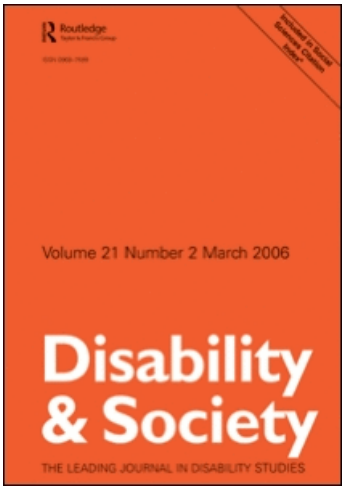
This article was downloaded by: *[Williams Carawan, Lena]*
On: *13 May 2010*
Access details: *Access Details: [subscription number 921752197]*
Publisher *Routledge*
Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Disability & Society
Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t713393838

Using photography and art in concept mapping research with adults with dyslexia

Lena Williams Carawan [a];Blace Nalavany [a]
[a] School of Social Work, East Carolina University, Greenville, NC, USA

Online publication date: 28 April 2010

To cite this Article Carawan, Lena Williams andNalavany, Blace(2010) 'Using photography and art in concept mapping research with adults with dyslexia', Disability & Society, 25: 3, 317 — 329
To link to this Article: DOI: 10.1080/09687591003701223
URL: http://dx.doi.org/10.1080/09687591003701223

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.informaworld.com/terms-and-conditions-of-access.pdf

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Disability & Society
Vol. 25, No. 3, May 2010, 317–329

Routledge
Taylor & Francis Group

Using photography and art in concept mapping research with adults with dyslexia

Lena Williams Carawan* and Blace Nalavany

School of Social Work, East Carolina University, Greenville, NC 27858, USA

(*Received 13 January 2009; final version received 3 June 2009*)

Reflexive photography for individual interviews and the use of art with focus groups provides a valuable method for exploring the psychosocial issues encountered by adults with dyslexia. Reflexive photography and art is particularly appropriate when interviewing adults with dyslexia who may have difficulty expressing and focusing on what they want to say. This article explores the potential of reflexive photography and art as an innovative method to generate statements by participants in concept mapping.

Keywords: dyslexia; concept mapping; reflexive photography; art

Downloaded By: [Williams Carawan, Lena] At: 20:47 13 May 2010

Introduction

Since its emergence in the 1970s the social model of disability has had a noteworthy affect on social research on people with physical and sensory impairments. Its central goal has been to facilitate the rights of people with disabilities. The social model stands in contrast to the medical model. The medical model deconstructs disability as an inherent medical problem, requiring diagnosis and treatment; as such, the individual is defined by their disability and emotional, behavioral and social experiences are invalidated. Conversely, the social model 'is concerned with the lived experience of disability described in the words of disabled people themselves. The environmental and social barriers that exclude people from mainstream society are imposed on top of any impairment experienced' (Brewster 2001, 47). While there are conflicting views of how the lived experience of people with disabilities are addressed within the social model, the importance of lived experience is not disputed. Surprisingly, research guided by social model assumptions for exploring the perceptions and experiences of people with learning difficulties is limited (Race, Boxall, and Carson 2005). Indeed, the dearth of research on the recognition and validation of the experiences of adults with a specific type of learning difference, hereby labeled 'dyslexia', is echoed by many researchers (see, for example, Dale and Taylor 2001; Ingesson 2007; McNulty 2003; Morris and Turnbull 2006). While we understand the oppressive nature of labels (Riddick 2000), in this study we use the term 'with dyslexia' to describe our participants. We believe that 'with dyslexia' is a 'people-first' term that places emphasis on the person instead of the disability. 'The way a society refers to people with disabilities can shape cultural attitudes and

*Corresponding author. Email: Carawanl@ecu.edu

ISSN 0968-7599 print/ISSN 1360-0508 online
© 2010 Taylor & Francis
DOI: 10.1080/09687591003701223
http://www.informaworld.com

beliefs. Using respectful language can be a powerful way to foster acceptance and inclusion of people with disabilities' (People First 2004, 1). While internationally there may be differences in the cultural perception of terms used in disability research, in the USA there is a movement to use people-first terms when discussing individuals with disabilities.

This study endeavors to address this gap in the extant literature by utilizing an innovative, mixed methodological approach called concept mapping to produce a conceptual model of the psychosocial experiences of adults with dyslexia as perceived by the participants themselves. However, it is vital to emphasize here that this paper takes methodology as its focus. The primary goal of this paper was to accommodate the unique needs of adults with dyslexia by modifying Step 2 of the concept mapping process by using photography and art to facilitate the idea generation. We will discuss the overall findings and how the participants were at the center of the research throughout the process in a forthcoming paper. To the best of our knowledge photography and art have not been used as a methodology to generate ideas in any published concept mapping study. Furthermore, despite the expanding research literature on concept mapping (Kane and Trochim 2007), we could find no published studies of the utilization of this methodology with adults who have dyslexia. Since concept mapping has recently received increased attention by social science researchers (see, for example, Johnsen, Biegel, and Shafran 2000; Petrucci and Quinlan, 2007), innovative methodological approaches to the item generation phase may be of significance to professionals interested in the use of concept mapping.

The following with be covered in this paper: (1) a brief summary of concept mapping methodology; (2) an overview of the traditional methods of item generation; (3) a literature review on the use of photography and art in research; (4) a description of how the use of photography and art to generate ideas accommodates the needs of adults with dyslexia; (5) how art and photography were utilized in this study; (6) a discussion of preliminary evidence as to the goodness of fit of the use of photography and art in generating ideas about adults' experiences with dyslexia.

Downloaded By: [Williams Carawan, Lena] At: 20:47 13 May 2010

Summary of the concept mapping methodology

Developed by Trochim (1989), concept mapping is a mixed method participatory approach, designed for the management and interpretation of a specific type of qualitative data. Concept mapping combines qualitative and quantitative analysis that utilizes a structured process focused on a topic or construct of interest. It involves input from participants which seeks to yield an interpretable pictorial view of their ideas and concepts and how these are interrelated (Kane and Trochim 2007). The process of concept mapping involves a series of six systematic, yet flexible, steps (Trochim 1989). Step 1 involves the preparation of the focus question or problem statement. In Step 2, idea generation, participants brainstorm qualitative statements in response to the focal question to produce ideas around a particular concept. The qualitative statements serve as the foundation data for the study. In Step 3 structuring, participants give context to the statements by individually sorting the statements into conceptually similar piles. Utilizing a Likert-type scale, participants rate each statement based on predetermined criteria. In Step 4, representation of ideas, data are analyzed statistically using multidimensional scaling and hierarchical cluster analysis. These analyses yield a visual representation, or map, of the conceptual relationships among a set of qualitative statements. In Step 5, interpretation, participants provide

feedback regarding the findings of the analysis. In Step 6, utilization, the findings guide strategic planning, whether this means developing or evaluating a program, developing a survey or questionnaire, or generating a theory that can be used to inform practice and policy decisions. More recently, concept mapping has been utilized to bring validation to the experiences of people who have been marginalized by society (Bedi 2006; Donnelly, Donnelly, and Grohman 2005; Paulson and Worth 2002). As such, the concept mapping methodology is consistent with the social model of disability.

Item generation

The most essential goal in Step 2, item generation, is for participants to generate as many statements, opinions or ideas that are associated with the main question or focus statement. The focus statement is prepared in Step 1 and captures the conceptual domain of the study. The nature of the focus statement depends upon the purpose of the study, whether that means developing and evaluating a new program, producing a conceptual or theoretical understanding of some psychosocial issue or constructing a survey or measurement instrument. Qualitative statements are generated by participants. Participants are individuals, groups or key stakeholders that have unique experience with the conceptual domain or topic of the study. Therefore, the intent underpinning concept mapping is congruent with participatory research methodologies that emphasize empowerment (Petrucci and Quinlan 2007). The most common method used in item generation is brainstorming (Kane and Trochim 2007). Participants brainstorm as many statements as possible in response to the focus statement. Although focus groups are typically used to generate or brainstorm the statements (Trochim 1989), other methodologies are also used, including participants responding through a web site, email, fax, mail, survey, telephone interviews and personal interviews (Petrucci and Quinlan 2007).

The focus statement could be either a closed or open-ended question. The choice to use a closed or open-ended statement depends upon the purpose of the study and is not based on an argument as to which type of statement is 'best'. An example of a closed focus statement is 'Generate three statements or sentences to describe how you cope with grief (or a specific domain of interest)'. Another example is 'Please list things that you do to cope with grief (or a specific domain of interest)'. Sometimes the focus statement is followed up with a focus prompt which helps participants generate statements, e.g. 'One thing I do to cope with grief is … (or a specific domain of interest)'. In the closed format participants generate brief statements in response to the focus statement (e.g. 'One thing I do to cope with grief is to attend a support group for people who are grieving').

Depending upon the purpose of the concept mapping study, researchers may opt for open-ended statement formats. Focus groups, telephone interviews and personal interviews are often used in conjunction with open-ended focus statements. Certainly, focus groups and individual interviews are most similar to qualitative research methodologies. Open-ended focus statements may allow more spontaneous responses and do not overly restrict participants' thoughts and feelings about the conceptual domain of interest. Utilizing individual interviews, participants in the Paulson, Everall, and Stuart (2001) study responded to the following open-ended questions: 'What was not helpful about counseling? What would have made counseling more helpful' (p. 55). Paulson and Worth (2002) used in-depth individual interviews to the

Downloaded By: [Williams Carawan, Lena] At: 20:47 13 May 2010

following open-ended focus statement: 'What helped you in counseling to overcome your suicidal behavior and thinking?' (p. 88). Bedi (2006) used in-depth individual interviews to explore the client's experiences with counseling alliance development. Most recently, Hepworth and Paxton (2007) used semi-structured interviews to understand the pathways to help seeking in women with bulimia nervosa and binge eating problems. Similarly to pure qualitative interviewing skills, interviewers use paraphrases, verbal probes and open-ended questions to generate an in-depth understanding of the phenomenon of interest. In other words, the process is more akin to in-depth interviews commonly used in qualitative research. Telephone interviews (Brown, Bednar, and Sigvaldason 2007; Brown, Sigvaldason, and Bednar 2007; Paulson and Worth 2002) and a combination of in-person and telephone interviewing (Donnelly, Donnelly, and Grohman 2005) have been used in previous concept mapping studies where open-ended focus statements were of primary interest. Data generated from personal interviews are usually tape-recorded, transcribed and then content analyzed to obtain a list of statements inclusive of the focus statement. Statements are then sorted and rated by participants and serve as the foundation to the conceptual maps and implications of the study.

According to Petrucci and Quinlan (2007), telephone interviews may be more conducive in concept mapping studies for populations with unique circumstances, 'including participants with certain disabilities, low literacy' (p. 29). We would like to expand upon Petrucci's and Quinlan's contention that phone interviews may be helpful for participants with disabilities. Specifically, we used photography in individual interviews and art in focus group sessions to elicit responses to the following focus statement and prompt: 'What does dyslexia mean to you as an adult?' How does dyslexia affect a person's life as an adult?' In the following section we present our rationale for using photography and art with adults with dyslexia.

Downloaded By: [Williams Carawan, Lena] At: 20:47 13 May 2010

The rationale for using photography and art with adults with dyslexia

According to Mathers (2005), 'people with learning disabilities respond well to methods [of visual communication] that allow them to be involved as active contributors [in research]' (p. 5). We make the argument that incorporating photography and art as a way to generate ideas in the individual and focus group interviews (Step 2 of the concept mapping process) is a method that accommodates the unique needs of this group.

Multisensory approaches connect the visual, auditory and kinesthetic senses and may dramatically enhance the language skills and academic performance of people with dyslexia (Birsh 2005). Research also suggests that many individuals with dyslexia are more creative and visually oriented as compared with individuals without dyslexia (Everatt, Steffert, and Smythe 1999; Wolff and Lundberg, 2002). With this in mind, we used photography with individual participants and art in each of the focus groups as a method for participants to tell their own stories, using a combination of visual, kinesthetic and verbal language. To be certain, photography and art may capitalize on dyslexic individual's strengths in creativity and visuo-spatial processing. Based on our observations and the feedback from participants, we believe this multisensory method proved to be an effective method for the research participants to discuss and explain their thoughts, feelings and ideas about their experiences as adults with dyslexia. Methods are only techniques for gathering evidence (Harding 1987) and, as such, should be open to creativity and originality. We will begin by discussing

the use of photography in individual interviews, followed by the use of art in focus group research.

Photography and individual interviews

While Atget (1856–1927) was the first person to use photography as a tool for social research (Szto, Furman, and Langer 2005), photography has moved back and forth in popularity as a research method over the last century (Hurworth 2003). Recently, however, interest in using photography in research has greatly increased (Banks 2001; Emmison and Smith 2001; Rose 2001). Even with the recent increased interest and use, there remains a gap, however, in the literature about the use of photographs in the interviewing process (Hurworth 2003).

It was Collier (1967) who first projected the inherent possibilities of the use of photographs as a method to elicit narratives during interviews in social research. Collier (1967) argued that often the use of photographs both engaged the participant quickly and fully and made it possible to achieve better multiple interviews with the same individual. Provoking a response from research participants by the use of photographs became known as photo-elicitation (Harper 1984). Photo-elicitation has been used by a variety of social scientists. For example, photo interviews have been used to: examine the meaning of adequate shelter (Suchar and Rotenberg 1994); explore the perspectives on camp of children with cancer (Epstein et al. 2006); examine the cultural and economic impact of changes in a fishery on commercial fishermen (Williams-Carawan 2004). A variety of terms (auto-driving, photo novella and photo-voice, reflexive photography and photo-elicitation) have emerged over time and been used to describe the technique of photo interviews. For the purposes of our study we chose to use the technique of reflexive photography for the individual interviews. This technique is an interviewing process that involves photographs taken by the participants and is followed by a reflective interview where participants can discuss the significance of their photos. We use the terms reflexive photography and photo-elicitation interchangeably throughout the paper. Reflexive photography has been used to examine cross-cultural issues (Douglas 1998) and as an innovative approach to workplace literacy for communication and change (Gallo 2002). Douglas (1998) asked African-American students to give their impressions of a predominantly white school by taking photos and then discussing them in a later interview. In this study participants reported that the process of taking photos and later participating in an interview based on the photographs led to deeper levels of reflective thinking than the interviews alone would have done. According to Radley and Taylor (2003) the technique of the research participant taking their own photographs 'provides a potential to question, arouse curiosity, tell in different voices, or see through different eyes from beyond' (p. 70). We see the use of reflexive photography in our work as a tool of empowerment that enables participants to reflect in a deep and meaningful way what it means to be an adult with dyslexia.

Furman referred to the use of photography as 'writing with light' (Szto, Furman, and Langer 2005, 140). In the world of dyslexia 'writing with light' can also be seen as 'speaking with light', since the photographs can provide the basis for individual participants to tell their stories. We wanted a research method that would have meaning to the participants, would be participatory, promote self-reflection and encourage the participants' voice to emerge and be heard. We believe the use of photographs met these criteria and thus resulted in gaining richer and more comprehensive interviews

Downloaded By: [Williams Carawan, Lena] At: 20:47 13 May 2010

than we might have obtained from interviews alone. This result is consistent with other data (see, for example, Collier 1967; Douglas 1998; Williams-Carawan 2004; Aldridge 2007).

In a search of the literature we found only one study (Aldridge 2007) that reported the use of photography with people with learning disabilities. Aldridge explored photo-elicitation techniques as a method to include individuals with learning disabilities, who she saw as vulnerable participants, in social research studies. Her study included giving cameras to participants with learning disabilities and asking them to photograph their on-site gardening projects. Aldridge argued that her project was a success because it gave direct insight into the participant's point of view and experiences, as well as emphasizing the participants' strengths, rather that their deficits. Aldridge (2007) concluded that social researchers must learn to be flexible with their methods in order to accommodate and include vulnerable groups in research.

Downloaded By: [Williams Carawan, Lena] At: 20:47 13 May 2010

The use of art and focus groups

Arts-based research has been used in multiple ways and with various topics. Examples include the study of the culture of Alcoholics Anonymous (Austin and Forinash 2005), a range of issues in education (Bagley and Cancienne 2002) and the study of poor working-class women (Foster 2007). According to Estrella and Forinash (2007), the use of both narrative inquiry and arts-based research permits researchers to 'explore the marginalized, controversial, and disruptive perspectives that have often been lost in more traditional research methodologies' (p. 377). Estrella and Forinash also argued that the arts can serve as a tool to 'break through, uncover, penetrate, and reveal while at the same time supporting, sustaining, and nourishing' (p. 379). Drawing on the work of John Dewey, Michael Polanyi, and others, Barrett (2007) argued that 'creative arts practice as research is an intensification of everyday experiences from which new knowledge or knowing emerges' (p. 115). We found that in our focus groups of adults with dyslexia the construction of a collage from images cut from magazines provided participants with the opportunity to construct a 'picture story' of their everyday experiences with dyslexia. This experience served as a catalyst for participants to then 'tell' their story of what it is like to be an adult with dyslexia.

According to Kane and Trochim (2007) the generation of statements within the concept mapping process 'refers to any procedure that yields a set of ideas that describe the conceptual domain of interest' (p. 49). While brainstorming is the most common, alternative methods for generating statements exist. Morgan, Fellows, and Guevara (2008) argued for creativity in generating statements. Specifically, according to Morgan et al. using stimulus materials and projective techniques with focus groups is an approach that 'generates less analytical and more imaginative responses' p. 198). It also provides a means for the participants to explore their own thinking about the topic at hand. In general, focus group participants 'are likely to appreciate the more free form, right-brained opportunities that stimulus materials and projective techniques provide' (p. 198). As discussed previously, it is understood that dyslexic individuals learn more readily with multisensory activities (Pennington 1991) and demonstrate talents in areas where creativity and visual skills are highlighted (Everatt 1997). In our experience stimuli (for example, images cut from magazines) and projective techniques (as in our small groups creating a collage together to describe

what it is like to be an adult with dyslexia) have provided a goodness of fit with the inherent learning and communication styles of this population. Therefore, it is possible that the collage elicited more in-depth and descriptive statements than may have been produced otherwise. Based on our own research, as well as the work of Morgan, Fellows, and Guevara (2008), we believe that this approach shows the potential to help to close the research gap when used as a method in research with this population.

Our experience with the use of photography and arts in research with adults with dyslexia agrees with the work of Foster (2007), who argued that her participatory study of poor, working class women demonstrated that the use of arts-based methods produced valid data. Foster used techniques such as painting, photograph transfer and collage in her research. As she explained so compellingly: 'seeing the lives through the eyes of those living them, and expressed creatively and intuitively, imbues research findings with an authenticity and passion that an outsider's account could not hope to capture' (p. 8). The use of art, whether photographs, collage, music, drawing or other art-related techniques, can assist people in expressing their ideas and thoughts in rich and deep ways. Art can offer an approach that helps 'organize people who can speak for themselves, but lack the vehicles to do so' (Gablik 1991, 112). Individuals with dyslexia often struggle with attention (Shaywitz, Morris, and Shaywitz 2008) and for the adults with dyslexia in our study this method offered a way to help participants focus on what they wanted to tell us. The process included thinking about what they [the participant] wanted to tell us and the world about what their experience with dyslexia was like. They chose what they would photograph and what they would put in the collage. The following gives an account of our process.

Downloaded By: [Williams Carawan, Lena] At: 20:47 13 May 2010

Settings and participants

We advertised the study asking for individuals who were interested in participating in the project to contact either of the researchers. Participants contacted us individually and we discussed the study and the methodology that we were considering, asking for input from each individual. While time consuming, we believed that this was an important part of the process. Since photography and art are not as common as other methodologies, we thought it was important to obtain feedback from potential participants. All participants volunteered after a thorough discussion of the research project. Their feedback played a major role in our decision to proceed with the proposed methodology.

There were two ways of gaining information from participants in this study: personal interviews and focus groups. While all participants were invited to take part in both an interview and a focus group, only three individuals participated in both. The remainder of the participants chose to take part in either the individual interview or the focus group. Six individual interviews and two focus groups of six participants were conducted in two southern cities in the USA. Participants were sent or given a packet that contained a short demographic questionnaire and a short symptom checklist regarding dyslexia.

Individual interviews

Photographs were used with the participants who were individually interviewed. The participants were asked to 'take 12 or more pictures of anything that would help

people understand your dyslexia' and to 'take part in a two hour interview at a time that is convenient for you'. Disposable cameras were offered to each individual to take the photos, but not all participants accepted them, since many of them had digital cameras of their own. We also added that we would have the film developed and provide a copy of the photographs for the participants to keep. Each interview was recorded. In the actual interviews we asked a grand tour question/focus statement, 'What does dyslexia mean to you as an adult?', to begin this part of the research process. The researcher presented the photographs one by one to the participant, which provided an opportunity for him/her to share information about each picture. Researchers numbered each photograph and often wrote or provided direct quotes on the back of each one. Discussing the photographs often led to unexpected information or deeper discussions than the particular picture showed. During the process it became clear to us that use of the prompt that we had prepared ('How does dyslexia affect, influence, or impact you as an adult?') was unnecessary. As Collier (1967) stated, 'Photographs are charged with psychological and highly emotional elements and symbols' and 'methodologically, the only way we can use the full record of the camera is through the projective interpretation by the native' (p. 49). One participant took several photographs of strands of lights laid out in her drive in different arrangements. The light represented a spark to her and meant that her brain was working well: 'The spark is coming, and I'm not forgetting things'. The grand tour question gave the participants the flexibility to explain in detail or not why they took certain photographs and the meaning that they gave to the image. One picture led to a participant sharing a story about her passion for reading books about organizing everything in her life:

> I've spent probably the last ten years to get organized and what I do for relaxation is read books – that is what I spend my money on. If I can get just one thing out of that, it helps me, that helps me to be more balanced. I know being organized makes me feel better. I feel more in control.

Another participant took a photograph of an electric meter, which she described as follows:

> These are electricity meters. These are pretty much how I am in a constant tug of war of where my energy goes. Everything I do takes so much energy, especially the way things are set up now. What I want to do versus what I have to do to survive and I am constantly negotiating energy.

We were constantly amazed at how the photographs stimulated the participants' experiences about what it is like to be an adult with dyslexia. Other photographs did not stimulate discussion that provided particular insight but collectively they added to our understanding of the lives of these participants.

Focus groups

An art project was used in the focus groups to assist in the process of describing what it is like to be an adult with dyslexia. Focus group participants were asked to take part in a 2 hour focus group and as a part of the focus group to describe their experience of dyslexia both verbally and through pictures in an art project. The process was

Downloaded By: [Williams Carawan, Lena] At: 20:47 13 May 2010

recorded and one of the researchers facilitated the process, while the other researcher recorded notes on a laptop at the back of the room.

Participants were divided into small groups of three and given a variety of magazines, scissors, tape, glue, markers, crayons and construction paper. Each group was asked to create a collage that would describe their experience with dyslexia as an adult (this was the focus statement). As previously discussed, in concept mapping the focus statement is often followed up with a focus prompt to help facilitate the generation of statements. Because we were unsure of how deeply the collage would tap into the participant's experiences with dyslexia we developed several focus prompts as a complementary plan. The focus prompt statements were written on a flip chart and inquired about the specific emotional, behavioral and social experiences they have encountered as an adult with dyslexia. However, the focus prompts were not shown to participants prior to the collage activity. If at all possible, we wanted participants to define their experiences with dyslexia in their own way, without any prompts beyond the focus statement. The results of using art in the focus group far surpassed anything that the researchers expected. In fact, the focus prompts were not needed, as the collage activity triggered discussion about participants' emotional, social and behavioral experiences with dyslexia from childhood to adulthood. Although the focus group was originally scheduled for 2 hours, an additional half-hour was needed for all participants to share their experiences. One researcher with 30 years of educational experience working with children and adults with dyslexia spoke of her surprise at the impact of the art activity on participants – how engaged and open they were with the process. Certainly, participants' reactions to the collage activity spoke of its usefulness. For example, many participants expressed their excitement by the use of terms like 'wow', 'good' and 'neat' throughout the entire process. Participants were immediately engaged. At the end of the evening one of the participants stated 'That [the art project] was a good idea because we are all creative'.

One spokesperson was chosen by each group to speak for the group and describe the collage. Before the evening was over, each participant spoke about the collage and how it related to their experience of dyslexia as an adult. Creating the collage tapped deeply into the groups' experiences with dyslexia. One collage showed a wind tunnel with papers, books, everything swirling around, out of order and out of control. One participant explained the choice of the wind tunnel by saying:

> Feeling lost in the background, so much going on – work, stress, going really fast – things passing you by. I feel like I am being sucked into a tunnel almost every day – even walking to class – I say a prayer – keep me grounded. I am not complaining – I want an education – crowds of people – hurrying to class and back to work.

The group spoke about how stressful, chaotic and organizationally challenging life often is for them and, yet, how important it is for them to be organized and have order around them. Order seemed illusive for many of the participants. 'Stress – sometimes I lay down at 4:00 a.m. It takes all my energy – getting ready to leave the house. I am scared to ask questions because of how it might be perceived'. However, in spite of the chaos and stress that sometimes appeared to engulf them, one participant stated: 'Just because I am not doing my best doesn't mean that I am not TRYING MY BEST!' This strong statement became the title of one of the collages and seemed to embody an underlying belief for the participants.

Statements about the pain associated with dyslexia came up again and again. One participant discussed her choice of a picture in the collage: 'I picked this picture [push

Downloaded By: [Williams Carawan, Lena] At: 20:47 13 May 2010

pins totally covering feet] because I know the pain that I have with writing and there are [other] aspects [like] emotion and fear of barriers that keep me from going where I want to go'. Another participant added:

> With school – I have been very hurt and made fun of in school and college. I put myself out there in school – I do not [know] what I will do in the job market. I have an amazing work ethic which makes up for other deficits. Routine is my friend – a way to compensate.

The belief in the need for a strong work ethic in order to achieve was apparent in both the individual interviews as well as the focus groups.

Idea generation is an important step in concept mapping because in great part the process is based on statements that come directly from the participants' ideas about a particular concept. The direct quotes in the previous section illustrate both the power and importance of this phase of concept mapping. In the next section we discuss our process for comparing the statements generated in the study.

Downloaded By: [Williams Carawan, Lena] At: 20:47 13 May 2010

Comparison of statements generated

Comparing the number of statements across concept mapping studies is challenging due to different conceptual frameworks and methodological procedures. However, contrasting the number of statements generated in our study to other concept mapping studies that utilized an open-ended focus format illustrates the effectiveness of using photography and art with adults with dyslexia. We could find only two studies that also used an open-ended focus statement format (Bedi 2006; Donnelly, Donnelly, and Grohman 2005) and remotely approached the number of statements that were generated in our study. Using individual and telephone interviews that spanned approximately 30 minutes each, 47 participants generated 266 original statements in a study by Donnelly et al. on psychosocial problems associated with head injury. In Bedi's study 40 participants were individually interviewed regarding their perspective on counseling alliance formation. Each interview spanned about 1 hour and resulted in 376 original statements. Several open-ended concept mapping studies yielded between 43 and 107 statements (Brown, Bednar, and Sigvaldason 2007; Brown, Sigvaldason, and Bednar 2007; Paulson, Everall, and Stuart 2001; Paulson, Truscott, and Stuart 1999; Paulson and Worth 2002). Excluding the two focus groups, we individually interviewed six participants (one telephone interview) for approximately 90 minutes each. Preliminary content analysis of the data yielded a total of 692 statements. The number of original statements produced in our study significantly exceeded that of other concept mapping studies that used open-ended individual interviews. This suggests that the multisensory activities (i.e. photographs and art) enhanced our participants' ability to convey their experiences with dyslexia.

Conclusions

In social science research the interest in concept mapping, a specific mixed methods approach, has increased dramatically. Innovative approaches to the concept mapping methodology and detailed descriptions on how to tailor the method to special populations are absent from the literature. This paper illustrates the value of using photography and art in the item generation step of concept mapping with dyslexic

adults. Photography and art are consistent with multisensory approaches that are often used to enhance the language skills and academic performance of individuals with dyslexia. The use of photography and art drew on the strengths of the participants. It tapped into their creativity and visuo-spatial processing. For these reasons, our research participants generated significantly more statements when compared with other concept mapping studies that utilized an open-ended statement format.

The overall effectiveness of using photography and art with adults with dyslexia will not be realized until the remaining phases of this concept mapping study are completed. Concept mapping is a laborious research process that involves participants in four steps (generating statements, sorting, rating and interpreting the data). Because each step builds on prior activities, it is our intention to use methods that are sensitive to the unique needs of adults with dyslexia in each of the concept mapping steps. In the meantime, this paper has presented two innovative data collection methods – photography and art – that we believe have implications for future research endeavors with adults who have dyslexia and other vulnerable groups.

Downloaded By: [Williams Carawan, Lena] At: 20:47 13 May 2010

References

Aldridge, J. 2007. Picture this: The use of participatory photographic research methods with people with learning disabilities. *Disability & Society* 22, no. 1: 1–17.

Austin, D., and M. Forinash. 2005. Arts-based inquiry. In *Music therapy research,* 2nd ed., ed. B. Wheeler, 458–71. Gilsum, NH: Barcelona.

Bagley, C., and M. Cancienne, eds. 2002. *Dancing the data.* New York: Peter Lang.

Baker, S.F., and J.L. Ireland. 2007. The link between dyslexic traits, executive functioning, impulsivity and social self-esteem among an offender and non-offender sample. *International Journal of Law and Psychiatry* 30: 492–503.

Barrett, E. 2007. Experiential learning in practice as research: Context, method, knowledge. *Journal of Visual Art Practice* 6, no. 2: 115–124.

Banks, M. 2001. *Visual methods in social research.* London: Sage.

Bedi, R.P. 2006. Concept mapping the client's perspective on counseling alliance formation. *Journal of Counseling Psychology* 53: 26–35.

Birsh, J. 2005. *Multisensory teaching of basic language skill.* Baltimore, MD: Paul H. Brookes.

Brewster, S. 2004. Insights from a social model of literacy and disability. *Literacy* 38, no. 1: 46–51.

Brown, J.D., L.M. Bednar, and N. Sigvaldason. 2007. Causes of placement breakdown for foster children affected by alcohol. *Child and Adolescent Social Work Journal* 24: 313–32.

Brown, J.D., N. Sigvaldason, and L.M. Bednar. 2007. Motives for fostering children with alcohol-related disabilities. *Journal of Child and Family Studies* 16: 197–208.

Collier, J. 1957. Photography in anthropology: A report on two experiments. *American Anthropologist* 59: 843–59.

Collier, J. 1967. *Visual anthropology: Photography as a research method.* New York: Holt, Rinehart, & Winston.

Collier, J. 1987. Visual anthropology's contribution to the field of anthropology. *Visual Anthropology* 1: 37–46.

Dale, M., and B. Taylor. 2001. How adult learners make sense of their dyslexia. *Disability & Society* 16: 997–1008.

Davis, T.S. 2007. Mapping patterns of perceptions: A community-based approach to cultural competence assessment. *Research on Social Work Practice* 17: 358–79.

Donaldson, P. 2001. Using photographs to strengthen family planning research. *Family Planning Perspectives* 33, no. 4: 176–8.

Donnelly, J.P., K. Donnelly, and K.K. Grohman. 2005. A multi-perspective concept mapping study of problems associated with traumatic brain injury. *Brain Injury* 19: 1077–85.

Douglas, K.B. 1998. Impressions: African American first-year students' perspectives of a predominately white university. *Journal of Negro Education* 67, no. 4: 416–31.

Emmison, M., and P. Smith. 2001. *Researching the visual.* London: Sage.
Epstein, I., B. Stevens, P. McKeever, and S. Baruchel. 2006. Photo elicitation interview (PEI): Using photos to elicit children's perspectives. *International Journal of Qualitative Methods* 5, no. 3: 1–8.
Estrella, K., and M. Forinash. 2007. Narrative inquiry and arts-based inquiry: Multi-narrative perspectives. *Journal of Humanistic Psychology* 47, no. 3: 376–83.
Everatt, J. 1997. The abilities and disabilities associated with adult developmental dyslexia. *Journal of Research in Reading* 20, no. 1: 13–21.
Everatt, J., B. Steffert, and I. Smythe. 1999. An eye for the unusual: Creative thinking in dyslexics. *Dyslexia* 5: 28–46.
Foster, V. 2007. The art of empathy: Employing the arts in social inquiry with poor, working-class women. *Social Justice* 34, no. 1: 12–27.
Gablik, S. 1991. *The re-enchantment of art.* London: Thames and Hudson.
Gallo, M.L. 2002. Picture this: Immigrant workers use photography for communication and change. *Journal of Workplace Learning* 14: 49–58.
Harding, S. 1987. Is there a feminist method? In *Feminism and methodology,* ed. Sandra Harding, 1–14. Bloomington, IN: Indiana University Press.
Harper, D. 1984. Meaning and work: A study in photo elicitation. *International Journal of Visual Sociology* 2, no. 1: 20–43.
Hepworth, N.H., and S.J. Paxton. 2007. Pathways to help-seeking in bulimia nervosa and binge eating problems. A concept mapping approach. *International Journal of Eating Disorders* 40: 493–504.
Hervey, L. 2000. *Artistic inquiry in dance/movement therapy: Creative alternatives for research.* Springfield, IL: Charles C. Thomas.
Hurworth, R. 2003. *Photo-interviewing for research,* Social Research Update. Falmer, UK: University of Surrey.
Ingesson, S.G. 2007. Growing up with dyslexia: Interviews with teenagers and young adults. *School Psychology International* 28: 574–91.
Johnsen, J.A., D.E. Biegel, and R. Shafran. 2000. Concept mapping in mental health: Uses and adaptations. *Evaluation & Program Planning* 23: 67–75.
Kane, M., and W.M.K. Trochim. 2007. *Concept mapping for planning and evaluation.* Thousand Oaks, CA: Sage.
Mathers, A. 2005. *Participation of people with learning disabilities in the landscape design process of urban green space.* Sheffield, UK: University of Sheffield Department of Landscape.
McNulty, M.A. 2003. Dyslexia and the life course. *Journal of Learning Disabilities* 36: 363–81.
Morgan, D., C. Fellows, and H. Guevara. 2008. Emergent approaches to focus group research. In *Handbook of emergent methods,* ed. Sharlene Nagy Hesse-Biber and Patricia Leavy. New York: Guilford Press.
Morris, D., and P. Turnbull. 2006. Clinical experiences of students with dyslexia. *Journal of Advanced Nursing* 54: 238–47.
Paulson, B.L., R.D. Everall, and J. Stuart. 2001. Client perceptions of hindering experiences in counselling. *Counselling and Psychotherapy Research* 1: 53–61.
Paulson, B.L., D. Truscott, and J. Stuart. 1999. Clients' perceptions of helpful experiences in counseling. *Journal of Counseling Psychology* 46: 317–24.
Paulson, B.L., and M. Worth. 2002. Counseling for suicide: Client perspectives. *Journal of Counseling & Development* 80: 86–93.
Pennington, B.F. 1991. Dyslexia and other developmental language disorders. In *Diagnosing learning disorders: A neuropsychological framework,* 48–51. New York: Guilford Press.
Perry, G. 2004. Water's edge and the water's edge writing. PhD thesis, Deakin University.
Petrucci, C.J., and K.M. Quinlan. 2007. Bridging the research-practice gap: Concept mapping as a mixed methods strategy in practice-based research and evaluation. *Journal of Social Service Research* 34: 25–42.
Prosser, J. 1996. *Image based research.* London: Falmer Press.
Race, D., K. Boxall, and I. Carson. 2005. Towards a dialogue for practice: Reconciling social role valorization and the social model of disability. *Disability & Society* 20, no. 5: 507–21.
Radley, A., and D. Taylor. 2003. Images of recovery: A photo elicitation study on the hospital ward. *Qualitative Health Research* 13, no. 1: 77–99.

Downloaded By: [Williams Carawan, Lena] At: 20:47 13 May 2010

Richards, L., and J. Morse. 2007. *READ ME FIRST for a user's guide to qualitative methods,* 2nd ed. London: Sage.
Rose, G. 2001. *Visual methodologies.* London: Sage.
Shaywitz, S.E., R. Morris, and B.A. Shaywitz. 2008. The education of dyslexic children from childhood to young adulthood. *Annual Review of Psychology* 59: 451–75.
Suchar, C., and R. Rotenbery. 1994. Judging the adequacy of shelter – a case from Lincoln Park. *Journal of Architectural and Planning Research* 11, no. 2: 149–65.
Szto, P., R. Furman, and C. Langer. 2005. Poetry and photography: An exploration into expressive/creative. *Qualitative Social Work* 4, no. 2: 135–56.
Trochim, W.M.K. 1989. An introduction to concept mapping for planning and evaluation. *Evaluation and Program Planning* 12: 87–110.
Williams-Carawan, L. 2004. Listening to the voices of the fishing people: How fishers make sense of their lives in today's world. PhD dissertation, Memorial University of Newfoundland.
Wolff, U., and I. Lundberg. 2002. The prevalence of dyslexia among art students. *Dyslexia* 8: 32–42.

Downloaded By: [Williams Carawan, Lena] At: 20:47 13 May 2010