory research. We also suggest that individual interviews can reduce the generative potential for the identification of solutions and contribution to understanding.

Not engaging stakeholders (such as policy makers, decision makers, community organizations, or service providers) throughout the research process represents missed opportunities to enact social change. Newman and Spinal Cord Participants' (2010) study exemplifies the participatory process and benefits that Photovoice can engender for researchers, participants, and the community through their study exploring and addressing issues related to accessibility and participation in the home and community. As part of the initial stakeholder engagement process of the Photovoice method, the authors engaged staff of a nonprofit disability-resource agency, directed by individuals with disabilities, to discuss issues that could be addressed through a Photovoice project. These discussions generated a Photovoice project focused on accessibility within the community for individuals with spinal cord injury and engaged participants throughout the processes of data collection, analysis, and dissemination of the findings.

In relation to using Photovoice with individuals who have cognitive disabilities or those with children, there are challenges to eliciting in-depth discussion. Jurkowski, Rivera, and Hammel (2009) applied several adaptations to the Photovoice methodology in their study to maximize participation and engagement of individuals with intellectual disabilities. They conducted individual interviews to provide more opportunities for reflection and in-depth understanding of participants' photos, experiences, and perspectives. They also conducted focus groups and paid close attention to putting

questions in writing, reducing the level of abstractness in the questions they asked, and reducing the number of participants in the groups.

There are also challenges regarding conducting Photovoice with individuals who have physical disabilities as participants may have difficulties with manipulating cameras as well as accessing places and objects they want to photograph. For example, Levin et al. (2007) noted that it is necessary to engage in additional planning, in collaboration with participants who have sensory or physical impairments, for modifications to the camera or adaptations to picture taking (e.g., having pictures taken by another person, but still directed by the participant). In their study with individuals having a history of stroke, participants had difficulty holding the camera and using its setting buttons (e.g., zooming). Having screens on digital cameras was helpful for those who were not able to hold the camera up to their eyes. Individuals with mobility limitations may find it particularly difficult to attend several group meetings. For example, Baker and Wang (2006) conducted a study with individuals experiencing chronic pain who had physical limitations and transportation barriers; they reported being unable to conduct group sessions with this population. Instead, Baker and Wang carried out one exit interview and most of the other picture-taking communication by mail.

Ethical considerations. Beyond the ethical principles of autonomy, beneficence, and justice, all of which are important to consider when conducting qualitative research (Orb, Eisenhauer, & Wynaden, 2001), Photovoice brings additional issues that are noteworthy of attention. Wang and Redwood-Jones (2001) provided a helpful discussion of ethical issues associated with using Photovoice based on their experiences of conducting a large scale community project with youth and other key stakeholder groups (see Wang, Morrel-Samuels, Hutchison, Bell & Pestronk, 2004). Taking pictures of others without permission or pictures that risk portrayal of an individual, community, or group in a negative light are key issues to consider when using Photovoice. Wang et al. (2004) provided a set of principles that other researchers have adopted to help minimize the ethical risks associated with conducting a Photovoice project. These principles include differentiation between consent processes; engaging participants in education and discussion related to photography ethics; providing written material and instructions; reviewing consent for publication of pictures once they have been developed; and providing a copy of pictures to participants. In terms of consent, Wang et al. distinguish between three types: consent that pertains to the general rights and responsibilities of participants in relation to research participation, consent that pertains to being the subject of a picture, and consent to publish pictures taken by research participants.

Additional challenges arise when using Photovoice with individuals experiencing physical, intellectual, or mental disabilities. First, in conducting Photovoice with individuals who have cognitive disabilities, there are challenges in terms of determining whether participants have the capacity to participate in the Photovoice activities. Wiersma (2011) discusses such issues that were encountered in her study using Photovoice with individuals experiencing early stage Alzheimer's

disease. The cognitive capacities of participants in relation to the collection, recollection, and discussion of photos were questioned and prompted additional scrutiny of the ethical review of her study.

There are also psychosocial issues, such as stigma, to consider when conducting Photovoice with individuals who are experiencing illness and disability. Although several studies used Photovoice to enhance understanding and awareness on the issue of stigma in relation to different illness and disability conditions (e.g., López, Eng, Randall-David, & Robinson, 2005; Moletsane et al., 2007; Wiersma, 2011), very few provided focused discussion on the potential risk of re-stigmatisation through participation in this type of method. Wiersma (2011) pointed briefly to this issue by highlighting how participants hoped that the project would help to reduce stigma associated with Alzheimer's disease; in this regard, she reflected upon the way in which her findings represent participants and their lives and questioned whether the findings reinforced stigma or contributed to its reduction.

From the group of Photovoice studies we surveyed outside of the illness and disability context, we found an excellent and extensive discussion of the intersection between ethics, stigma, and Photovoice by Walsh, Hewson, Shier, and Morales (2008). In their study with youth living in a socioeconomically vulnerable community affected by unemployment, poverty, and crime, Walsh et al. encountered several stigma-related issues associated with conducting Photovoice. The authors' raised the concern of whether the project, by way of singling out a particular community, contributed to stigmatization already associated with or experienced by the community. Walsh et al. addressed the issue by ensuring that youth took pictures that represented balanced perspectives of their community. Other types of concerns were identified in studies such as Capous-Desyllas' (2010) unpublished dissertation on the use of Photovoice to understand the needs and perspectives of women working in the sex industry. One of the participants in this study expressed a high level of concern in relation to the protection of anonymity for fear of stigma repercussions related to people finding out about her work. Thus, while researchers are beginning to explore the potential of Photovoice in relation to understanding and addressing social stigma, they are also beginning to encounter ethical considerations of the paradoxical risks that a Photovoice project may entail in reifying stigma for a population and community. As stigma is a complex phenomenon, further reflection and examination of this issue is warranted across different populations and settings to elucidate a set of principles and approaches that can reduce the risks of contributing to stigma that may be associated with the implementation of a Photovoice project.

Study Limitations

While this scoping review has several strengths, such as the systematic approach adopted, there are also limitations. Although we identified 191 studies using Photovoice through peer-reviewed and grey literature sources, it is possible that some studies were omitted by our search strategy. For example, not all theses and dissertations are indexed in the ProQuest Dissertations database. Beyond the inclusion criteria, we did not

evaluate the quality of the 191 studies surveyed; however, this is not generally an expectation in the scoping review methodology (Arskey & O'Malley, 2005). Nonetheless, as occupational therapy researchers conduct more Photovoice studies in focused areas, such as specific to certain illness and disability contexts, quality appraisal will be important for future consideration, particularly in terms of adherence to participatory principles as well as outcomes such as social change.

Conclusion

The purpose of this review was to examine the use of Photovoice as a health research method from the time that it was originally published in 1997 by Wang and Burris. We wanted to understand how, why and with whom Photovoice has been used and then consider the implications of the results for occupational therapy research more specifically. Our review suggests that Photovoice is a useful method that can facilitate understanding of the perspectives of individuals experiencing illness and disability or are at risk for a wide range of occupational performance issues.

Diligence is required to include the essential components of Photovoice; the use of expressive media and group process are examples of components that may already be familiar to occupational therapists. Facilitative skills and a client-centred collaborative approach may be transferable to conducting research using Photovoice in both community-based rehabilitation and in settings where occupational therapists work from a health-promotion model. Although Photovoice has wide-ranging appeal as a research method, the ethical and methodological issues associated with using this method with populations experiencing illness and disability warrant further attention in the literature.

Key Messages

- Photovoice is a participatory-action research method combining photography and group work to give individuals an opportunity to record and reflect on their daily lives.
- Photovoice provides a framework for occupational therapy researchers to apply a participant-centred approach and to identify participant solutions to barriers in occupational participation.
- Ethical and methodological issues, such as stigma, logistics, capacity, and accessibility, are important considerations when using Photovoice with populations experiencing various forms of illness and disability.

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References

- Aitken, S., & Wingate, J. (1993). A preliminary study of the self-directed photography of middle-class, homeless, and mobility-impaired children. *Professional Geographer*, *45*, 65-72. doi: 10.1111/j.0033-0124.1993.00065.x
- Aldridge, J. (2007). Picture this: The use of participatory photographic research methods with people with learning disabilities. *Disability & Society*, *22*, 1-17. doi: 10.1080/09687590601056006
- Allotey, P., Reidpath, D., Kouame, A., & Cummins, R. (2003). The DALY, context and the determinants of the severity of disease: An exploratory comparison of paraplegia in Australia and Cameroon. *Social Science & Medicine*, *57*, 949-958. doi:10.1016/S0277-9536(02)00463-X
- Andonian, L. (2010). Community participation of people with mental health issues within an urban environment. *Occupational Therapy in Mental Health*, *26*, 401-417. doi:10.1080/0164212X.2010.518435
- Andonian, L., & MacRae, A. (2011). Well older adults within an urban context: Strategies to create and maintain social participation. *British Journal of Occupational Therapy*, *74*, 2-11. doi:10.4276/030802211X12947686093486
- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal Social Research Methodology*, *8*, 19-32. doi:10.1080/1364557032000119616
- Baker, T. A., & Wang, C. C. (2006). Photovoice: Use of a participatory action research method to explore the chronic pain experience in older adults. *Qualitative Health Research*, *16*, 1405-1413. doi:10.1177/1049732306294118
- Berinstein, S., & Magalhaes, L. (2009). A study of the essence of play experience to children living in Zanzibar, Tanzania. *Occupational Therapy International*, *16*, 89-106. doi:10.1002/oti.270
- Capous-Desyllas, M. (2011). Visions & voices: An arts-based qualitative study using photovoice to understand the needs and aspirations of diverse women working in the sex industry. *Dissertation Abstracts International Section A*, *71*.
- Castleden, H., Garvin, T., & First Nation, H. (2008). Modifying photovoice for community-based participatory Indigenous research. *Social Science & Medicine*, *66*, 1393-1405. doi:10.1016/j.socscimed.2007.11.030
- Catalani, C., & Minkler, M. (2010). Photovoice: A review of the literature in health and public health. *Health Education & Behavior*, *37*, 424-451. doi:10.1177/1090198109342084
- Christensen, P. M., & James, A. (2000). Researching children and childhood: Cultures of communication. In P. M. Christensen, & A. James (Eds.), *Research with children: Perspectives and practices* (pp. 1-8). New York: Falmer Press.
- Clark, C. D. (1999). The autodrivn interview: A photographic viewfinder into children's experience. *Visual Studies*, *14*, 39-50. doi:10.1080/14725869908583801
- Collier, J. (1957). Photography in anthropology: A report on two experiments. *American Anthropologist*, *59*, 843-859.
- Collier, J., & Collier, M. (1986). *Visual anthropology: Photography as a research method* (Rev. and expanded ed.). Albuquerque, NM: University of New Mexico Press.
- Colquhoun, H. L., Letts, L. J., Law, M. C., MacDermid, J. C., & Missiuna, C. A. (2010). A scoping review of the use of theory in studies of knowledge translation. *Canadian Journal of Occupational Therapy*, *77*, 270-279. doi:10.2182/cjot.2010.77.5.3
- Drew, S. E., Duncan, R. E., & Sawyer, S. M. (2010). Visual storytelling

- ing: A beneficial but challenging method for health research with young people. *Qualitative Health Research*, 20, 1677-1688. doi:10.1177/1049732310377455
- Hagedorn, M. (1994). Hermeneutic photography. An innovative esthetic technique for generating data in nursing research. *Advances in Nursing Science*, 17, 44-50.
- Hammell, K. W. (2006). *Perspectives on disability and rehabilitation: Contesting assumptions; challenging practices*. Edinburgh, UK: Elsevier/Churchill Livingstone.
- Hammell, K. W. (2007). Reflections on . . . a disability methodology for the client-centred practice of occupational therapy research. *Canadian Journal of Occupational Therapy*, 74, 365-369.
- Haque, N. (2011). Tackling inequity through a Photovoice project on the social determinants of health: Translating Photovoice evidence to community action. *Global Health Promotion*, 18(1), 16-19.
- Harper, D. (2002). Talking about pictures: A case for photo elicitation. *Visual Studies*, 17(1), 13-26. doi:10.1080/14725860220137345
- Hergenrather, K. C., Rhodes, S. D., Cowan, C. A., Bardhoshi, G., & Pula, S. (2009). Photovoice as community-based participatory research: A qualitative review. *American Journal of Health Behavior*, 33, 686-698. doi:10.5993/AJHB.33.6.6
- Jurkowski, J. M., Rivera, Y., & Hammel, J. (2009). Health perceptions of Latinos with intellectual disabilities: The results of a qualitative pilot study. *Health Promotion Practice*, 10, 144-155.
- Kramer, L., Schwartz, P., Cheadle, A., Borton, J. E., Wright, M., Chase, C., & Lindley, C. (2010). Promoting policy and environmental change using photovoice in the Kaiser Permanente community health initiative. *Health Promotion Practice*, 11, 332-339. doi:10.1177/1524839909341555
- Letts, L. (2003). Occupational therapy and participatory research: A partnership worth pursuing. *American Journal of Occupational Therapy*, 57, 77-87. doi:10.5014/ajot.57.1.77
- Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science*, 5, 69. doi:10.1186/1748-5908-5-69
- Levin, T., Scott, B. M., Borders, B., Hart, K., Lee, J., & Decanini, A. (2007). Aphasia talks: Photography as a means of communication, self-expression, and empowerment in persons with aphasia. *Topics in Stroke Rehabilitation*, 14, 72-84. doi: 10.1310/tsr1401-72
- López, E., Eng, E., Randall-David, E., & Robinson, N. (2005). Quality-of-life concerns of African American breast cancer survivors within rural North Carolina: Blending the techniques of Photovoice and grounded theory. *Qualitative Health Research*, 15(1), 99-115.
- Mathison, S. (2008). Seeing is believing: The credibility of image-based research and evaluation. In S. I. Donaldson, C. A. Christie, & M. M. Mark (Eds.), *What counts as credible evidence in applied research and evaluation?* (pp. 181-196). London: SAGE.
- Miller, G., & Happell, B. (2006). Talking about hope: The use of participant photography. *Issues in Mental Health Nursing*, 27, 1051-1065.
- Moletsane, R., de Lange, N., Mitchell, C., Stuart, J., Buthelezi, T., & Taylor, M. (2007). Photo-voice as a tool for analysis and activism in response to HIV and AIDS stigmatisation in a rural KwaZulu-Natal school. *Journal of Child and Adolescent Mental Health*, 19, 19-28. doi:10.2989/17280580709486632
- Namey, E., Guest, G., Thairu, L., & Johnson, L. (2008). Data reduction techniques for large qualitative data sets. In G. Guest & K. M. MacQueen (Eds.), *Handbook for team-based qualitative research* (pp. 137-161). Lanham, MD: AltaMira Press. Retrieved from http://www.stanford.edu/~thairu/07_184.Guest.1sts.pdf
- Newman, S. D. (2009). Evidence-based advocacy: Using photovoice to identify barriers and facilitators to community participation of individuals with spinal cord injury. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 69, 4668-4668. (2009-99040-542)
- Newman S. D., & Spinal Cord Injury Photovoice Participants. (2010). Evidence-based advocacy: using Photovoice to identify barriers and facilitators to community participation after spinal cord injury. *Rehabilitation Nursing*, 35(2), 47-59.
- Noland, C. M. (2006). Auto-photography as research practice: Identity and self-esteem research. *Journal of Research Practice*, 2(1), 1-19.
- Nykiforuk, C. I. J., Vallianatos, H., & Nieuwendyk, L. M. (2011). Photovoice as a method for revealing community perceptions of the built and social environment. *International Journal of Qualitative Methods*, 10, 103-124.
- Orb, A., Eisenhauer, L., & Wynaden, D. (2001). Ethics in qualitative research. *Journal of Nursing Scholarship*, 33, 93-96.
- Prosser, J., & Schwartz, D. (1998). Photographs within the sociological research process. In J. Prosser (Ed.), *Image based research* (pp. 115-130). London: Palmer Press.
- Townsend, E. A., Beagan, B., Kumas-Tan, Z., Versnel, J., Iwama, M., Landry, J., . . . Brown, J. (2007). Enabling: Occupational therapy's core competency. In E. A. Townsend & H. J. Polatajko, *Enabling occupation II: Advancing an occupational therapy vision for health, wellbeing, & justice through occupation*. (pp. 87-133). Ottawa, ON: CAOT Publications ACE.
- Trentham, B., & Cockburn, L. (2005). Participatory action research: Creating new knowledge and opportunities for occupational engagement. In F. Kronenberg, S. Algado, & N. Pollard (Eds.), *Occupational therapists without borders: Learning from the spirit of survivors* (pp. 440-53). Edinburgh, UK: Elsevier/Churchill Livingstone.
- Wang, C., & Burris, M. A. (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health Education & Behavior*, 24, 369-387.
- Wang, C. C., Morrel-Samuels, S., Hutchison, P. M., Bell, L., & Pestronk, R. M. (2004). Flint Photovoice: Community building among youths, adults, and policymakers. *American Journal of Public Health*, 94, 911-913.
- Wang, C. C., & Redwood-Jones, Y. (2001). Photovoice ethics: Perspectives from Flint Photovoice. *Health Education & Behavior*, 28, 560. doi:10.2105/AJPH.94.6.911
- Walsh, C. A., Hewson, J., Shier, M., & Morales, E. (2008). Unraveling ethics: Reflections from a community-based participatory research project with youth. *Qualitative Report*, 13, 379-393.
- Wiersma, E. C. (2011). Using Photovoice with people with early-stage Alzheimer's disease: A discussion of methodology. *Dementia*, 10, 203-216.
- Zecevic, A., Magalhaes, L., Madady, M., Haylligan, M. & Reeves, A. (2010). Happy and healthy only if occupied? Perceptions of health sciences students on occupation in later life. *Australian Occupational Therapy Journal*, 57, 17-23. doi:10.1111/j.1440-1630.2009.00841.x