Article

A Literature Review to Evaluate the Choice and Use of Visual Methods

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Abstract

Visual methods are accepted tools for qualitative research and are increasingly used in a wide range of disciplines, such as sociology, psychology, geography, and health care. A literature review was undertaken with the aims of understanding why visual methods are chosen for use in research, reviewing any evidence regarding outcomes arising from those choices, and reflecting on the role of visual methods in these outcomes. Searches conducted from 2000-2010 across multiple bibliographic databases yielded 109 research papers that cited reasons for their choice of visual method. These were reviewed using a method tailored to the review's purpose but also informed by a narrative synthesis approach. The reasons given were collated and analysed inductively, with two categories of reasons emerging: those principally related to enrichment of data collection or presentation and those concerning the relationship between participants and researchers. Support for these reasons is reviewed and the ethical implications regarding choice of method are discussed. This article concludes that support for the use of visual methods to enhance data richness is strong, but more research is needed to facilitate a better-informed choice of method. There is some support for using visual methods for purposes connected with relational aspects between researcher and participants, but the visual media's contribution derives mainly from the ability of images to facilitate and enrich communication thus enhancing the data. The enrichment of data and an approach to participants that is affirming and empowering are intricately connected in the attainment of relationship-focused outcomes.

Visual methods are accepted tools for qualitative research and are increasingly used in a wide range of disciplines, such as sociology, psychology, geography, and health care. This literature review was conducted with the aims of understanding why visual methods are chosen for use in research, reviewing evidence regarding outcomes arising from those choices, and reflecting on the role of visual methods in these outcomes. Research from several disciplines, such as health care, education, social work and community development, sociology, and anthropology, was included.

For the purpose of this article a visual method indicates "the use of visual materials . . . employed by a social researcher during the course of an investigation" (Banks, 2001, p. ix) and includes all the types of visual data described by Prosser and Loxley (2008) as "found data" (pre-existing), "researcher created data," "respondent created data," and "representations," with the latter being the use of visuals in the presentation of research results. Some research used visual data "for the purposes of sociological analysis" (Bolton, Pole, & Mizen, 2001, p. 507); that is, there was "a focus on the visual for its own sake" (Banks, 2001, p. ix), in contrast to using visual methods for a different research goal. The use of visual information as a topic in itself is conceptually different from the instrumental use of visual methods explored in this article; therefore, such use of visual data was excluded.

Pauwels (2010) described a system for visual social research termed an Integrated Framework; however, reasons for choosing visual methods were not explicated in the Framework. The focus of his article is mainly the visuals themselves—how they are conceptualised, collected, and analysed. The current review is instrumental and therefore approaches visual methods as tools and seeks the researchers' reasons for choosing them, which is a different approach from Pauwels and other visual sociologists, such as Harper (1998) and Stanczak (2007). These two aims are complementary, because it is not only necessary to consider how one views and understands visual images, but also whether they will fulfil the reasons one has for choosing them.

Detailed descriptions of specific visual methods and the analysis of visual data are beyond the remit of this paper, and instead can be found in books on visual methodologies (e.g., Banks, 2001; Hamilton, 2006; Prosser, 1998; Rose, 2001). Only research reports that stated a rationale for using visual methods are reviewed here, but other literature on visual methods are referred to when discussing the review's findings.

Method

Literature searches were conducted from 2000-2010 in databases that covered social sciences (ASSIA, SA, SSA, and SSCI), education (ERIC, BEI, and Aust EI), psychology, and medicine (PsychINFO, Embase, Medline, AMED, and Cinahl) using the key term 'visual method' (combined with 'research' when there were more than 500 results), with additional searches in some databases using 'photograph' or 'drawing.' Articles and books in English were considered; from these, some earlier citations on visual methods were noted. Over 1500 titles were sifted according to whether they met the definition of visual methods above and were research papers that used visual methods instrumentally—285 met these criteria. A method was sought that would guide summarising and conceptual understanding of the data as well as collate factual information. Miles and Huberman's (1994) use of matrices and an inductive approach towards explanatory coding, which provides a level of analysis similar to 'analytical' coding in grounded theory, was chosen as the most appropriate approach given the specific purpose of the review. Popay et al.'s (2007) narrative synthesis method contains the elements of seeking a model of how and why an 'intervention' works (in this case, visual methods) and exploring explanations for differences in findings, and these elements were used to guide the review. Popay et al.'s full

method was not appropriate because the review was not to assess the quality of the visual methods but to collate and synthesise researchers' reports about them. At the first level of analysis, 109 research papers of the 285 described reasons for choosing visual methods, so these were selected for full review. The instrumental reasons stated were grouped together when the description showed evident similarity—for example 'breaking the ice' and 'building rapport'—and then entered into a matrix with the chosen visual method. Within each case, authors' comments about whether these methods delivered the expected benefits were reviewed. The evidence provided by the researchers for the majority of their comments was sparse, so no formal assessment of the quality of the evidence for effectiveness of visual methods was undertaken, but methodological factors that might influence the effectiveness of a particular visual method were noted, many of which are discussed below. The matrix of reasons was then inductively analysed for emergent explanatory groups, which resulted in the following two categories: those that were aimed at improving the quality and depth of the data collected or subsequently presented and those that pertained to the relationship between participant and researcher. Many studies cited multiple reasons; thus, an individual piece of research could be represented in both of these categories.

Visual Methods Used to Enhance Data Collection or Presentation

Reasons in this category related to facilitating people in expressing themselves as fully as possible. Rapport-building, facilitating communication, facilitating expression of tacit knowledge, improving the researcher's access to difficult-to-reach places or groups, and promoting reflection were identified.

Rapport Building

One method employed for the purpose of facilitating the building of rapport is photo-elicitation, where photographs are taken by the participant or researcher and then used in an interview. The rationale given by authors for choosing this method included putting someone at ease (Banks, 2001), encouraging engagement with the research study process (Rhodes & Fitzgerald, 2006), and providing the interviewer with a way into the participant's world (Chalfen, 1998; Gold, 2004). The effectiveness of this method for building rapport was seldom mentioned, with two exceptions: Gold (2004) reported that taking photographs as an orientation exercise enabled him to initiate conversations with people and Meo (2010) noted that her interviews with students concerning class, identity, and education were longer and "more enjoyable" (p. 155) when using photographs than when interviewing without them. Rapport building may need to be defined more precisely by authors to enable further evidence to emerge. Although rapport may be facilitated with visual methods, at present it is unclear with whom or when they may surpass verbal discourse alone in this regard.

Facilitating Communication

Researchers have variously reported using visual methods as a prompt to help participants express abstract ideas or as an adjunct to verbal communication. These reasons were grouped together because they facilitated communication in practical and intellectual ways.

Prompts

Photo-elicitation was the method most commonly chosen when researchers cited using visuals as a prompt (e.g., Clark-Ibáñez, 2007; Keller, Fleury, & Rivera, 2007; Wuggenig & Mnich, 2006). Some authors reasoned that images may prompt additional paths of thought in the researcher; for

example, Samuels (2007) found that interviewing Buddhist novices with participant-generated photographs led to much richer dialogue than without their use. Visual tools have also been reported to help potentially less articulate participants; for example, children were able to express their understanding and expectations of their pre-school environment through taking their own photographs, making books or collages from them, and then discussing their work (Clark, 2005; Kinney, 2005).

Meo (2010) compared traditional interviews with later ones that used participants' photographs, and she reported that those who communicated well in the first interview were the most articulate in the second. What she did not indicate, other than stating the interviews were on average longer, is whether having photographs as prompts in the second interview helped the less communicative to say more. In a study of transitions to adulthood, Thomson and Holland (2005) found no marked benefit of having memory books (a record of events made by the participant) as a prompt in the ensuing interview, and they even noted that some data from the interviews with the books were "less codable" (p. 215); their contents did contain data additional to those raised in the interview however, which demonstrated that memory books can elicit different data from interviews. Thomson and Holland (2005) reported that only 50% of the teenage participants compiled memory books, which underlined the fact that some people will find a visual method more helpful than others. Researchers should reflect on the impact of excluding those reluctant to engage with visual methods.

Expressing abstract ideas

It may seem counterintuitive to employ visual methods to explore abstract ideas, but this has been shown to be possible and productive, mostly through the use of visual metaphors. Hall and Mitchell (2008) encouraged student midwives to use drawing and collage as one way to express their views on the meaning of birth. Without suggesting the use of metaphors, the participants included flowers, hearts, and suns in their creations. Their written descriptions indicated that these were chosen to represent the concepts of growth, love, and new life respectively. The sample was small (n=6) and the artwork and descriptions requested retrospectively, but these participants reported that the use of visual metaphors had enabled them to meaningfully express their thoughts surrounding birth. Guillemin (2004) also found participants spontaneously used metaphors, in this case when depicting how menopause had affected them. Gauntlett (2007), a sociologist, was more directive, giving training on use of metaphors prior to asking participants to build a Lego model to depict their own identity. He theorised that this training was justified to familiarise the participants with the concept of metaphor and the medium of Lego.

Abstract ideas have also been explored without the use of metaphor. A longitudinal exploration of the professional development of trainee teachers during a placement was conducted by Richards (2006) by asking them to draw a picture at predetermined intervals. These proved effective at recording the participants' development of knowledge and confidence, both abstract concepts.

Visuals as adjuncts to communication

Visual methods were chosen by some researchers as an adjunct or alternative to oral or written communication when this was difficult, impaired, or impossible. One study (Clarke, McConachie, Price, & Wood, 2001) sought children's views on their communication aids, using a range of picture/symbol boards, word display, and voice synthesisers. The children indicated their views concerning their communication aids and other aspects of their life by placing an image representing the item being evaluated on three conceptual continua: fun/boring, uncool/cool, and

useful/useless. Care must be taken, if using symbols instead of words, to ensure participants attach the meaning to them that is intended.

As an adjunct to spoken language, Gallo (2001) asked a group of immigrants learning the language to take photographs of their current lives. This was primarily to aid language practice in the classroom, but the participants also found the photographs had been a vehicle for initiating discussions elsewhere. The benefits may stem from providing a shared focus from which participants converse, thus reducing basic misunderstandings or total inability to comprehend. Having something to show also facilitates the person with poorer language skills to initiate an interaction.

Facilitating Expression of Subconscious and Tacit Knowledge

In the literature, frequently reasons given for choosing a visual method related to facilitating communication on topics that are difficult to raise either because they are largely subconscious or subject to social or psychological inhibitions. One rationale for the potential effectiveness of a visual approach is rooted in the psychoanalytical school, which theorises that drawing or modelling will enable things to be expressed visually or symbolically that would be repressed in their verbal form (Jones, 2005). Newell-Walker (2002) combined elements from this approach with a more phenomenological approach as a way of restoring 'personhood,' and she provided a case example where a participant made a series of drawings across several sessions, which demonstrated a positive progression of insight with each successive drawing. Her case study illustrated the potential effectiveness of creating and reflecting on a series of drawings as a means to understanding aspects of one's psycho-social self that are usually subconscious.

The expression of emotions may be inhibited for social or psychological reasons, and although photo-elicitation has been used to encourage emotional expression in connection with receiving chemotherapy (Frith & Harcourt, 2007), use of creative media such as drawing or collage followed by interviews was more common. Kearney and Hyle (2004) investigated the emotional impact of major changes on employees in an institution. Nine respondents were asked to draw a picture of how the changes had been for them, and follow up interviews were conducted some weeks later. Eight were confident that this method had enabled them to capture the heart of their personal experience and express their feelings better. The authors commented that many expressed self-consciousness and lack of confidence with regard to drawing. The lack of uniformity in participants' reaction to drawing emphasises the care with which an activity has to be introduced, and the need to be aware how methodological and intrapersonal factors may affect the drawing produced.

Some researchers wished to explore knowledge that is largely subconscious or 'tacit.' Meo (2010) reported photo-elicitation was useful in tapping "class and gendered practices" (p. 152) in greater depth than with interviews alone. Part of the benefit may derive from the clues for further questions that the researcher found within the images, particularly when a participant seemed to assume no explanation was necessary. Latham (2003) explored people's lived experience and knowledge of social situations by asking them to compile a photo-diary (description and photographs) of their activities and feelings in public spaces, which was then followed by an interview. This method enabled participants to describe intuitive aspects of their practical knowledge of the social environment that would be difficult to express without the visual clues that the researcher and interviewer used together.

Only one study was found that explicitly compared the data gathered through different visual methods. Woolner, Clark, Hall, Tiplady, Thomas, and Wall (2010) involved students in a

consultation about school redevelopment using participant-generated photographs and the compilation of maps. They noted that the different methods, whilst confirming much data, also generated some unique data, and that maps tended to evoke data related to position and space, whereas photographs evoked data on people and events or activities. The purpose of the research may therefore be a factor to consider when choosing a visual method in order to tap the appropriate tacit knowledge.

Accessing the Difficult-to-Reach

There are many groups which are a challenge to engage in the research process, such as homeless people (Johnsen, May, & Cloke, 2008; Packard, 2008; Radley, Hodgetts, & Cullen, 2005). Visual methods do not require participants to be articulate or have high levels of literacy, so these methods are often employed with such groups. Because snowballing is frequently the only way researchers can recruit participants, it is important that the method is not considered too onerous and that it seems enjoyable to undertake. Photography, using disposable cameras, was the commonest method used by all the studies cited above.

Groups

Authors' evaluations of the methods used in the studies were nearly always positive, often commenting that more detail was obtained than originally expected, but notes of caution were sounded as well. Packard (2008) found some homeless people were unfamiliar with cameras, yet reluctant to admit this, which resulted in spoiled pictures or non-use of the camera. This problem is pertinent to any participant group, so it needs to be considered for all methods requiring participant-generated visuals, along with other methodological issues such as clear, appropriate instructions, attention to the effect of self-selection, and participants' possible reluctance to use a visual medium.

Places

Occasionally a participant could take the researcher to places they would not normally expect to access; for example, Parkin and Coomber (2009) toured and videoed injection sites with drug addicts. In other papers, participant photography was cited as a means to access aspects of participants' lives to which the researcher would not be privy. It is only by giving participants a camera that visual information became available to the researcher. Examples of this are pictures taken within a Moroccan hammam, where a westerner would not be welcome (Lorenz & Kolb, 2009); pictures taken by homeless people of places that were unsafe (Johnsen et al., 2008); and images from young participants' places of work (Bolton et al., 2001).

Encouraging Reflection

For people unused to reflecting on their experience, visual methods may provide a stepping stone. Many researchers chose a visual method for this purpose, such as Latham (2003) cited above; other authors noted that reflection was facilitated through the use of a visual method (Gauntlett, 2007; Johnson, 2004; Mignot, 2000). Gallo (2001) reasoned that photographs facilitated critical reflection because they were "frozen images" (p. 115) that could be examined thoughtfully. Johnson (2004) found that critical reflection had been enabled through comparison of cartoon drawings and prose recorded by a newly qualified teacher, revealing their feelings about and views of the institution that had not been evident in the word-based account alone.

Holliday (2000) asked gay women to explore and reflect on their identity through the production of video-diaries, and she theorised that the resulting data can be regarded as confessional, facilitated by the perception that the video lens is a mirror, thus making the self the audience. Although she considered the result to be a representation of the person, rather than 'truth,' she indicated that the method had enabled participants to gain in understanding of their identities and had promoted self-awareness.

Discussion of Using Visual Methods to Enhance Data Collection and Presentation

Visual methods have been chosen to facilitate participant engagement and communication in order to gain richer data, especially if difficulties are experienced or anticipated. One factor influencing data richness may be the thought and reflection required by participants to plan and execute visual artefacts (Guillemin & Drew, 2010). Another is the image itself, which in the ensuing interview prompts recall of thoughts and feelings at the time of its inception.

At a sociological level, images may be providing a "bridge" (Meo, 2010) that enable participants to converse about milieux that are very different from the researchers'. Many researchers concluded that images had facilitated their questioning and yielded informative responses. At a cognitive level, because visuals use different parts of the brain than language, the two in combination could provide additional cues for understanding and encourage new connections between the two patterns of thought, thus facilitating insights. Visual methods do appear to be effective in these respects, and the articles reviewed above note that participants reported new insights.

Visual methods may indeed enable richer data to be gathered compared with verbal data alone, but with the richer data come additional challenges in presenting them. Barthes (1967) considers images too polysemic to be interpreted without verbal description, so he regards images to be dependent on text. Others regard the visual as confirmatory of text (Reiger, as cited in Bolton et al., 2001), but Latham (2003) considers that if textual data is given privilege, without including the visual, the richness of social practice would be inadequately described. Such comments lend support to the use of visuals and text together to create an interplay, which is most creatively demonstrated in picture story books (Sipe, 1998): the words and pictures can work in synergy to enhance meaning, or if they convey different messages, can provoke reflection as Johnson (2004) described. Pictures make one stop and look, to take in different aspects of the image, whereas text leads one on (Steiner, as cited in Sipe, 1998), and this property of visual images may be one reason why they facilitate reflection.

When combining visual and verbal data to present findings it is worth noting that Banks (2001) provides a note of caution by questioning whether a verbal description can ever be a true reflection of what a participant has expressed in a visual creation, and Pink (2001) considers word and image cannot be equated because they represent different ways of knowing. Despite these views, it is common for visuals to be used in conjunction with text, using both in a complementary way (e.g., Flick, 2006; Hanke, 2000). A range of visual media have been used to present research findings more fully or to stimulate greater engagement with them, for example, drama (O'Neill, Breatnach, Bagley, Bourne, & Judge, 2002), photographic exhibitions (Frohmann, 2005), annotated diagrams (Latham, 2003), and video clips (Holliday, 2004).

Visual Methods Used to Mediate the Relationship Between Researcher and Participant

Reasons included in this category pertained to the relationship between researcher and participant. Amongst the articles reviewed, enabling the participants' voices to be heard was the

most frequently stated reason, but this was a generalised aspiration within which other more specific purposes lay. Excluding data enhancement discussed in the previous section, an ideological or theoretical stance was discerned to be at the root of the remaining aspirations for visual methods, and comprised the following: valuing participants' experience and expertise in their own field, empowering participants, reducing the power imbalance between researcher and participants, working collaboratively with participants, and effecting change in individuals or a community. Examined below are the expectations of visual methods regarding these relationship-centred goals, therefore the issues of methodology and data handling per se are not addressed, which are broader considerations outside the remit of this paper, although they would be directed by ideological and theoretical concerns as well.

Participants as Experts

Many studies entailed participants generating their own images and then discussing them. The rationale frequently given was that the participants will express their own experience, which the researcher can then discuss with them, rather than the researcher setting the parameters and potentially silencing an aspect of the participants' experience. For example, Moore, Croxford, Adams, Refaee, Cox, and Sharples (2008) expressly chose participant photography to enable the residents in an inner city area to present their views, not the researchers' views. Most community projects reviewed acknowledged the participants' expertise regarding their own community and reported effectively tapping that expertise through visual methods; for example, Castleden, Garvin, and Huu-ay-aht First Nation (2008) used a cycle of participant photography followed by meetings to gather an indigenous Canadian population's views on their environment. In a similar way, James, Jenks, and Prout's concept of the social child as competent in their own sphere (as cited in Punch, 2002) is the rationale many authors state for using drawing or photography as a medium with children; several papers expressed the opinion that the children's ease with these media facilitated the tapping of their expertise (Elsley, 2004; Morrow, 2001; Punch, 2002), a view that Thomas and O'Kane (2000) support.

Issues of Power

A number of researchers chose a visual method as a means of addressing the imbalance of power between researchers and participants. The most common method chosen for this purpose was photovoice, in which participants were given cameras to record a general topic, for example neighbourhood violence (Wang, Morrel-Samuels, Hutchison, Bell, & Pestronk, 2004), then participants used the images to raise issues that they wished to explore with their community and policy-makers. This method reduces the influence of the researcher's status, knowledge, or cultural background (Kearney & Hyle, 2004). Castleden et al. (2008) claimed their project was successful "at balancing power, creating a sense of ownership in the research, fostering trust, building capacity, and implementing a culturally appropriate research project in the community" (p. 1398). Flum, Siqueira, DeCaro, and Redway (2010) expressly chose photovoice for an evaluation of health and safety practices to give power to those with the least, namely cleaners. Sharing their photographs with their peers, and then with management, empowered the cleaners to demonstrate that Health and Safety policies were not always being implemented. A review of the photovoice method (Catalani & Minkler, 2010) concluded that a degree of empowerment is usually achieved through this method.

Other visual methods may also facilitate empowerment, for example, children taking and discussing photographs on well-being rather than trying to talk about it without the visual element (Nic Gabhainn & Sixsmith, 2006). The authors suggested that using the cameras outside school removed 'adult surveillance' of the data collection process, thus potentially reducing its influence.

Clark (2010), who used participant photography with preschoolers, concluded that the method helped redress the power imbalance between adult and child because an analysis showed considerable overlap of roles taken by the researcher and participants.

Collaboration

Awareness of power issues has led many researchers to seek the active participation of those they recruit throughout the research process rather than only at data collection (e.g., Frohmann, 2005; Gallo, 2001). Through such involvement participants may well gain skills and knowledge that could change their life opportunities. Pink (2001) advocated as full a collaboration as is practical in order to reduce the power differential, but Parr (2007) noted the challenges of collaboration, particularly those demonstrated in studies with 'hard to reach' groups such as the homeless (Johnsen et al., 2008; Packard, 2008; Radley et al., 2005).

Evidence suggests that visual methods may encourage the majority to collaborate, but there may be some participants who fail to do so (Firth & Harcourt, 2007; Foster-Fishman, Nowell, Deacon, Nievar, & McCann, 2005). Collaboration may become 'collegiate' (Wang et al., 2004), but Driscoll and Rudge (2005) pointed out that mutual trust and respect had to be established before profile books for nursery children could become effective in engaging the child. This suggests that the relational aspect is an important factor when using a visual medium.

Effecting Change

Although empowerment and collaboration arguably bring about change in the participant, some authors report that a visual method effected a specific change. Rich, Lamola, and Woods (2006) asked young people to video record a 'narrative' of their chronic illness, and the researchers measured an improved self-confidence in managing that illness and an improved quality of life in the participants. The authors attributed these improvements to the participants' greater awareness of their condition and their selves. Gallo's (2001) students, as previously discussed, also demonstrated improved self-confidence, not only through improved language skills but also by taking an active role in their workplaces. Gotschi, Delve, and Frever (2009) used a photo-elicitation method with groups of farmers and reported that they improved in confidence. It therefore seems that a number of methods can bring about improved confidence; some of this improvement may be derived from the positive approach and encouragement of the researcher and so may not be attributable to the visual nature of the method, but authors broadly agreed that participants felt having a visual artefact to speak to gave more credence to their views than words alone.

Effecting change within a community is another reason cited for choosing a visual method, and in this review all articles that expressed this reason chose the photovoice method or an adaptation of it. A key element of this method is the presentation of findings to policy makers to inform and influence decisions; this is underpinned by Freire's work on raising critical consciousness through education and research (Castleden et al., 2008; Wang et al., 2004). The evidence of effectiveness in this regard was mixed. For example, Lorenz and Kolb (2009) noted that no policies regarding acquired brain injury had been changed as a consequence of their project, but Wang et al. (2004) reported that photovoice had had substantial influence on the approval of two centres, one for health and the other for youth. On balance, Catalani & Minkler (2010) concluded that the method itself may be less influential in affecting policy makers than the degree of involvement of the latter in the intervention or their degree of interaction with participants. The use of participants' own photographs to illustrate their presentations may be a crucial factor, but more studies would be needed to strengthen this conclusion.

Discussion of Using Visual Methods to Mediate the Relationship Between Researcher and Participant

There are multiple influences on the outcomes reviewed above, and it is difficult to isolate the role of the visual element from the overall approach. Many of the studies showed that the visual element was only one factor in complex social situations. The ideological approach to participants directs the interactions between the researcher and participants, and a collaborative relationship may produce richer data than a more directive approach. Although visual methods resulted in increased empowerment or collaborative working and concomitant improvement in self-esteem and confidence, these benefits may potentially be traced to the facilitation of communication and self-expression. This does not eclipse the contribution that the visual element makes, especially its role in improving communication and other aspects discussed in the data-enhancement category above, but raises the possibility that non-visual methods may yield similar relationship-focused outcomes. Unless the visual method is primarily chosen to enrich the data, the benefits of the visual element are difficult to evidence because of the complex influences on relationships within the research context. There is insufficient evidence as yet to indicate whether or not an appropriate but exclusively verbal method could achieve similar outcomes in the relational areas discussed, given similar researchers with similar ideological and theoretical approaches.

Ethical Implications of Visual Methods

There is appreciable debate about the ethical challenges that visual methods pose in addition to the ones common to all research. The ethics of using visual methods has been reviewed (Wiles et al., 2008) and included the professional and legal framework in which researchers operate and issues of confidentiality and consent. The focus here, however, is on the impact of the choice of method, so discussion is confined to the ethical challenges of balancing the desire to enhance data richness with the need to maintain a non-exploitative experience for the participants.

Many issues, such as that of whose 'voice' is heard in the data, are common to other research, but the introduction of visual data increases the complexity. For example, Sandercock and Attili (2010) considered that conflict and failures were under-represented in a film compiled about a neighbourhood, thus the residents' overall data had been distorted. Another challenge arises from the polysemic nature of images, so that extra care has to be taken to faithfully represent the participants' intentions both in analysis and in the presentation of findings. The latter will usually require explanatory words to accompany any image so that it is understood in the way its author intended, otherwise the aim of giving 'voice' is compromised (Morrow, 2001); for example, in dramatic presentations the participant's voice is paramount throughout the scripting process and performance (O'Neill et al., 2002). The possibility of adverse reactions should be considered in presentations of findings; for example, Mienczakowski and Morgan (2001) discussed the possibility of a portrayal of suicide evoking suicidal feelings in the audience, and they advocated reflective practice to ensure potential harm is discerned and addressed.

Adverse reactions to the method of collecting visual data must also be considered. Packard (2008), in a study with the homeless as discussed above, found some participants reluctant to admit their unfamiliarity with cameras because they felt ashamed of their lack of skills, which raises the ethical imperative of non-malfeasance. The author reflected on the difficulty in balancing respect for a person's expertise with the need to adequately explain the technical features vital to appropriate use of the equipment. Consideration of method should therefore include a critique of all methods (visual or non-visual) capable of achieving comparable data in order to discern which is less likely to cause distress. Constant ethical awareness and reflection are needed so that the researcher responds to such events in an appropriate and sensitive manner.

As visual methods are often used to facilitate expression of emotions and tacit knowledge, participants may reveal more than they were expecting to share with the researcher. In the articles reviewed, such revelations were positive (e.g., Kearney & Hyle, 2004; Newell-Walker, 2002), but ongoing discussion regarding consent may be needed with participants, especially if their reactions are not positive or there is a risk of leaving issues unresolved (Meo, 2010). In addition to the inclusion of participants' reactions or understandings, discussion must also include what images may be reproduced and for what audience. With non-visual data harm is usually avoided by anonymising the data, but where recognisable images of a person are used, anonymity cannot be given. Some participants clearly wish to waive anonymity yet Ethics Committees may disallow this, perhaps jeopardising the aim of empowering the participant and valuing their knowledge and autonomy. Another aspect of anonymity regarding participant-generated images is that of other people featured, and whether the photographer's consent is sufficient for publication. Meo (2010) implied that it is, provided that the specific environment is anonymised so that the location cannot be pinpointed and provided that the image itself is not "potentially damaging" (Meo, 2010, p. 154) because of immodest content. In contrast, Radley and Taylor (2003) were required by their Ethics Committee to debar participants from photographing other people at all.

These ethical ramifications that visual data raise increase the need to fully examine the reasons for choosing visual methods, and place a duty on researchers to be confident that the advantages of the visual compared with other methods outweigh the additional ethical uncertainties and considerations that must be addressed. There are currently few studies that directly compare non-visual methods with ones that incorporate visuals, and the only one found has been discussed above (Meo, 2010).

Summary and Conclusion

The focus of this review was the purposes for which visual methods are chosen, excepting the gathering of visual data as a form of knowledge in and of itself. It examined studies which reported reasons for the choice of method and reviewed whether these were fulfilled. This review focused on the instrumental use of visual methods, in contrast to much of the literature regarding visual research which centres on how to conceptualise and analyse the data themselves.

The reasons provided by researchers were analysed inductively and two categories emerged: those that enhanced data richness and those that pertained to the relationship between researchers and participants. Reasons regarding enhanced data included facilitating communication, enabling the expression of emotions and tacit knowledge, and encouraging reflection. Much evidence to support these claims was found, and authors suggested that the majority of participants found the visual methods enjoyable and easy to engage with. Consideration must be given to the small proportion that may not find visual methods helpful, either to note what the data may miss by excluding them or to find other methods that could include them. Overall, authors reported that visual methods were effective in producing richer or different data compared with exclusively verbal methods, although this review found only one study that specifically compared the outcomes between verbal and visual approaches in the same participants (Meo, 2010). More studies that compare the content and quality of the data gathered with these two approaches would inform researchers' choices and help to discriminate circumstances where visual methods are particularly advantageous and why.

The category of reasons that focused on the relationship between researchers and participants included acknowledging participants as experts in their own lives, facilitating empowerment, valuing collaboration, and effecting change in the participant or community. Many authors

reported that the visual methods employed had achieved one or more of these, but one of the difficulties in assessing evidence for a visual method's impact in this category is the difficulty in separating the contribution that the visual method makes from those of relationships, language-based communications, and the researcher's ideological and theoretical approach. This review has argued that there are two major influences on such relationship-focused benefits: the quality of the relationship between the researcher and participants, which researchers themselves mediate, and the visuals' influence on the communication between researcher and participant and, consequently, the data collected. A visual method may play a role in facilitating empowerment and collaboration or effecting change, but current evidence suggests that the advantages of visual methods chiefly accrue from images' ability to facilitate and enrich communication, thus enhancing the data. The enrichment of data and an approach to participants that is affirming and empowering are intricately connected in the attainment of relationship-focused outcomes such as empowerment and change.

It is clear that visual methods will continue to be employed, and that more evidence about their benefits will enhance informed ethical choice regarding the most effective one to employ in a given situation. The body of knowledge about visual methods' potential will be improved through future articles providing clear statements regarding reasons for the method's selection and subsequent evaluation of the extent to which those expectations were met.

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