Chapter 1
Introducing the Mmogo-method as a Visual Data-Collection Method

Vera Roos

Abstract This chapter introduces the Mmogo-method as a visual data-collection method. The method requires participants to construct visual representations by using open-ended or unstructured materials stimulated by an open-ended prompt in a group setting. The Mmogo-method developed from the Indingilize Structured Observation Technique (Indingilize). The Indingilize uses pre-determined categories for the study under investigation, researchers' observations scored on four themes, and visual representations scored to generate quantitative data which are analyzed statistically. By contrast, researchers using the Mmogo-method adopt an onto-epistemological stance, assuming that people have developed unique and different perspectives (relativism), which they express verbally and visually in relation to a social reality that is not mind-dependent (realism). In applying the method, researchers create context for optimal participation and take an empathic position when probing and interpreting participants' visual representations. They involve members of the group to obtain detailed data and recognize the importance of context. Context is distinguished in terms of the situatedness of collected data (which does not limit knowledge transfer). Multiple data sources are obtained, namely visual, textual and observational, to explore and describe social phenomena and to develop theory or interventions. The method is bound by ethical considerations and excludes anyone who has been traumatized or is struggling to deal with reality. It also has limitations in its application to those who prefer not to participate in a group or an experiential research activity, and in the choice of materials.

'The Mmogo-method®' is a registered South African trademark of the North-West University.

V. Roos (✉)
Africa Unit for Transdisciplinary Health Research, North-West University, Private Bag X6001, Potchefstroom 2520, South Africa
e-mail: Vera.Roos@nwu.ac.za

V. Roos (ed.), *Understanding Relational and Group Experiences through the Mmogo-Method®*, DOI 10.1007/978-3-319-31224-8_1

Introduction

The Mmogo-method is recognized as a visual data-collection method because participants use open-ended or unstructured materials (malleable clay, beads of different sizes and colours, and dried grass stalks, or substitute materials serving the same purpose) to construct visual representations. Participant-generated visual representations are stimulated by an open-ended prompt and participants are involved in a group ranging from six to 10 people, allowing for optimal participation. In the application of the method, participants construct visual representations which they explain and which serve the group members as stimuli to augment the subsequent discussion with their views. The visual representations are photographed and used as visual data while the individual and group's discussions are audio or video recorded, transcribed verbatim, and serve as textual data. Observational data are obtained by observing individual and group members' non-verbal behaviour and interactions.

The Mmogo-method is useful in exploring personal and group experiences of social reality that people may find difficult to talk about due to the implicit nature of their experiences. By generating visual representations, the visual becomes a representation of some dimension of the participants' experience of social reality, on which they can elaborate and which researchers can use to elicit further discussion about the meanings the creations hold for the participants. In addition, a group perspective is obtained through the visual representations and participants' initial clarifications stimulate further discussion. While the Mmogo-method serves primarily as a data-collection method, the principles of projection could easily draw the research context into a therapeutic process. Although the method seems straightforward in its compilation, its application requires researchers who are skilled in interviewing techniques and who are able to conduct focus groups. Boundaries have been set for this method to protect participants during data collection from divulging more personal information than intended. Those who prefer not to share their experiences in a group or who do not want to engage in an experiential type of research activity also fall outside the scope of this method.

Background to the Development of the Mmogo-method

The Mmogo-method developed from the Indingilize Structured Observation Technique (Indingilize) (Fiedeldey-Van Dijk, 1993a). The Indingilize (meaning 'circle' or 'round' in the Nguni languages of Africa) technique refers to a kit of building materials used to create or shape structures which researchers observe and code (Fiedeldey-Van Dijk, 1993a). The Mmogo-method and the Indingilize employ the same research materials as well as an open-ended prompt to stimulate participants to construct visual representations. The rationale of using open-ended or unstructured materials and an open-ended prompt is to elicit the associative meanings

attached to the social phenomenon under investigation, drawing on the principle of projection. Projection focuses participants' attention on their subjective experiences and on perspectives they may not be aware of and of which they do not necessarily have a propositional knowledge (Jung, 1961; Lincoln, 2009; Pain, 2013). The more open-ended the materials and prompts, the more participants will project their meanings in the visual representations (Catterall & Ibbotson, 2000; Roos, 2012). The open-ended nature of the prompt is ambiguous, thus leaving it open to the participant's interpretation.

The Indingilize and the Mmogo-method differ in their application, however, because of their different underlying ontological and epistemological assumptions. The Indingilize is based on probabilistic causality, which means that if the context is narrowed, observation of absolute causality is probable, and the harmonious mapping of the territory is possible (Fiedeldey-Van Dijk, 1993a). Based on this ontological assumption, a methodological orientation is proposed to investigate social life as both social facts and social process in a "highly structured observation process in which quantitative and qualitative approaches are used" (Fiedeldey-Van Dijk, 1993a, p. 105). In the application of the Indingilize the sample size can vary from several hundred or even thousands from which data may be obtained within a short period. Data are obtained by using researchers' pre-defined categories to score their observations of a particular group under study during construction of visual models; and completed visual models are scored according to fixed variables (Fiedeldey-Van Dijk, 1993a). The pre-determined variables are categorized under four themes, namely biographical and demographical data, non-verbal and interactive behaviour, the use of the Indingilize materials, and data on the specific study. Non-verbal or interactive variables include: enthusiasm, aggression, immediate start, passivity, concentration, uneasiness, planning, repetition, communicating about the task at hand, comparing models, correct use of materials (for example, participants are not supposed to break the dried grass stalks), natural talent, maximum use of materials, quality of figures, and so on. Researchers also score how much of the materials was used, such as how many different colours or sizes of beads, or dried grass stalks. Coding the visual models takes place when the researchers scientifically "transform the respondents' display into scientific language, using alpha-numerical and numerical symbols" (Fiedeldey-Van Dijk, 1993a, p. 51). For example, visual representations are scored according to participants' "level of westernisation on a five-point scale" but also in terms of the "visual objects' position, size, detail relative to other models, their central placing, and the roles and activities they display" (Fiedeldey-Van Dijk, 1993a, p. 51). In the application of the Indingilize, participants' meanings associated with the visual representations are not included as data. The group is also not involved in contributing views. On completion of the research, the coded information of all respondents form the dataset, which is subjected to statistical analysis (Fiedeldey-Van Dijk, 1993a). According to Fiedeldey-Van Dijk, the Indingilize may be used to make significant deductions in terms of pathology, interpersonal problems, family conflicts, self-identification, collectivism, values, preferences, and so on (Fiedeldey-Van Dijk, 1993b).

In contrast, researchers following the Mmogo-method assume an onto-epistemological stance, embracing both the subjective social constructions of participants and a reality that is not mind-dependent but in relation to which people develop their subjective constructions (Jackson & Mazzei, 2012). Researchers adopt a meta-reflective position to obtain participants' subjectively formed social constructions (informed by the social, cultural, historical, political and economic environments) and use these subjective social constructions as reflections of reality. Reality is understood as consisting of three domains: the real, the actual, and the empirical. The real domain explains causes or causal mechanisms in whatever exists, naturally or socially, and the structures and powers of objects and hidden networks, situations and relationships (Clark, MacIntyre, & Cruickshank, 2007; Sayer, 2000). The real domain is not always observable or understood because it exists independently of knowledge (Sayer, 2000). The actual refers to what happens if and when the structures and powers in the real are activated, and the empirical refers to the meaning or perspectives people develop in relation to the real and the actual (Sayer, 2000). Although the real and the actual are not mind-dependent, people develop subjective perspectives in relation to these domains (Sayer, 2000). These perspectives are, however, fallible representations of the actual and real domains of reality because some entities in the real and actual are not observable (Clark, Lissel, & Davis, 2008; Sayer, 2000). Moreover, empirical data about subjective perspectives reveal only tendencies or broken patterns of reality (Sayer, 2000). These tendencies are not regular and patterns will not be detected in every instance. It is for this reason that the Mmogo-method often involves multiple data-collection strategies and proposes a specific manner of implementation to enhance the possibility of capturing detailed data from which patterns may be observed and described. Therefore, by drawing on principles of projection, the contextual groundedness of personal and group experiences, data obtained from the Mmogo-method can assist researchers to probe below the surface of the observable factors (the actual) to explore what is happening underneath (the real) (Clark et al., 2008).

First Application of the Mmogo-method

The Mmogo-method was first used to obtain the experiences of a group of Setswana-speaking students who were doing their internships in a mainly Afrikaans-speaking university in South Africa. The context in which data are generated is important in applying the Mmogo-method. Accordingly, background is provided about the South African political environment, the university's integration processes broadly, and the group of students involved in the initial application of the method. South Africa's socio-political environment before 1994 was characterized by a racially segregated society. The Apartheid ideology culminated in favouring the white section of the population at the expense of non-white people. In practice, it meant that the people of South Africa were divided racially on all levels

of societal functioning, and different standards were used for service delivery. As a consequence, a segregated tertiary educational sector consisting of racially divided universities existed and students could register only at certain universities, which were privileged to a greater or lesser degree. Post-1994, the first democratic government of South Africa attempted to redress the injustices and the unequal distribution of resources by merging racially advantaged universities with the previously disadvantaged tertiary educational institutions. Newly-merged universities had to integrate in terms of staff, culture, language and student populations. As a consequence of the broader political restructuring as well as internal restructuring processes in the university at which this research was conducted, a group of black students, registered on a mainly Setswana-speaking campus, had to relocate to a predominantly white Afrikaans-speaking campus to complete a 6-month internship in order to register as counsellors. These students also had to find accommodation in a white, racially orientated local town in which the university was situated. The students tried to find accommodation, but were rejected as potential tenants as soon as the home owners set eyes on them. It was only after the supervisor of the internship programme had intervened that a suitable arrangement could be made to accommodate the students. This particular group also faced having to integrate into an academic environment in which they were expected to attend classes (previously their lecturers often did not show up for class), to write assignments, and do practical work in hospital settings and clinics unfamiliar to them. They were challenged at every level but appeared to have adjusted exceptionally well and were able to excel in their internship.

Towards the end of the internship, the programme supervisor wanted to obtain feedback from the group. They were asked as a group and during individual interviews to share their experiences: what had enabled them to complete their internship despite challenges, and what had they learned? The students' responses in the group and individually were brief and communicated the general message that they had experienced everything as being "very good".

It was at this stage that I (as the researcher) realized that the participants might better communicate their experiences visually. I decided to use the Indingilize materials to provide another avenue to answer the question: what had enabled this group, despite adversities associated with adjusting into a new socio-cultural and academic environment, to reach their goal of becoming counsellors? To this end, Indingilize materials were applied in a different manner: students were provided with the unstructured materials and asked to visually demonstrate their experiences of their internship. A discussion of the findings may be found in Roos (2008), and Roos, Maine, and Khumalo (2008), but for the present purpose their response is given briefly. By making visual representations, the students indicated how their group had been formed and how they had been supported by one another and their lecturers to deal with the challenges they faced and to reach their goals. In Fig. 1.1, a student demonstrates how his knowledge increased during this internship (the oxen in the bottom row growing in size from small to big), and how his fellow students and the lecturers had contributed to the process. The load being pulled (by the oxen) represents fellow students and lecturers who had made it easier for him to achieve

Fig. 1.1 Participant's increased knowledge and the value of social support

his goals than if he had been hauling the load by himself. It would have been impossible for him to manage the load without the help of his fellow-students and lecturers. He needed help from others.

The participants were able to further identify specific aspects in the educational environment that had assisted them in their learning: availability of lecturers and their willingness to support them; learning content that contributed to their knowledge of counselling; and modes of curriculum delivery that assisted them to develop specific skills they could apply to their own communities back at home. They reflected on the challenges they had faced and how they had dealt with adversity. The visual representations and discussions about them stimulated the expression of personal as well as the group's meanings.

The Mmogo-method

The first implementation of the method with a Setswana group of participants set in motion further developments of the Mmogo-method and resulted in two publications (Roos, 2008, 2012). The method is distinctive in terms of its emphasis on involving participants in the research process, relatedness between people, and the togetherness of people in generating data (Roos, 2008). Consequently, in a discussion with Michael Temane and Itumeleng Khumalo, two Setswana-speaking psychologists and colleagues, it was decided to use the Setswana word *mmogo* (meaning 'together', 'as one', 'building together') to capture these different meanings of the method. In developing the Mmogo-method as a qualitative, visual data-collection method, my training as a clinical psychologist with a community psychology background and an interest in relational well-being led me to treat

participants in the research as the experts in their experiences, and to emphasize the value of research in a group and the importance of creating context for participation.

Participant Involvement in the Data-Collection Process

Participants are central to the method. They are asked to focus on a particular topic and to create a visual representation of it. By focusing their attention, a way is paved for attuned communication. Attention requires recognition, and by involving participants in the discussion of their visual representations they reflect on their experiences, formulate ideas and visually produce the meanings associated with the experiences (Rydzik, Pritchard, Morgan, & Sedgley, 2012; Theron, 2012). In the visual constructions, participants choose what to include and what to omit. Their visual representations and their explanations are informed by their experiences, identities, and intentions, which are often not conscious but related to the topic of the study (Rydzik et al., 2012). Therefore, every single element of a visual representation is important and could potentially symbolize a hidden position or relationship to reality (Chilisa, 2012; Collier, 2001; Rieger, 2011). However, researchers' interpretations should be verified with participants, and meanings associated with the visual representations should not be decontextualized. This will be expanded on in the following chapters.

The Importance of the Group

Multiple perspectives on the research phenomenon are obtained from collecting data in groups; but these cannot be utilized if the perspectives and meanings of the group are not tapped into. The group is important because people's social life consists of continuous experiences, dialogue and interactions both with their social world and with themselves (Moen, 2006; Stacey, 2003).

The group in the Mmogo-method functions on the basis of Chilisa's (2012) talking circles, which are also a form of focus group method. The underlying assumption is that a talking circle "symbolises and encourages sharing of ideas, respect of each other's ideas, [and] togetherness" (Chilisa, 2012, p. 213). As in the talking circles, the individual participants in the Mmogo-method are able to speak uninterruptedly about their visual representations, while the group members listen. When participants explain their visual representations to the group, the process of visual conceptualization and reflective discussions of the visual representations provide participants with an opportunity to voice their inner stories to others (Literat, 2013). In expressing his or her views while the group listens, the individual gains a place in the group. When an optimal context for participation is created and the group confirms the position of the individual, that individual is able to become

visible without fear for rejection (A. A. De Wet, personal communication, April 19, 2013).

If a collaborative context is created and the group functions with a degree of openness, spontaneity, acceptance, and respect, participants are able to re-assess their own personal point of view (Stryker & Vryan, 2006). A process of self-awareness is facilitated by collective self-enquiry and reflection (Reason, 1994). Through self-monitoring processes and dialogical exchange participants observe the others, evaluate their own and others' positions and can adapt their behaviour (Hermans, 2002; Vorster, 2011; Wood, 1995). In the group setting, multiple interactions between participants expose them increasingly to more and wider ranges of possible responses (Stacey, 2003).

The Importance of Context

Context has meaning on two levels. On one level context situates the perspectives and experiences obtained from people about issues affecting them in the "actual state of affairs" in which they live (Nelson & Prilleltensky, 2005, p. 58). This means that data obtained from people should be interpreted against the broader environments in which the experiences are embedded (e.g. the social, economic, cultural and political) and which are relevant to answering the specific research question. However, this does not mean that the data generated are useful only for the context in which they were obtained, because although data are contextually grounded, the knowledge produced is transferable (Keating, Eales, & Phillips, 2013; Keating & Phillips, 2008).

On another level context refers to how a research space (context) is created for optimal participation. Creating context is important because participants do not refer to a set research protocol to form meaning; instead they form it in every action of communication with the researchers (Stacey, 2003). Researchers create context for their research from the very first contact they have with potential participants. Context is created through verbal and non-verbal communication, because all human interaction is communicative interaction (Stacey, 2003). Creating a context for participants to play a part in research means providing a frame for the research to take place (Vorster, 2011). The effectiveness of the created context will impact on the quality of the data because participants will engage in the research context only if they feel safe. Emotional safety, like respect, openness and unconditional acceptance, is among others promoted when participants are assured that their visual representations will not be judged (Theron, 2012).

A sense of safety is further promoted when the boundaries of the research are made explicit. In applying the Mmogo-method, as with other data-collection methods, the boundaries of the research are usually clearly explained in the invitation to participate in the research and by obtaining informed consent. A sense of safety is promoted when the research goal is communicated clearly, by introducing norms of trustworthiness, and by getting to know participants.

A sense of safety is further promoted if participants experience a sense of control. In the application of the Mmogo-method this control is emphasized by reminding them of their voluntary participation; by exercising choices in what they want to construct, what they want to share with the group, and when they want to share it.

Pluralistic Data-Collection Method

The Mmogo-method employs an approach called pluralistic data collection because both visual and textual data are obtained during the different phases of its application (Gilgun, 1999). The specific research design to be used when the Mmogo-method is applied will be determined by the aim of the research. For example, if the aim is to develop theory, a constructivist grounded theory design can be used, or when the aim is to explore and describe social phenomena, a descriptive interpretive design can be used (Charmaz, 2006; Thorne, 2000).

Different qualitative data-collection strategies are applied to obtain visual and textual data. In Fig. 1.2, the processes of different data collection and analyses are explained. On Level 1, participants individually construct visual representations by using open-ended materials elicited by an open-ended prompt. In a group setting, participants simultaneously project their unique and subjective experiences and meanings related to the social phenomenon under investigation onto their visual representations. On Level 2, researchers adopt an empathic stance to obtain the subjective experiences of the socially constructed meanings in a discussion about the visual representations. In repeating the process for all the participants, further ideas for discussion are stimulated, thereby obtaining the meanings for the individual and the group. The group discussions aim to elicit narratives and participation from all members.

Different sources of data are obtained through the data generation process such as: (1) self-generated visual representations of individuals' experiences or perspectives (visual data); (2) individuals' verbal explanations of the visual representations (visual and textual data); (3) group discussions about individuals' explanations (textual data); (4) observations of individual and group interaction (observational data); (5) researchers' reflections; and (6) analysis of photographs of visual representations after data collection.

On Level 3, textual, visual and observational data are analyzed using different methods. On Level 4, the analyzed data are used to develop theory or to explain a social phenomenon or develop an intervention.

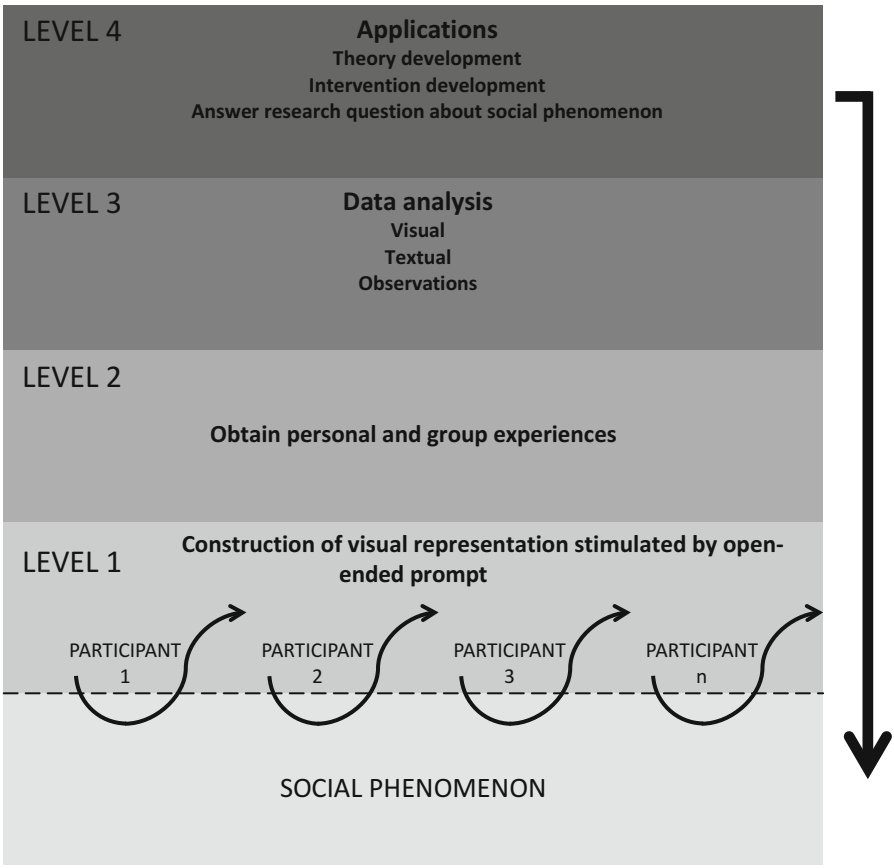

Fig. 1.2 Visual representation of the application of the Mmogo-method

Mmogo-method and Other Visual Data-Collection Methods

Visual data-collection methods are well-developed and applied in disciplines such as human geography, social anthropology, sociology, psychology, education, urban and regional planning, and tourism (De Lange, 2012; Kokk & Jönsson, 2013; McNiff, 2013; Pain, 2013; Pink, 2013; Rose, 2013; Spencer, 2010). The application of these methods differs: some researchers introduce existing visual data to stimulate discussions, or visual data are generated by participants (Prosser, 2007; Ravey & Johnson, 2008; Rydzik et al., 2012). Participant involvement can also vary from serving as co-researcher to participating in the process only (Chilisa, 2012). The Mmogo-method shares the concept that, by involving participants in the generation of data, their ownership is promoted and the power in the researcher-participant relationship is distributed (Chilisa, 2012; Mannay, 2010; Rose, 2013; Wall, Higgins, Hall, & Woolner, 2013).

In line with other visual data-collection methods, the Mmogo-method may involve participants of different ages, including children, adolescents, young adults, and older persons (Ebersöhn et al., 2012; Hinthorne, 2013; Johnson, Pfister, & Vindrola-Padros, 2012; Rydzik et al., 2012). The Mmogo-method, like other visual data-collection methods, may be used to obtain data from groups of people who share similar experiences (Flick & Foster, 2008; Harley, 2012; Mannay, 2010; Pink, 2003, 2013).

Researchers conducting visual research can either use existing visual materials or initiate the construction of visual data (Pauwels, 2011). The Mmogo-method joins other visual data-collection methods for which participants generate visual data; for example, kinetic family drawings are used to explore the resilience of children of HIV-positive mothers (Ebersöhn et al., 2012) and participatory videos to explore young persons' understanding of gender-based violence (De Lange & Geldenhuys, 2012). Drawings are used to obtain educators' perception of what children need to know about sex (Beyers, 2012) or to promote resilience (Theron, 2012). Photo-voice is employed to discover children's experiences as citizens of democratic South Africa (Joubert, 2012) and visual graphics to portray human rights, social justice, democracy and the public good (Nanackchand & Berman, 2012). Photography can assist in understanding the experiences of compulsive hoarders (Singh & Jones, 2012).

The scope of visual materials may include any sensory material and can range from self-constructed materials, videos, photographs, drawings, collages, and cultural materials, to films (Mitchell, 2008; Roos, 2012). Methods which generate visual data can use any appropriate visual material or tool for data collection, such as cameras, video cameras, paints, drawing tools, sand, magazine illustrations, Lego bricks, performance graphs, X-rays, or modelling clay (Hogan, 2013; Johnson et al., 2012; Literat, 2013; Nanackchand & Berman, 2012; Pain, 2011, 2013; Rose, 2013). However, in choosing the visual material or method, the participants' levels of skills and knowledge should be taken into account. For example, in using material such as Lego bricks, a certain level of skill is expected (Hinthorne, 2012a). Participants should therefore be given an opportunity to experiment with the medium before engaging in the research. The implicit meanings in visual materials, such as pictures in magazines used to make collages, may contribute at times to participants' feeling no connection to the implicit meanings expressed in the visual materials (Hinthorne, 2012b; McNiff, 2013).

More particularly, the materials chosen for the Mmogo-method are non-specific and require little skill to use. They allow participants to make three-dimensional visual representations that can be moved around, be engaged in interaction or be viewed from different perspectives. The unstructured nature of the material could, however, limit some participants in their visual expression because it may not be suitable or practical for constructing the mental images associated with the social experience.

Conclusion

By introducing a new participant-generated visual data-collection method the question that comes to mind is: why add yet another one to the list? The Mmogo-method grew out of the need to obtain the often hard-to-explain subjective experiences and meanings that have developed in particular contexts. Interviews and focus group discussions had failed to provide sufficiently rich data about personal and group experiences. This method has since been usefully applied to collect data in different contexts, from diverse groups of people, and on a variety of topics. The Mmogo-method combines social and research components to gather different sets of data. It is distinctive in its emphasis on the importance of context for participation and on the construction of a research space to allow researchers to access individual participants' subjective experiences and the group's perspective on a social phenomenon. The visual representations participants construct in the course of a research session serve as points of reference for stimulating individual as well as group discussions. The choice of materials and the open-ended prompt allow participants to choose what aspects of their experiences they would like to share, and how this may be done. The materials chosen and the prompt also provide researchers with opportunities to probe for deeper meanings of which participants themselves may by unaware. Researchers assume an empathic position and ask probing questions, following participants in their explanations. This empathic position is again assumed in the analysis of the visual and textual data, which takes into consideration the context in which they were collected. The Mmogo-method is limited by ethical considerations of not doing harm to those who struggle to deal with reality, or who had recently experienced trauma; and of respecting an individual's choice if he or she prefers not to engage in a group or an experiential type of research activity; or by the choice of research materials.

References

Beyers, C. (2012). Picture that: Supporting sexuality educators in narrowing the knowledge/practice gap. *South African Journal of Education, 32*(4), 367–380.

Catterall, M., & Ibbotson, P. (2000). Using projective techniques in education research. *British Educational Research Journal, 26*(2), 245–256. doi:10.1080/01411920050000971.

Charmaz, K. (2006). *Constructing grounded theory. A practical guide through qualitative analysis*. Thousand Oaks, CA: Sage.

Chilisa, B. (2012). *Indigenous research methodologies*. Thousand Oaks, CA: Sage.

Clark, A. M., Lissel, S. L., & Davis, C. (2008). Complex critical realism: Tenets and application in nursing research. *Advances in Nursing Science, 31*(4), 67–79. doi:10.1097/01.ANS.0000341421.34457.2a.

Clark, A. M., MacIntyre, P. D., & Cruickshank, J. (2007). A critical realist approach to understanding and evaluating heart health programmes. *Health, 11*(4), 513–539. doi:10.1177/1363459307080876.

Collier, M. (2001). Approaches to analysis in visual anthropology. In T. Van Leeuwen & C. Jewitt (Eds.), *The handbook of visual analysis* (pp. 35–60). London, UK: Sage.

De Lange, N. (2012). Editorial. Visual methodologies in educational research. *South African Journal of Education, 32*(4), 1–3. Retrieved from http://www.scielo.org.za/pdf/saje/v32n4/01.pdf.

De Lange, N., & Geldenhuys, M. (2012). Youth envisioning safe schools: A participatory video approach. *South African Journal of Education, 32*(4), 494–511. Retrieved from http://www.ajol.info/index.php/saje/article/download/83111/73201.

Ebersöhn, L., Eloff, I., Finestone, M., Van Dullemen, I., Sikkema, K., & Forsyth, B. (2012). Drawing on resilience: Piloting the utility of the kinetic family drawing to measure resilience in children of HIV-positive mothers. *South African Journal of Education, 32*(4), 331–348. Retrieved from http://www.scielo.org.za/pdf/saje/v32n4/02.pdf.

Fiedeldey-Van Dijk, C. (1993a). *Differentiation as a basis for research methodology: Developing the indingilize structured observation technique*. Unpublished doctoral thesis, Pretoria, South Africa: University of Pretoria.

Fiedeldey-Van Dijk, C. (1993b, July). *The indingilize structured observation technique (patented): Research – and therapeutic applications*. Paper presentation at the III European conference of psychology, Tampere, Finland.

Flick, U., & Foster, J. (2008). Social representations. In C. Willig & W. Stainton-Rogers (Eds.), *The SAGE handbook of qualitative research in psychology* (pp. 195–214). London, UK: Sage.

Gilgun, J. F. (1999). Methodological pluralism and qualitative family research. In M. B. Sussman, S. K. Steinmetz, & G. W. Peterson (Eds.), *Handbook of marriage and the family* (pp. 219–261). New York, NY: Springer.

Harley, A. (2012). Picturing reality: Power, ethics, and politics in using photovoice. *International Journal of Qualitative Methods, 11*(4), 320–339. Retrieved from http://wigan-ojs.library.ualberta.ca/index.php/IJQM/article/view/6030/14341.

Hermans, H. J. (2002). The dialogical self as a society of mind introduction. *Theory & Psychology, 12*(2), 147–160. doi:10.1177/0959354302122001.

Hinthorne, L. L. (2012a). *Achieving participatory development communication through 3D model building*. Retrieved from http://100thousandbricks.wordpress.com.

Hinthorne, L. L. (2012b). A picture is worth a thousand words: Using the visual interpretation narrative exercise to elicit non-elite perceptions of democracy. *Field Methods*, *14*(2), 1–7. doi:10.1177/1525822X12444065.

Hinthorne, L. L. (2013). Using digital and instant film photography for research documentation: A research note. *Qualitative Research, 14*(4), 1–12. doi:10.1177/1468794113488127.

Hogan, S. (2013). Peripheries and borders: Pushing the boundaries of visual research. *International Journal of Art Therapy: Formerly Inscape, 18*(2), 67–74. doi:10.1080/17454832.2013.797480.

Jackson, A. Y., & Mazzei, L. A. (2012). *Thinking with theory in qualitative research. Viewing data across multiple perspectives*. London, UK: Routledge.

Johnson, G. A., Pfister, A. E., & Vindrola-Padros, C. (2012). Drawings, photos and performances: Using visual methods with children. *Visual Anthropology Review, 28*(2), 164–178. doi:10.1111/j.1548-7458.2012.01122.x.

Joubert, I. (2012). Children as photographers: Life experiences and the right to be listened to. *South African Journal of Education, 32*(4), 449–464. Retrieved from http://www.ajol.info/index.php/saje/article/view/83108.

Jung, C. G. (1961). *Memories, dreams, reflections*. New York, NY: Pantheon Books.

Keating, N., Eales, J., & Phillips, J. E. (2013). Age-friendly rural communities: Conceptualizing 'best-fit'. *Canadian Journal on Aging/La Revue canadienne du vieillissement, 32*(4), 319–332. Retrieved from http://dx.doi.org/10.1017/S0714980813000408.

Keating, N., & Phillips, J. (2008). A critical human ecology perspective on rural ageing. In *Rural ageing: A good place to grow old?* (pp. 1–10). London, UK: Policy Press.

Kokk, G., & Jönsson, S. (2013). Visual research methods and the importance of analytical spaces. *Management & Organizational History, 8*(2), 174–184. doi:10.1080/17449359.2013.779148.

Lincoln, Y. (2009). Ethical practices in qualitative research. In D. M. Mertens & P. E. Ginsberg (Eds.), *The handbook of social research ethics* (pp. 150–169). Thousand Oaks, CA: Sage.

Literat, I. (2013). "A pencil for your thoughts": Participatory drawing as a visual research method with children and youth. *International Journal of Qualitative Methods, 12*, 84–98. Retrieved from http://ejournals.library.ualberta.ca/index.php/IJQM/article/view/11780/14875.

Mannay, D. (2010). Making the familiar strange: Can visual research methods render the familiar setting more perceptible? *Qualitative Research, 10*(1), 91–111. doi:10.1177/1468794109348684.

McNiff, S. (2013). Introduction: A critical focus on art-based research. *Journal of Applied Arts and Health, 4*(1), 5–12. doi:10.1386/jaah.4.1.5_1.

Mitchell, C. (2008). Getting the picture and changing the picture: Visual methodologies and educational research in South Africa. *South African Journal of Education, 28*(3), 365–383. Retrieved from www.ajol.info/index.php/saje/article/download/25163/4362.

Moen, T. (2006). Reflections on the narrative research approach. *International Journal of Qualitative Methods, 5*(4), 1–11. Retrieved from http://wigan-ojs.library.ualberta.ca/index.php/IJQM/article/view/4360/3489.

Nanackchand, V., & Berman, K. (2012). Visual graphics for human rights, social justice, democracy and the public good. *South African Journal of Education, 32*(4), 465–478. Retrieved from http://www.ajol.info.nwulib.nwu.ac.za/index.php/saje/article/download/83109/73199.

Nelson, G., & Prilleltensky, I. (2005). *Community psychology: In pursuit of liberation and well-being*. London, UK: Palgrave Macmillan.

Pain, H. (2011). Visual methods in practice and research: A review of empirical support. *International Journal of Therapy and Rehabilitation, 18*(6), 343–350. http://dx.doi.org/10.12968/ijtr.2011.18.6.343.

Pain, H. (2013). A literature review to evaluate the choice and use of visual methods. *International Journal of Qualitative Methods, 11*(4), 303–319. Retrieved from http://ejournals.library.ualberta.ca/index.php/IJQM/article/view/10397/14340.

Pauwels, L. (2011). An integrated conceptual framework for visual social research. In E. Margolis & L. Paulwels (Eds.), *The SAGE handbook of visual research methods* (pp. 3–23). London, UK: Sage.

Pink, S. (2003). Interdisciplinary agendas in visual research: Re-situating visual anthropology. *Visual Studies, 18*(2), 179–192. doi:10.1080/14725860310001632029.

Pink, S. (2013). *Doing visual ethnography*. London, UK: Sage.

Prosser, J. (2007). Visual methods and the visual culture of schools. *Visual Studies, 22*(1), 13–30. doi:10.1080/14725860601167143.

Ravey, P., & Johnson, K. (2008). Visual approaches: Using and interpreting images. In C. Willig & W. Stainton-Rogers (Eds.), *The SAGE handbook of qualitative research in psychology* (pp. 296–314). London, UK: Sage.

Reason, P. (1994). Three approaches to participative inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 324–339). Thousand Oaks, CA: Sage.

Rieger, J. H. (2011). Rephotography for documenting social change. In *The SAGE handbook of visual research methods* (pp. 132–149). London, UK: Sage.

Roos, V. (2008). Mmogo-method™: Discovering symbolic community interactions. *Journal of Psychology in Africa, 18*(4), 659–668. Retrieved from http://dspace.nwu.ac.za/handle/10394/2896.

Roos, V. (2012). The Mmogo-method®: An exploration of experiences through visual projections. *Qualitative Research in Psychology, 9*(3), 249–261. Retrieved from http://www.tandfonline.com/doi/abs/10.1080/14780887.2010.500356.

Roos, V., Maine, M. K., & Khumalo, I. P. (2008). Processes and functions in higher education students adjusting to a new learning environment: Applying the Mmogo-method®. *Journal of Psychology in Africa, 18*(2), 293–300. Retrieved from http://dx.doi.org/10.1080/14330237.2008.10820201.

Rose, G. (2013). On the relation between 'visual research methods' and contemporary visual culture. *The Sociological Review, 62*(1), 24–46. doi:10.1111/1467-954X.12109.

Rydzik, A., Pritchard, A., Morgan, N., & Sedgley, D. (2012). Mobility, migration and hospitality employment: Voices of central and eastern European women. *Hospitality & Society, 2*(2), 137–157. Retrieved from http://dx.doi.org/10.1386/hosp.2.2.137_1.

Sayer, A. (2000). *Realism and social science*. New York, NY: Sage.

Singh, S., & Jones, C. (2012). Visual research methods. A novel approach to understanding the experiences of compulsive hoarders: A preliminary study. *Journal of Cognitive-Behavioral Psychotherapy and Research, 1*(1), 36–42. Retrieved from http://www.scopemed.org/?mno=18850.

Spencer, S. (2010). *Visual research methods in the social sciences: Awakening visions*. New York, NY: Routledge.

Stacey, R. (2003). Learning as an activity of interdependent people. *The Learning Organization, 10*(6), 325–331. Retrieved from http://dx.doi.org/10.1108/09696470310497159.

Stryker, S., & Vryan, K. D. (2006). The symbolic interactionist frame. In J. DeLamater (Ed.), *Handbook of social psychology* (pp. 3–28). New York, NY: Springer.

Theron, L. C. (2012). Does visual participatory research have resilience-promoting value? Teacher experiences of generating and interpreting drawings. *South African Journal of Education, 32*(4), 381–392. Retrieved from http://www.ajol.info.nwulib.nwu.ac.za/index.php/saje/article/view/83102/73192.

Thorne, S. (2000). Data analysis in qualitative research. *Evidence Based Nursing, 3*(3), 68–70. doi:10.1136/ebn.3.3.68.

Vorster, C. (2011). *Impact. The story of interactional therapy*. Pretoria, South Africa: Satori Publishers.

Wall, K., Higgins, S., Hall, E., & Woolner, P. (2013). 'That's not quite the way we see it': The epistemological challenge of visual data. *International Journal of Research & Method in Education, 36*(1), 3–22. http://dx.doi.org/10.1080/1743727X.2012.730278.

Wood, J. T. (1995). *Relational communication. Continuity and change in personal relationships*. Belmont, CA: Wadsworth Publishing Company.