Photo-voice as a qualitative research method in nursing and health sciences: A literature review

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Abstract. The interest on research methods using photograph and photo-interview has emerged in the last decade. However, some aspects of this method were less explained for further application. This review revealed the state of knowledge of photo-voice in qualitative nursing and health researches in order to provide an updated description on this method. Photo-voice is one of visual research methods to elicit information through participant-produced photographs and photo interview. The objective of this review was to explore the current applications of photo-voice regarding to the terms used, the framework underpinning the researches, the research designs, the concepts explored, the advantages and disadvantages identified and the guideline provided for future use. Based on the literature reviewed, photo-voice has proved its applicability to address sensitive issues and to provide richer data and deeper analysis. This research method could improve the comprehensiveness of the data produced and increase the participation of groups being investigated. The rich visual and narrative data collected by this method are considered appropriate to be applied in exploring the marginalized groups in a way that empower them. This method also opens the chance to involve other disciplines in a research team. Some issues to consider in applying this method are time-consuming and technical limitations, as well as the challenges in maintaining the level of participation. However, the advantages of the method were more prominent, especially in balancing the power in research and empowering the participants. This method was recommended to use in researches conducted in oppressed or marginalized groups for the purpose of empowerment and producing indigenous knowledge of the groups.

Key words: visual research method, participant-produced photograph, photo interview, empowerment

Introduction

The significance of comprehensive and participatory approaches to research has been considerably noticed by the research (Israel, Eng, Schulz & Parker, 2005). Those approaches brought much concern on conducting less exploitative and power-balanced researches (Allen, 2008; Packard, 2008; Castleden & Garvin, 2008). Various methods were applied to meet the concerns, including the methods referred as participant-produced photography and photo-interview (Riley & Manias, 2004).

The most common utilization of participant-produced photography and photo-interview in nursing and health journals was photo novella, photo voice and photo-elicitation, which addressed to an approach where the researchers used photographs produced by participants as a tool to elicit, draw out or evoke response from participants themselves (Riley & Manias, 2004). Hurworth, Clark, Martin, and Thomsen (2005) identified the various terms attributed to photo-interview, namely photo-elicitation, auto-driving, reflexive photographs, photo novella, photo-voice.

In general, Riley and Manias (2004) explained that the use of photography in nursing and related journals was identified as follows: documentation or surveillance; therapeutic intervention; teaching, leaning and evaluating performance; a research method; and a descriptive and educational literature. Highlighting more specifically photography as research method, Hurworth, Clark, Martin, and Thomsen (2005) reviewed that photo-interviewing, photo could be applied to evaluate medical and hospital procedures; to assess participatory needs and health promotion; to assist in teaching allied health students; as a therapeutic strategy; to provide rich narratives and much more useful information from people who difficult to talk about abstract concepts; and to make children more willing to talk about mental and physical health.

The application of participant-produced photograph in health researches has overcome a wide curved movement. It was not a new method, since it has been used since 1976 by social scientists, but it once ignored in the past decade (Hurthwoth, 2003). Although there are more interests to this methods lately, but not many written explanation on the method were available in comparison with the rest of qualitative methods (Hurworth, Clark, Martin, & Thomsen, 2005).
Many studies proved the advantages and limitation of photo-interview (Hurworth, 2003), but the difference of the method and how it should be used, including ethical concerns issues and data analysis, were less explained (Riley & Manias, 2004). Acknowledging the renewal emerging of interest to this method in improving comprehensiveness and participation, we need to review the related researches or published articles in order to summarize the new knowledge produced from the application of this method. This paper was purposed to describe the applicability of participant-produced photography and photo-interview in qualitative nursing and health research in the last five years (2006-2010).

The objective of this review was to explore the current applied of this methodology regarding to the terms used, the framework underpinning the researches, the research designs, the concept explored, the advantages and disadvantages identified and the guideline provided for future use.

**Method of Study Review**

The literature reviewed was retrieved from databases such as CINAHL, ScienceDirect and Proquest. The keywords used to search the articles were photo novella, photovoice, photo interview, and photo elicitation. To trace the current use of the method in nursing and health related disciplined, only the literature published in a five-year period (from 2006 to 2010) was selected, more specifically the literature which was published in English in nursing or health related journals. Based on these criteria, 16 articles were reviewed. In addition, some books and other articles which explained the use of the method were used to support the discussion on the review results.

**The Result of The Study Review**

**The term used**

The 16 articles used different terms such as photo elicitation (Allen, 2008; Dennis, Gaulocher, Carpiano, Brown, 2009; Oliffe & Bottorff, 2007; Packard, 2008; Thompson et al., 2008; Thomson & Gunter, 2007), photo-diary (Allen, 2008; Stacey & Hardy, 2010), auto-photography (Blackbeard & Lindegger, 2007), photo elicitation interview (Blackbeard & Lindegger, 2007; Dennis, Gaulocher, Carpiano, Brown, 2009; Meo, 2010), participatory photo mapping- participatory photography (Dennis, Gaulocher, Carpiano, Brown, 2009); Photovoice (Dennis, Gaulocher, Carpiano, Brown, 2009; Riley & Manias, 2006, 2009; Oliffe & Bottorff, 2007; Packard 2008; Castleden & Garvin, 2008; Thompson et al., 2008; Royce, Parra-Medina, Messias, 2006); photo-interview (Packard, 2006) and photo novella (Sampson & Gifford, 2010). From the 16 retrieved articles, we could see that the most common term used to address the participant-produced photograph and photo-interview is photo-voice and photo-elicitation.

**Concepts explored**

The methods of participant-produced photograph and photo-interview have been applied in school-based, community and hospital setting. In school-based setting, Blackbeard (2007) applied auto-photography and photo-elicitation to explore the concepts of masculinity and abjection among adolescent boys, Allen (2008) explored sexual culture and agency of young people, and Meo (2010) explicated the student's habitus in two secondary schools. In the community setting, the method has been used to elucidated the implication of place for health of children (Dennis, Gaulocher, Carpiano, Brown, 2009), the experience of prostate cancer survivors (Oliffe & Bottorff, 2007), identity of homeless people (Packard, 2008), indigenous research (Castleden & Garvin, 2008), youth empowerment (Royce, Parra-Median & Messias, 2006). While in the hospital setting, this method has been used to explicate the Governance and control of nurses in operating room (Riley & Manias, 2006), experience of living with chronic mental illness (Thompson et al., 2008). In addition the method has been considered successfully in explore the concept of selves in the area of psychology (Packard & Conway, 2006).

**Framework**

The researches utilized the methods of participant-produced photograph and photo-interview were underpinned by various framework such as post structuralism (Allen, 2008), post-modernist (Riley & Manis, 2006), feminist theory (Blackbeard, 2007; Castleden & Garvin, 2008; Thompson et al., 2008), interpretive phenomenology (Dennis, Gaulocher,
Carpiano, Brown, 2009), theory of critical consciousness (Castleden & Garvin, 2008; Thompson et al., 2008), symbolic interactionism (Packard, 2008), interpretive phenomenological theory and community-based participatory research (Dennis, Gaulocher, Carpiano, Brown, 2009), Bourdieu’s theory of social praxis and sociological theorist of identity making (Meo, 2010). In addition to the philosophical framework, some researchers also applied other frameworks related to participatory and documentary photography (Castleden & Garvin, 2008; Thompson et al., 2008; Dennis, Gaulocher, Carpiano, Brown, 2009).

**Design**

Different research designs were employed by the researchers in using the method of participant-produced photography and photo-interview. However, some researchers did not mention the research design and only informed the method they used, such as Allen (2008), Packard (2008), Blackbeard (2007), Dennis, Gaulocher, Carpiano, Brown, 2009).

The researchers most commonly used ethnography as the design. In the design, they applied participant-produced photography and photo-interview as research method, and use it synchronously with other methods such as field observation, individual and group interview, and participant observation (Meo, 2010; Riely & Manias, 2006; Oliffe & Bottorff, 2007). Beside ethnography, some research employed community-based participatory research (Castleden & Garvin, 2008) and qualitative descriptive design (Thompson et al., 2008). In their ethnographic study, Oliffe and Bottorff (2007) emphasized that if any study need to achieve emancipation goal, the researchers could continue the study by conducting a participatory action research.

**Data Analysis Method**

Most of researchers did not explain explicitly about the data analysis method they applied in their studies. Only three studies specifically mentioned it. Two studies used content analysis to analyze visual data (photographs) and narrative analysis to analyze verbal transcripts of interview. One study mentioned that Foucauldian analysis was employed to analyze the data.

**Guideline or strategies to use the method**

Some studies mentioned clearly about some aspects which needed to be paid more attention in applying the method of participant-produced photography and photo-interview. Dennis, Gaulocher, Carpiano, and Brown (2009) described explicitly on how to apply Participatory Photo Mapping (PPM). PPM process was started by initiating youth groups to discuss aerial photo of the neighborhood. The process was proceeded by the activities in documenting their own experience in neighborhood through digital photography and Geographical Information System (GIS), which then followed by conducting FGD to produce explanatory narratives. At the end of the process, the participants and researchers presented the mapped photographs and narratives to the decision makers in the neighborhood.

The preparation phase of photo-taking by participants was described by Allen (2008). He explained how to work with the youth in order to keep the process of photo-taking would not violate the ethical consideration or violate the regulation applied in the school. In addition to provide more guideline strategies, Castelede and Garvin (2008) explicated a clear comparison of the traditional stages of photovoice proposed by Wang (2005) with the stages of photovoice they developed in conducting an indigenous study in Huu-ay-aht First Nation, British Clumbia, Canada. They described clearly about the steps employed in each stages of photovoice starting from the recruitment and training workshop until the process to reach the stake holder to create change.

Furthermore, Oliffe and Botteroff (2007) supplied rich description on the process of photo-taking by participants, the interview process, how the photo voice contributed to participants’ observation data and how the data and findings were shared with various audiences. They also showed some pictures taken by the participants and the data elicited from the photo. It informed the reader how the picture could brought up rich data and analysis.

Royce, Parra-Medina and Messias (2006) detailed the process of applying photovoice to empower the youth. They described seven steps of photo-voices in their study namely: defining the research issues; training the youth researchers, devising the initial themes for taking photos, photo taking, documenting the stories, facilitating group discussion and reaching the audience.
Advantages

Oliffe & Bottorff (2007) mentioned in their study that photo elicitation could facilitate unique dialogue with participants. It could extend the ethnographic borders by producing an artful emic perspective that could captured the complexities of participant's conditions. It considered successfully to achieve emancipation from oppressed group of both gender. Oliffe & Bottorff suggested that this method could be employed to contrast and compare biomedical diseases with human experience of illness.

More advantages were mentioned by the other studies as follows: enable youth to actively determine what data were collected and shape the meaning (Allen, 2008); could capture the identities and meanings of sensitive concept which were shaped by social and unconscious processes, both in the level of individual and level of peer (Blackbeard, 2007); could direct recommendation to empower the participants in the sensitive issues (Blackbeard, 2007); transdisciplinary collaborative research (Dennis, Gaulocher, Carpiano, Brown, 2009; Thompson et al., 2008); youth involvement with PPM helped to identify assets and barriers to health and safety in community (Dennis, Gaulocher, Carpiano, Brown, 2009); richer data than traditional interview, opening up of unforeseen dimensions for analysis, facilitation of a rapport with respondents, very potential to enhance student’s voice and participations (Meo, 2010).

From other studies, another advantages explicated that this method could reduce interviewee shyness and/or reticence; to disarm and encourage conversation (Thompson et al. 2007), function as complementarities with other method, such as “go-alongs interview” (Carpiano, 2009), produce more in-depth analysis (Riley & Manias, 2006). And effectively balance power, create a sense of ownership, fostered trust, build capacity and respond to cultural preference (Casteleden & Garvin, 2008).

Disadvantages

Beside the advantages of the method, some disadvantages should be put into concerns. This method took time for ethical approval (Allen, 2008), time constraints and background noise in doing FGD in rural area (Blackbeard, 2007), needed more facilitators for FGD (Blackbeard, 2007) to produce rich data, had technical, pragmatic and ethical limitations (Dennis, Gaulocher, Carpiano, Brown, 2009), limited in participant retention, seasonality and weather, access to cameras and film-developing (Castleden & Garvin, 2008), considered more time consuming, expensive and demanding (Meo, 2010). During the process, Packard (2008) found that the participants in community did not return the cameras. The researchers need to anticipate these disadvantages if they would plan to apply this method.

Discussion

The most common term being used in the reviewed articles to address the participant-produced photography and photo-interview were photo-voice and photo-elicitation. Photo-voice is one type of photo-elicitation which employed using participant-produced photographs as a catalyst or stimulus of discussion during a research interview (Riley & Manias, 2006; Meo, 2010). Riley and Manias (2004), in their review of the uses of photography in clinical nursing practice and research, mentioned that the most common application of photography in research was photo-elicitation.

Furthermore, Oliffe and Bottorff (2007) explained that photo-elicitation is the same approach as photo-interviewing, photo-feedback, photo-voice, auto-driving, reflexive photography and photo-novella. All those terms referred to the use of participants-produced photographs. However, Oliffe and Bottorf and Packard (2008) highlighted the difference of using the term photo-voice among other terms. They emphasized that the term of photo-voice more strongly addressed to empowerment and emancipation rather than the other terms referred participants-produced photographs. Therefore, the term of photo-voice will be used in further discussion in this review.

Related to the framework underpinning the studies which were reviewed, most of them applied feminist theory and participatory or documentary photography in their studies. This finding was in congruent with the original theoretical and practical underpinning of photo voice proposed by Wang, Burris and Ping (1996). They mentioned that photo-novella, which later called photo-voice (Hurworth, 2003), was supported by 3 main theoretical framework, namely the Freire’s empowerment education for critical
consciousness, feminist theory, and participatory documentary photography (Lopez, Eng, Robinson, Wang, 2005). There were there studies (Castleden & Garvin, 2008; Thompson et al., 2008; Royce, Parra-Medina, Messias, 2006) who applied those three theoretical frameworks in one study.

This review provided more evidence that photovoice could be applied to explore various concepts in diverse settings. Concept has a separate identity describing an object or phenomenon (Burns & Grove 2007) which could be explored from participants using research method such as photo-voice. The findings of literature review conducted by Riley and Manias (2004) about the uses of photography in clinical nursing practice and research showed the same evidence about the various concepts being explore using this method. They explicated that as a research method to promote understanding, photo voice had been employed to investigate different topics such as the lived world of older people, the experience of women living with breast cancer, the experience of parenthood, the experience of chronically ill children, and the experience of serenity. Hurthworth (2005) also mentioned that a variety of disciplines had used photo-elicitation technique to capture the concepts under investigation.

According to Wang, Burris and Ping (1996), photo voice is a methodology that utilized the camera by the community members who have limited access to decide the policies affecting their lives. Later on, Lopez, Eng, Robinson and Wang (2005) mentioned that photo-voice is one of community based participatory research (CBPR) approach. They also explicated that photo voice is a participatory action research method that involves placing cameras in the hands of community people so that they may visually represent and communicate to others about their lived experiences. In contrast, Riley and Manias (2004) mentioned in their review that the uses photography of photography in research is merely as a method to observe, to promote empowerment, to enhance understanding, and to establish validity. The studies they reviewed showed that the researchers used a variety of frameworks concerning the methodology. It confirmed the finding in this review that photo-voice is being used much not as a methodology but as a research method.

Although some studied applied the methodology of photovoice proposed by Wang, Burris and Ping (1996), but sometimes the methodology was not practicable for some condition. A community project conducted by Royce, Parra-Medina, and Messias (2006) showed that the project is not feasible to follow all steps recommended, such as involving the policy makers in the advisory board of the project. However, Royce, Parra-Medina, and Messias emphasized that photo-voice is a creative community assessment tool which is possible to adapt in different settings and in different concepts under investigation. In other words, this study proved that photo-voice is more suitable to be applied as a method or tool of research rather than a methodology.

By regarding photo-voice as a method, the researchers could exercise the method along with other method using various framework and research design. As explained by Riley and Manias (2004) that photo-voice had been applied in many studies that used various design, including ethnography. Ethnography was the most common design used in the review studies in this paper, such as the study conducted to explore the gate keeping practices of nurses in operating rooms (Riley & Manias, 2009); to explore governenance and control in operating room nurses’ clinical practice (Riley & Manias, 2006), to examine the class habitus, identities and schooling among secondary school students, and to explore the life of prostate cancer men (Oliffe, 2007). Since the time, place and events could not be separated in ethnographic studies (Holloway & Wheeler, 2010), photo voice offered an opportunity to provide thick description to put the time, places and events in a context of cultural and social relationship.

The use photo-voice in conjunction with other tools and methods, as manifested in this review, were an appropriate effort in the framework of feminist theory. According to Im (2010), in her review of current trends in feminist nursing research, feminist research frequently employed multi methods rather than mainstream research as part of its intellectual commitments. The reasons for using multi methods were as follows: to enable the researchers to bridge the past and present condition, the data collection and further action, individual behavior and social framework; to disclose the previously unexplored or misunderstood experiences; to increase confidence of the findings.
The complexities of methodology that revealed in this review are not only obvious in term of data collection method. From the six studies that explicitly mentioned and explained the process of data analysis, most of them applied multi and various data analysis. The most common use data analysis methods were content analysis and thematic analysis. Some studies use both type of analysis (Stacey & Hardly, 2010; Blackbeard, 2007; Castleden & Garvin, 2008) and only one study (Sampson & Gifford, 2010 which used only thematic analysis. The rest of them only mentioned that they used narrative analysis (Dennis, Gaulocher, Carpiano, Brown, 2009) and critical analysis (Riley & Manias, 2006).

According to Neuendorf (2002), content analysis is a quantitative analysis to summarize the messages that its use is not specifically based on the type of variables or context of messages. While narrative analysis is a procedure to organize the data elements into a coherent and developmental report (Polkinghorne, 1995 as cited in Holloway & Wheeler, 2010). Holloway and Wheeler (2010) explained some of narrative analysis such as thematic, structural, dialogic or performance analysis and visual analysis. These two methods of analysis were used for different data source in some studies reviewed in this paper (Blackbeard, 2007; Castleden & Garvin, 2008). Content analysis was used to analyze visual data and narrative analysis was used to analyze verbal transcript of interviews. Blackbeard (2007) considered it as the challenges to integrate these two types of data analysis.

The thematic analysis is used to identify the core of experience that reflects and appropriately represents the participants' statements. Stacey & Hardy (2010) used it to analyze the written material recorded in journals written by participants and completed by the field noted data.

As being stated by Riley and Manias (2004), very few studies explained the process of data analysis. They recommended that the studies employed photographs as methods should put more explanation on data analysis method in order to make this method widely accepted by research scholars. The information of data analysis provided by the reviewed articles in this study could fill the gap of information which was not completed in the previous review.

Besides providing clearer description of data analysis methods, this review showed how the researchers dealt with the ethical issues. This kind of explanation could not be found in the previous review conducted by Riley and Manias (2004). The paper authored by Allen (2008) and Blackbeard (2007) described how to work with young people in school setting to maintain the ethical concerns and how they could contribute a lot to capture the image of events, place and persons without breaking the ethical rules. Meo (2010) also discussed the issues of consent and anonymity.

In addition to the ethical issues, the reviewed articles also brought more information on how to conduct the interview. Meo (2010) compared the photo-elicitation interview with traditional interview and also revealed the variations within photo-elicitation interview in term of student's reflexivity about the photographic experience, the quantity of images and the variety of topics covered. Oliffe and Bottorf (2007) provided rich information about the process of photo taking by participants and the interview process.

The other important information needed about the method was the definite steps in conducting photo voice. Castleden and Garvin (2008) identified the difference of Wang’s stages of Photovoice and the stage used in the modified Huu-ay aht project in the term of feedback loop as an effort to seek input from the entire community at regular intervals throughout the project. This feedback loop makes the whole steps resemble the steps of participatory action research, which includes the implementation of solution suggested in the study as an integral part of the whole study (Streubert & Carpenter, 1999).

The advantages and disadvantages identified in this review also touched almost all aspects of methodology. It could help bring up this method into consideration of research scholars to use the method in their studies as Riley and Manias (2004) expected. As the goal expected in using the framework of Freire’s empowerment education for critical consciousness, feminist theory, and participatory documentary photography (Lopez, Eng, Robinson, Wang, 2005), photo voice proved to effectively balanced power to achieve the empowerment or emancipation goal of the oppressed or marginalized group (Oliffe & Bottorff, 2007; Casteleden & Garvin, 2008; Dennis, Gaulocher, Carpiano, Brown, 2009; Allen, 2008; Meo, 2010; Royce, Parra-mEdina, Messias, 2006), especially in sensitive
issues, both in the level of individual and level of peer (Blackbeard, 2007). Some studies reviewed showed the successful of this method to be applied in transdisciplinary collaborative research (Dennis, Gaulocher, Carpiano, Brown, 2009; Thompson et al., 2008). Compared to traditional method of interview, photovoice could elicit richer data than traditional interview (Meo, 2010) and produce more in-depth analysis (Riley & Manias, 2006).

However, before applying this method, we should consider what this method could reveal about the participants and concept under investigation, as well as the process of the research, the possibilities, the opportunities and its limitations (Hall, 2009). The limitations of photo voice mostly came from the technical aspects, time, and participants. To overcome this limitations, some studies brought up with appropriate recommendations, such as conducting the training or workshop with the participants before the process (Allen, 2008; Royce, Parra-Medina, Messias, 2006) and using the prompt card during photo taking process (Allen, 2008), technical ways to maintain ethical aspects with participants (Castleden & Garvin, 2008; Thompson, Hunter, Murray, Ninci, Roffs, & Pallilathayil, 2008); or involve the peer leader to supervise the process of photo-taking (Royce, Parra-Medina, Messias, 2006).

**Conclusion**

As evidenced by the review of the last five year articles, it was recommended to use the term photo-voice to refer to participant-produced photograph and photo-interview. Photo-voice had been applied as a research method to explore various concepts in community-based, school-based and hospital-based research. The framework underpinning the studies varies and depends on the concept being explored. However, most of the studies reviewed took feminist theory and participatory or documentary photography as their framework of study. Regarding the study design, photo voice was commonly used in ethnographic studies.

In this review, more information was compiled related to data analysis, process of photo taking and maintaining ethical consideration as well as the whole steps of photo-voice. This review also elicited more advantages of photo-voice, including balancing the power, richer data collected and deeper analysis, especially in capturing sensitive issues. Some issues to consider in applying this method are the time and technical limitation, as well as the challenges in maintaining the level of participation.

Strongly emphasizing on empowerment, the term of photo voice is more recommended to be used in referring participant-produced photography and photo-interview. This research method proved its applicability to address sensitive issues and to provide richer collected data and deeper analysis. The abundant data produced might need qualitative data management software that could integrate pictures and narrative data, such as Nvivo, which then could be easily analyzed using content analysis or thematic analysis.

The rich visual and narrative data offered by this method considered appropriate to be applied for the visual learners group, such as men and children. It also opens the chance to involve other discipline in the research team. However, the researchers should anticipate the limitations of this method in term of technical and time by providing sufficient funding and enough time to run the study. Beside the limitation, the advantages offered by this method were added on by the current researches. These advantages were more prominent in balancing the power in research and empowering the participants.

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References


Oliffe, J., Bottorff, J. (2007). Further than the eye can see? photo elicitation and research with men. *Qualitative Health Research, 17*(6), 850-858.


