Testing a New Photovoice Model: A Meta-Analysis on Participatory Action Research Methodologies in Geographical Research

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TESTING A NEW PHOTOVOICE MODEL: A META-ANALYSIS ON PARTICIPATORY ACTION RESEARCH METHODOLOGIES IN GEOGRAPHICAL RESEARCH

by

Nolan Bergstrom

A thesis submitted to the Graduate College in partial fulfillment of the requirements for the degree of Master of Science Geography Western Michigan University April 2020

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Photovoice was developed in the early 1990s for use in public health studies evolving from participatory action research (PAR) and photographic methods. It attempts to mitigate the power dynamics between researcher and researched by allowing participants to be the primary knowledge producers. The Photovoice methodology has left open methodological avenues to implement Photovoice as a research tool in many fields. This research aimed to modify the Photovoice methodology to include mobile technology, social media to create a new model of Photovoice.

This research was conducted in K.I. Sawyer, MI, a small town in the Upper Peninsula of Michigan over a one-month period. The goal was to have citizens take pictures of K.I. Sawyer and to discuss and think critically about these pictures. Recruitment was completed using the USPS Every Door Direct Mail (EDDM) service which was unsuccessful. This low recruitment (n=1) complicated the research process.

This led to a change in multiple aspects of the new model, including the deletion of the focus groups, and the overall failure of the implementation of the new model. These changes facilitated a meta-analysis to assess the success of the new model, photovoice as a methodology and how it connects to geographical research.
ACKNOWLEDGEMENTS

Where do I even begin? I have an innumerable amount of people to thank for helping me reach this point. I want to thank my committee for being so patient and reassuring throughout the process of writing this thesis paper. I would not have reached graduation. Thank you, Dr. Hallett, Dr. Metro-Roland, and Dr. Padilla for your steadfast trust in me. I’ll appreciate that for the rest of my life. A special thanks needs to be extended to my family and surrogate family who helped me through my undergraduate and graduate studies. Many thanks to the Fifer family, especially Kayla, Steve, and Tami. I’m not sure where I would be without all of you. I want to thank my Mother, Michelle Dekker, for always supporting me since day one and being proud of me no matter how many mistakes I seem to make. Finally, I want to thank my Father, may you continue to rest in peace. I know, somehow, that you are proudly aware of who I am as a person and know how much you’ve always meant to me. Although my time at Western Michigan University has concluded, I will forever be grateful in the WMU Geography Department and the wonderful faculty who have made the stressful times a little easier. I am indebted to Lucia Harrison and the legacy left in the form of the Lucia Harrison Fund, allowing me to be sponsored by the Geography Department and to afford graduate studies and the pursuit of my dreams. Thank you all.

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Chapter I
INTRODUCTION

Participatory Action Research

Participatory action research (PAR) is a qualitative research technique which allows participants to be active in the research process (Clifford et al., 2016; Gubrium and Harper, 2013; Mitchell, 2011). This means that the research process is guided by input from the participants as it develops. Through this process, PAR provides the researcher the ability to reach out to diverse groups of people and the underrepresented (Clifford et al., 2016). Creativity, flexible design, and richness in research data has propelled PAR into a potent research methodology that is growing in popularity (Hall, 2005; Gubrium and Harper, 2013; Mitchell, 2011). Regarding geographical research, PAR methods such as photo-elicitation, have shown great potential to study emotions, experiences, and memories that people attach to their surroundings (Rose, 2016; Rose, 2008). This connection to PAR reveals potential for much qualitative geographic research, including emotional geographies and studies of relationship to place (Power et al., 2014) The important aspect of PAR is that participants are the research guides, where the primary researcher acts more as a collaborator. Typically, with PAR, participants are provided an opportunity to learn technical skills as well (Clifford et al., 2016). The outcome of PAR is the promotion of, and continuous becoming of, critical consciousness within participants and to provide the possibility for social change (Clifford et al., 2016; Freire 1970; Freire et al., 2014; Gubrium and Harper, 2013; Rose, 2000; Rose, 2008) and to create an opportunity for marginalized peoples to ask questions about themselves as well as produced validated knowledge.
Methodologies nested within PAR are both qualitative and quantitative, providing rich datasets (Clifford et al., 2016; Gubrium and Harper, 2013). Photography and photographic documentation pair well in telling the stories of groups of people (Clifford et al., 2016). Photographic elicitation is a powerful technique where research is interested in perceptions, experiences, and gauging feeling, allowing PAR to function as proposed, equally in urban and rural settings (Clifford et al., 2016; Gubrium and Harper, 2013; Rose, 2016).

**Use of Photography**

“The painter constructs, the photographer discloses.”


The invention and evolution of photography provided new avenues for qualitative research exploration, especially with regards to experiences, perceptions, and feelings (Davies, 2013; Hunt, 2014; Tucker, 2012; Rose, 2008; Rose, 2016).

Since the inception of photography, people have discovered new ways to apply it to geographical issues. These issues concern themselves primarily with research involving human behavior and movements of people, as well as documenting historical moments in time (Aelbrecht, 2015; Tucker, 2012). What makes photography a geographic research tool is its ability to encapsulate issues of space-time, specifically, spaces, objects, events, texture, experience, and emotion (Hunt, 2014). These complex issues marry well with the PAR process, and can provide people opportunity to document their lives, elicit emotion, and use photography as a tool to be heard. In this
way, photography acts almost as a translatively process, insofar, as it allows participants the opportunity to share their expertise in their own, everyday lives, through the visual.

**Visual Methods in Participatory Action Research**

Visual methods in participatory action research (PAR) are varied and include videography, documentary photography, artistic expression, photo-surveys, photo elicitation, and Photovoice, along with many others not listed (Balomenou and Garrod, 2014; da Silva Viera and Altunes, 2014; Fink, 2012; Mitchell, 2011; Loopmans et al., 2012; Lundman, 2016, Rose, 2016). Such variation allows researchers flexibility in research design and to offer the most effective mode of engagement for participants. PAR when paired with visual methods, can be contextual, flexible, and resilient (Clifford et al., 2016).

Visual methodologies in PAR can also potentially be educational (Clifford et al., 2016; Loopmans et al., 2012). This allows research participants the ability to gain skills that parallel the democratization process, like how to organize and be politically active, and how to train others in these aspects of PAR (Loopmans et al., 2012). Educational engagement should be a key aspect of visual PAR methodologies (Hall, 2005). The idea of PAR is to reach disenfranchised populations (Clifford et al., 2016) and to let participants guide the research process and to continually strive for critical-consciousness or realization of personal agency, and to validate their experiences and expertise.

One example of the reach that visual methodologies have is in studies with those whose largest barrier is language. Visual methodologies can have a positive impact in
empowering immigrant participants and enable researchers to use images to explore their emotions, perceptions, and experiences of place (Fink, 2012; Rose, 2016; Rose, 2008). These elements of visual methods adhere to the goals of PAR and have shown great potential in multiple fields such as urban geography and planning studies, public health studies, and studies involving migrants (Balomenou and Garrod, 2014; da Silva Viera and Altunes, 2014; Loopmans et al., 2012; Lundman, 2016).

Photographic and Visual Methodologies in Geographic Research

Photographic and visual methods have a rich history in participatory action research (PAR) and the social sciences, including geographic research. Photography’s ability to convey and explore themes in human geography (Bunge, 1977; Bunge et al., 1971, 2011; Rose, 2008), human geography pedagogy (Hall, 2015; Sanders, 2007; Sidaway, 2002), urban geography (Hall, 2009; Hunt, 2014), and cultural geography (Crang, 1997; Hunt, 2014; Markwell, 2000) is extensive even though there have been critiques of the establishment of geography’s focus on the visual (Rose, 2003). Despite this, geography has great potential in photography and visual methodologies, especially as it is becoming further embedded in modern cultural practices via ease of access to mobile technology with better photographic sensors and widespread use of social media (Poorthuis et al., 2014).

Photovoice has been employed in studies of concern to public health (Baker and Wang, 2006; Harley, 2012; Fournier et al., Mamary et al., 2007; 2014; Wang et al., 1996; Wang and Burris, 1997; Wang and Pies, 2004), public policy (Bananuka and Vaughn, 2015; Bisung et al., 2015; Gant et al., 2009; Strack et al., 2004; Wang et al.,
2000; Wang et al., 2004; Wilson et al., 2007), place (McIntyre, 2003; Power et al., 2014), space (Hunt, 2014) and experience (Nykiforuk et al., 2011) and is uniquely situated as a tool for geographical research.

Due to this potential for visual research (Mitchell, 2011) and the recognition of methodologies, such as photovoice, geographical research utilizing visual methodologies and visual data is becoming more accepted but under a critical eye. Due to the rise in popularity of visual methodologies, this study nests itself well in implementing, critiquing and adding to the overall richness of geographical research employing visual methodologies.

It was essential to first outline PAR as to understand its principles as photovoice was created to nest within PAR epistemologies. I want to transition next to briefly describing the photovoice methodology as originally described in the 1990s and then describe the statement of problem and my research questions. Following this I want to transition to the literature review and describing the individual components of photovoice and the geographical theory that connects with photovoice, specifically, feminist geography, critical landscape studies, and cultures of landscape. Explaining the connection of PAR and geographical theory is essential for further understanding where photovoice is situated in geographical research.

The Photovoice Methodology

Photovoice was developed in the early 1990s for use in public health studies evolving from participatory action research (PAR) and photographic methods. It attempts to mitigate power differential between researcher and participant by enabling
participants to be the primary knowledge producers in the research process. The photovoice methodology has left open methodological avenues of implementation. This thesis research aimed to modify the photovoice methodology to include mobile technology and social media effectively creating a new model of photovoice.

Statement of Problem

The photovoice methodology has left an opening in exploring avenues of implementation. This has opened exploration of using mobile technology and social media to experiment with the methodology. Photovoice as a methodology aims to shift power to participants by way of acknowledging the expertise of the participants allowing them to gain a ‘voice’ (Wang and Burris, 1997). Nesting within participatory action research (PAR), photovoice, and other participatory action research (PAR) methods, open discussions on whether issues of power dynamics between researcher and researched can be mitigated and discuss the positionality of the researcher, and how a photovoice study connected to academia can influence collaborative, participatory research. Beyond these points, there has been little research done on how to implement photovoice (Sutton-Brown, 2014). This led me to ask research questions about implementing a new model of photovoice and how it connects to geographical research.

Research Questions

The three primary research questions were as follows: 1) Can a new model of photovoice be implemented successfully using mobile phone technology and social media? 2) How does a meta-analysis of photovoice and the new model aid in
implementing it in the future? 3) How does photovoice, PAR, and the new model of photovoice, tie to geography and geographical research?

The chapters of this thesis define what the research focus is, why it is significant, and how the research was conducted. This chapter provided an introduction on PAR, a brief description of photovoice, and the statement of problem and research questions. Chapter two contains the literature review, the specifics on photovoice and the geographical theory important to this study. Chapter three is the background on the study area and its history. Chapter four is the methodology and results. Chapter five provides the discussion and chapter six is the conclusionary chapter and identifies future research prospects.

Chapter II

LITERATURE REVIEW

It is clear now that photovoice is a form of participatory action research (PAR) that embeds itself within visual methodologies and that photographic and visual methods in social science research have become more popular since the 1960s and 1970s (Hall, 2005), and typical applications have evolved to facilitate the process (Clifford et al., 2016; Gubrium and Harper, 2013; Mitchell, 2011). Knowing this information in general is helpful but I want to describe photovoice more directly. This section will define what photovoice is by looking at its theoretical framework, it’s history and creation, and, finally, the components that comprise the general methodology.
Critical-Consciousness: A Framework

The theoretical framework underlying photovoice is the concept of critical-consciousness. The theory was developed in the 1970s by Paulo Freire who argued critical-consciousness is a state of awareness that is often not apparent to oppressed populations, where, people may not have the ability to recognize the institutional inequity and inequity that deeply affects their lives (Freire, 1970; Freire, 2014). The aim is to achieve transformative potential through a process of critical-consciousness education (Jemal, 2017). This educational process for the oppressed is the foundation on which photovoice was built (Wang and Burris, 1997; Wang et al., 1996). In this way, photovoice is more than PAR or visual methodology, it is an iterative process by which the oppressed, disenfranchised, and underrepresented or any population, aim to achieve critical-consciousness and realize their potential to be agents of change within their own communities (Freire, 2014; Jemal, 2017; Wang and Burris, 1997).

Methodology

Photovoice was first developed in the late 1990s with the goal of raising awareness amongst policy makers on social welfare and health issues, providing a platform for community members to critically reflect on their communities and record community assets and issues, from the perspective of the community member (Wang and Burris, 1994; Wang and Burris, 1997; Wang et al., 1996) and has been applied in public health research (Baker and Wang, 2006; Harley, 2012; Hergenrather, 2006; Fournier et al., Mamary et al., 2007; 2014; Wang et al., 1996; Wang and Burris, 1997;
Wang and Pies, 2004), specifically with women in China (Wang and Burris, 1997; Wang et al., 1996).

The methodology joins various forms of PAR by way of in-depth interviews, focus groups, storytelling (writing and photodocumentary), artistic exhibition, and photo-elicitation (Wang and Burris, 1997; Wang et al., 1996; Wang et al., 2000; Wang et al., 2004; Nykiforuk et al., 2011; Finney and Rishbeth, 2006; Carlson et al., 2006; Kwok and Ku, 2008; Power et al., 2014). This toolset comprises the active research process encompassing written and visual tools.

The photovoice methodology is highly adaptable but does follow a certain framework: 1) recruitment, 2) training, 3) handing out of cameras, 4) post photo-taking debriefing interviews and focus groups, and 5) artistic exhibition, if deemed appropriate (Hergenrather et al., 2009; Wang and Burris, 1997; Wang et al., 1996; Wang et al., 2000; Wang et al., 2004). Embedded within this general framework is the process of participatory analysis. Participatory analysis incorporates a three-stage process involving selection (of pertinent photos), contextualizing (telling stories, i.e. captions), and codifying (theme generation) (Hergenrather et al., 2009; Gubrium and Harper, 2013; Wang and Burris, 1997). This is achieved through individual interviews and similar information derived from focus group sessions. The three-stage process is the most rigid part of photovoice and although the design is adaptable (Hergenrather et al., 2009), the process remains foundational and there remains little literature on how to implement photovoice other than the general framework outlined by Wang and Burris.
Understanding this framework is essential to understanding the individual components of photovoice. I will start with the recruitment component.

**Recruitment**

Recruitment is structured by identifying where a need for photovoice and PAR techniques exist. Most notably, these cases tend to be identified by partnerships with public health, community, youth, public school or advocacy groups (Hergenrather et al., 2009). Methods of recruitment are varied and ultimately determined by the researcher, the research team, or a combination of both. This may or may not include working in conjunction with groups outside of academia (Hergenrather et al., 2009). When first implemented in China, governmental groups at the county level, were utilized to recruit participants (Wang and Burris, 1997; Wang et al., 1996). Passing this recruitment onto the local groups attempts to foster trust with participants in carrying out research and creating knowledge (Wang and Burris, 1997; Wang et al., 1996). One study involving a North American University featuring North American researchers, utilized Ugandan research assistants to act as a liaison between the community and research team during recruitment (Fournier et al., 2014). Similarly, one study facilitated working with a village elder to aid in recruitment (Bisung et al., 2015). Often, community development workers are recruited themselves to aid research teams (Bananuka and John, 2015). Although no formal unilateral process is indicated for recruitment in a photovoice study (Sutton-Brown, 2014), the inclusion of someone close to the recruitment pool is noted as standard practice (Hergenrather et al., 2009). Following recruitment, photovoice
enters the training component, most notably, a training or series of training workshops are provided. I will discuss this training next.

**Training**

The training involved in photovoice has evolved over time, but most studies have followed the guidelines laid out by Wang and Burris (1997) (Hergenrather et al., 2009). The training includes a workshop which provides an outline on issues of power, ethics, and photographic techniques and for consent forms and the specifics of the research study to be discussed openly with participants (Hergenrather et al., 2009). This includes discussion of the political power involved with photography and the research process (Wang and Burris, 1997). This step plays an important role in providing all the necessary training to implement photovoice effectively and ethically and be as transparent to participants as possible. In many cases this step is done in tandem with a research team or with the involvement of photographic professionals to train participants on photographic rules and techniques and how to use the camera (Hergenrather et al., 2009; Wang and Burris, 1997). Often the community liaisons and workers aiding researchers or research teams must be trained in the photovoice methodology as well. In multiple studies the training on camera use is due to the utilization of disposable/non-disposable film cameras (Hergenrather et al., 2009; Wang et al., 2004). Some studies have utilized digital point and shoot cameras (Hergenrather, 2006; Mamary et al., 2007) but not as often as disposable/non-disposable film cameras. This fact is explored more when I discuss the new model involving mobile phone technology. Following this training, participants are ready to take pictures and discuss them during interview and
focus group sessions. This involves the participatory analysis framework of selection (of pertinent photos), contextualizing (telling stories, i.e. captions), and codifying (theme generation). I will discuss these aspects next.

**Participatory Analysis**

Following the training participants are given cameras and given a week to take photos and then drop them off. It is important to note that this process is based upon the earliest attempts of implementing Photovoice. Disposable cameras were utilized as the primary photo-taking tool primarily because of when the methodology was created, during the 1990s, digital formats were either in their infancy or non-existent. Despite advancements in technology, film cameras have largely remained the primary photo-taking tool (Hergenrather et al., 2009) due to their ease of use and simplicity, especially with studies involving children (Wang et al., 2004; Young and Barrett, 2001), immigrants (Finney and Rishbeth, 2006), or those with language barriers (Wang and Burris, 1997). This photo taking process is repeated in many early studies using Photovoice (Wang and Burris, 1997; Wang et al., 1996; Wang et al., 2004). Once participants hand their first camera in, they are given a second camera to use again, and photos from the first camera are developed, and prints made. These prints are then utilized in the three-step process of participatory analysis: selection, contextualization, and codification (Figure 1). I will go through the selection, contextualization, and codification process in the following sections.
Selection

The selection process is where participants identify photos that most accurately display the needs of themselves, their community or community assets (Wang and Burris, 1997; Wang et al., 1996). This process is important for both researcher and participant. During this time, in-depth interviews are conducted giving participants the opportunity to discuss what certain photos mean using the SHOWeD process (Hergenrather et al., 2009; Wang et al., 2004). The SHOWeD process is an acronym describing the questions asked during the in-depth interviews: What do you See here? What is really Happening? How does this relate to Our lives? Why does this problem or strength exist? What can we Do about it (Wang et al., 2004)? This acronym evolved out of the earlier version, “VOICE” or “Voicing our individual and collective experience” and has served as a prompt for participants (Wang et al., pg. 381, 1996; Wang and Burris, 1997). As Photovoice has been utilized in other studies, the prompt has adapted and changed from the original “VOICE” prompt to the SHOWeD prompt and then branching to contextually specific prompts (Hergenrather et al., 2009). For the purposes of this section, however, the focus is placed on the original two prompts. Each prompt serves as a guide during the interview process, even though the interview process is unstructured. This process narrows the number of photos to those which participants deem important. These photos are then saved for focus group discussion. This use of prompts comprises a part of the contextualization process.
Contextualization

Contextualization refers to the process of giving meaning to photographs through written description. This process occurs during interviews as well as in focus groups. Individuals write captions for their selected photographs in a free-write format in order to add perspective. This step is critical to the final step of codification because contextualization allows the participant to express themselves in their own written voice and prepares them to discuss with other participants during the focus group sessions (Wang and Burris, 1997). This process grants a uniqueness to each selected photo taken by a certain participant, especially when various age groups are represented in a cohort (Wang et al., 2004). Selection and contextualization are intrinsically connected in an iterative way.
Figure 1: The photovoice Methodology. Created by Author.
**Codification**

Codifying is the identification of issues and generation of themes that are discovered during focus group discussions and borne from the previous two steps (Wang and Burris, 1997; Wang et al., 1996). This step is the keystone of photovoice. Participants share their photos with each other in focus group sessions aiming to better understand their communities and lives (Wang and Burris, 1997, Wang et al., 2004). The Flint, MI photovoice study undertaken in 1999 serves as a primary example of how effective this methodology can be (Wang and Redwood-Jones, 2001; Wang et al., 2004). The goal was to bridge the public policy gaps in the community by utilizing photovoice with public policy makers and leaders, as well as adults and teenagers in the community. The data developed over the course of the study was revealing and during the codification step, community violence was a theme that was discussed.

A picture taken by a teenager while riding the bus to school showed bullet holes through the windows of the bus. The provided caption described the fear associated with riding in the bus due to how clearly it showcased the possibility of violence within the community of Flint. It was a powerful piece of data in helping public policy makers realize that the violence in the community is transparent to teenagers and it raised questions on how it might be affecting teenagers and children in Flint (Wang and Redwood-Jones, 2001; Wang et al., 2004). The exposure of this theme of community violence was important in ushering in the completion of a Youth Violence Prevention Center constructed by the Center for Disease Control, providing a platform for future funding for social programs in Genesee county and Flint (Wang et al., 2004).
These three steps build on each other and aim to validate the experiences, feelings, and perceptions of the participants (Wang and Burris, 1997) and aid in the possibility of making real changes in a community. This participatory analysis process underlies the general framework of photovoice. They all interplay with each other to successfully complete the process.

The next section describes artistic exhibition, an aspect that was not a part of the first iteration of photovoice but has evolved as tool for participants to expand who hears their voice.

**Artistic Exhibition**

Artistic exhibition is an optional aspect of photovoice that has evolved as the methodology has been utilized in more settings. (Hergenrather et al., 2009; Wang et al., 2004). Held to showcase the stories (captions) and the assets of the community, one major goal of this step is to enhance the product of the research and provide opportunity for the research to continue in the future by exposing the participants work to a larger audience (Hergenrather et al., 2009; Wang and Redwood-Jones, 2001; Wang et al., 2004). The artistic exhibition is also an avenue for macro level change via exposure to policy makers but it is important to note that photovoice can have the effect of working at the micro level as well and that should not be discounted (Wang et al., 2000). When Wang et al. (2000) implemented photovoice in Ann Arbor, MI working with the homeless population, it was clear to the researchers that the goal was macro level change, but participants were more concerned with micro level, that is, day-to-day changes in their personal lives, this shifted the goal of the photovoice project (Minkler, 2004). This is an
interesting aspect to consider when designing and discussing the dissemination of participants photovoice material.

Social media could be a means of artistic exhibition but has not been utilized in many photovoice studies (Yi-Frazier et al., 2015). Having discusses the theoretical and methodological frameworks of photovoice, I want to move on and discuss its limitations, ethical dilemmas that can arise, and issues power dynamic and research positionality that must be accounted for when using photovoice or PAR in general.

Limitations of Photovoice

There are many ethical and power related issues to be aware of when utilizing photovoice. Specifically, the political nature of the research (Call-Cummings and Martinez, 2016; da Silva Vieira and Altunes, 2014; Gubrium and Harper, 2013; Harley, 2012; Liebenberg, 2018 Prins, 2010; Shankar, 2016; Sutton-Brown, 2014; Wang and Redwood-Jones, 2001), the possible endangerment of research participants depending on what is being photographed (Nakamura, 2008), power asymmetries between researcher and participants, including, ‘weight of authority’, institutional racism concerns, non-community identified problems and research questions, and recruitment without a community liaison (Minkler, 2004), and the nature of research involving human-subjects (Call-Cummings and Martinez, 2016; Carlson et al., 2006; Wang and Burris, 1997).

Various implementations of photovoice do deviate from the original Wang and Burris model, in some aspects, and it is important to note that Wang and Redwood-Jones (2001) point out that following their formula for implementing photovoice should
eliminate or mitigate many of the aforementioned issues, however, others recognize that this may be naïve (Prins, 2010).

**Poor Implementation**

Poor implementation of photovoice is an issue mentioned as the PAR methodologies continue to grow in popularity. An anthropological study by Karen Nakamura (2008) discussed how every facet of good anthropological work should be considered and that photovoice cannot replace these principles, in practice. These facets being longitudinal relationships with participants and fully examining methodological and ethical concerns that come with a photographic study (Minlker, 2004; Nakamura, 2008). The ultimate issue was participant fatigue. Participants were given a quota of 37 pictures for each photo-taking session. This eventually culminated in loss of interest, especially because there was not an inherent benefit for them to continue taking pictures for the study (Nakamura, 2008). It is important to ask thoughtful and deliberate questions of why, who, and where, when making the decision of implementing photovoice or similar PAR methodology (Stoecker, 1999; Wang and Redwood-Jones, 2001).

**Reinforcing Rifts? Ethical Dilemmas**

Multiple ethical dilemmas can occur based solely on the population demographics of the participants. This is showcased in a photovoice study involving teenagers. Latino/a high schoolers documented their daily lives and presented them in an art exhibit for the primarily white population of their high school and town, for reflection (Call-Cummings and Martinez, 2016). The goal was to elicit empathic
responses and give the students a platform to express their experiences and perceptions on how being a Latino/a teenager in the community affects their everyday existence. During the exhibition an open-ended survey was given out to attendees, to assess whether an empathetic response occurred. A content analysis of the survey showed a lack of critical reflection by attendees on the student’s work. Sympathetic responses were cited as many attendees felt bad for some teenager’s situations but stated they would not be able to relate to the situations the Latino/a teenagers found themselves in (Call-Cummings and Martinez, 2016). The less than sympathetic and lack of empathetic responses was unexpected, and the lack of critical thought may have further polarized the two populations, which could be considered unethical in an academic setting (Call-Cummings and Martinez, 2016). This result is something that cannot always be accounted for as it may speak more to societal issues but needs to be considered when thinking about populations separated by gender, age, race, or socio-economic status. For the sake of this research, this brings to light the very risk of conducting a photovoice study.

**Power Dynamics**

Photovoice has had the primary aim of mitigating issues of power between researcher and participant. Multiple analyses and studies involving photovoice have discussed this aspect in-depth, whether it be regarding studies involving the homeless (Packard, 2008), researchers involved in other countries (Prins, 2010), or studies involving populations effected by disease (Harley, 2012). Each of these studies comes to similar conclusions - that photovoice can work to mitigate these barriers but the
power differential between researcher and participant may be far more nuanced and entrenched than one methodology can handle. What I mean is, are these power dynamics that are entrenched in traditional academic research too much for photovoice to overcome if some aspects of traditional research must still be adhered to? Is it possible that issues of researcher positionality are detrimental to the PAR and photovoice process? Can institutional racism when dealing with low-income participants or participants of other races in a recruitment population, the lack of a community liaison, or the issues of a research identifying a non-community identified problem be overcome in PAR research (Minkler, 2004)? Being a PAR, photovoice can be influenced by these power and ethical issues. The need for careful planning when using the photovoice methodology is apparent (Bengle and Schuch, 2018). The power dynamic issues are discussed more thoroughly in the discussion chapter but are worth noting here because these are concerning issues in the literature regarding photovoice. There remains a gap in the research on implementing photovoice in other ways than outlined by Wang and Burris, however (Sutton-Brown, 2014).

I want to transition to how photovoice connects to geography, particularly feminist geography, critical landscape studies, and cultures of landscape by describing what these geographies are and the aspects that are important to this thesis research.

**Critical Landscape Geography**

Critical landscape geography offers perspective on the dynamism and power embedded in how landscape is formed. The issues of power discussed under critical landscape studies connect with photovoice in exploring the meaning of the lived

21
experiential landscape that community members are a part of. It offers an intimate look at the tension in these studies. “Landscape is tension” as John Wylie (pg. 1, 2007), iterates. This tension arose out of how we as researchers define landscape and assess scholarship based on colonial or post-colonial theory (Wylie, 2007). The point, is, that studies of landscape have changed over time and this can be used as valuable tool to guide and understand future and present research not only to see where geographical research has come from regarding issues of power and how a researcher identifies a landscape but also on how this perception can be changed. Cultural geography deals with issues of landscape at multiple levels (Wylie, 2007).

Landscape studies have shifted in focus throughout the history of geographical writings and analysis. Early writings by Carl Ritter (1890s) and Alexander Von Humboldt (1800) focused on objective and subjective aspects of landscape. However, the epistemological debate over how to define what landscape is persisted, as more landscape studies accumulated. Moving into the twentieth century, landscape continued to evolve and change through the lens of Modernism. Carl Sauer’s landscape studies focused on the intersection of culture and natural phenomenon (Wylie, 2007). Particularly, that culture creates and shapes the morphology of the landscape (Wylie, 2007). Sauer saw the goal of geography as one of studying the evolution of landscape(s) and put much worth in the role of culture in influencing the physical aspects of a landscape. This act, against environmental determinism, influenced Sauers work and created a trajectory for cultural geography imbied with intellectual
movements away from the tradition of landscape as ‘static thing, unaffected by human culture, but rather, created by it’ (Wylie, 2007, pg. 177).

This type of thought in landscape studies and cultural geography fostered debate. It is at this point, during the late 1980s and early 1990s that reactionary movements occurred in landscape analysis. Issues of power, materiality, and the Western gaze were investigated by a group of cultural geographers that would lead to the “new cultural geography” (Cosgrove, 1983; Cosgrove 1985; Rose, 1993; Wylie, 2007).

The New Cultural Geography

The new cultural geography challenged the idea of landscape as a ‘sight to be seen’ and focused on the ‘ways of seeing’ (Matless, 1992, 1995, 1996; Wylie, 2007, pg. 91, 121). What is meant by this is that, “Landscape is visual image of cultural meanings,” and “…both the product and token of particular cultures, particular knowledges and subjectivities.” (Wylie, pg. 91). The foundation of the new cultural geography are three principle discourses, 1. landscape as a veil masking powerful forces that are influencing it (Cosgrove, 1983,1985,1989), 2. landscape as a text that can be interpreted (Duncan, 1995), and 3. landscape as masculinist in gaze (Rose, 1993).

The landscape as a veil concept was critically analyzed by Denis Cosgrove (1983, 1985) focusing on how the ideological tradition of viewing landscape artistically cannot be ignored in geography and is, in fact, a shroud covering the underlying elitist, powerful forces that produce the landscape we see. A strong example of this
phenomenon is Duncan and Duncan’s (2003) study of two New York City suburbs and the relationship between the two. The community of Bedford strives for the pastoral aesthetic employing Latino/a day laborers from a neighboring suburb, Mount Kisco. In promoting this pastoral aesthetic, issues of institutional racism, power, and privilege end up affecting the people of Mount Kisco, instilling a dynamic that sheds light on how the aesthetically pleasing pastoral landscape of Bedford and similar communities hide conflict (Duncan and Duncan, 2003). Specifically, “Landscape, as a particular type of visual representation, mystifies, renders opaque, distorts, hides, occludes reality” (Wylie, 2007, pg. 69).

The second important underpinning to the new cultural geography, landscape as text, builds upon and goes beyond the landscape as veil concept by exploring how landscapes can be read as products of cultural, societal, and economic forces and that it is the job of the new cultural geographer to explore the mechanisms creating landscapes (Duncan and Duncan, 1988; Wylie, 2007). This conceptual shift attempts to ease landscape into a place that grounds it in a scientific reality to be interpreted and ties closely to works done with semiotics (Cosgrove and Daniels, 1988).

The third concept is landscape as a masculinist gaze. That, while concepts like landscape as text and veil are structural and build upon but do not denounce old cultural geographical principles, they are still, in essence searching for an objective truth which presupposes objective validated knowledge (Rose, 1993; Wylie, 2007). The issue here is the interplay and dichotomy between female subjectivities and male objectivities; the natural being associated with the female and subjective and the objective being
associated with the male objectivities (Massey, 1994; Rose, 1993). Rose (1993) argues that there is a need to become close to the landscape in the rush to discover validated knowledge and that this endeavor is vailed voyeurism which retards this closeness to narcissism (Wylie, 2007). The product of the new cultural geography shift during this time was to understand peel back the curtain and aesthetic of landscape and explore the societal, political, and economic systems that are hidden (Wylie, 2007).

This ideological shift in cultural geography set the stage for the evolution of the new cultural geography concepts especially further exploring the materiality of landscape and the notion of culture being a powerful force on the landscape. One of the first responses to the work being done by new cultural geographers was a critique of the power being given to culture and the lack of critical dialogue on the material landscape and the danger of dematerializing landscape (Dora et al., 2011; Olwig, 1996). Issues of visuality, materialism, production and labor (Mitchell, 1994, 1995, 2001, 2002; Wylie, 2007) shifted studies and analysis of landscape (Wylie, 2007). The idea that landscape is a product of capitalistic interests, constructed and then made culturally important as to mask the influence of supply and demand was a major deviation from how landscape was understood at the time (Mitchell, 1994, 1995). The point being that landscapes are products of productional forces of capitalism and are hidden beneath ‘Culture’ and that we must try to uncover to fully see the mechanisms of production creating these landscapes of violence (Mitchell, 2001; Wylie, 2007). This challenged the “new cultural geography” immediately by shifting the focus towards the places that may be overlooked due to being ordinary (Wylie, 2007). Borne out of these debates was
another shift in looking at landscape, described as cultures of landscape. It sought to understand how current cultural meanings affect landscape symbolically and materially (Matless, 1996; Wylie, 2007). Specifically, these ideas parallel those of Michel Foucault. These concepts, inherently, deal with power, subjectivities and landscape discourse, as well as perception and the visual (Wylie, 2007). I want to transition to cultures of landscape next.

Cultures of Landscape

Study on landscape changed during the 1990s and this is shown by recognizing that many cultural geographical writings during the time were pushing back against ideas of landscape as a way of seeing (Wylie, 2007). David Matless coined the phrase ‘cultures of landscape’ and did so with Foucauldian principles of power, knowledge and discourse in mind (Matless, 1992; Wylie, 2007). A primary point is that power is an abstract force that continually creates and is neither negative nor positive and the focus should be on the de-material (Elden and Crampton, 2016; Foucault, 1977). By doing this we question objective realities and their materialness that is often granted truthfulness in geographical research (Elden and Crampton, 2016).

From this shift in thought, Matless then proposed that ‘cultures of landscape’ are, “…a multitude of small, local, specific practices…” (pg. 112, Wylie, 2007). Matless was attempting to shift away from viewing landscape in such an ideological way and grounding it in lived experience, with a specific view that a landscape isn’t just an object where everyday life occurs, but an object that is culturally charged (Wylie, 2007). This means that the previous attempts to analyze landscape through an objective lens, as a
visual medium to be interpreted or material object, resulted in asymmetries of power regarding the disassociation of academic researcher from that which is being studied (Matless, 1995). There is also a focus on context of culture, and its effects on landscape. When utilizing participatory action research (PAR) one is interested in the view and expertise of the lived experiences, perceptions, and feelings of the participant. That they themselves are a part of a unique landscape, or community that is constantly being created and evolving due to the context of culture, time, space, and place (Harvey, 2015). These concepts and how they connect to photovoice and PAR are important because we are focusing on contextuality and specificity. It is not unfair to say, then, that the trajectory of geographical research has been constantly evolving and the paradigmatic shifts on landscape studies are evidence of this discourse (Livingstone, 1990).

Similar to the movements in critical landscape studies and “new cultural geography”, concepts of feminism and feminist geography, borne out of the progressive movements of the 1960s and 1970s, uncovered institutions of oppression within geography, and the need to critically critique what made geography, geography (Cresswell, 2013).
Feminist Geography

“This then, is the great humanistic and historical task of the oppressed: to liberate themselves and their oppressors as well.”

Paulo Freire (Freire, 1970; Freire et al., 2000, pg. 44)

Feminism as a concept is varied (Cresswell, 2013; Rose, 1993) and is punctuated by a history of reactionary movement and an effort to strive for a betterment of all by challenging dogma in academia and society. Feminist geography has taken contemporary and archaic geographical history, philosophy, epistemology, and reasoning and marked it as oppressive towards the “Other” (Cresswell, 2013; Massey, 1994; Rose, 1993; Rose and Ogborn, 1988). It has also created a critical discourse in geography (Dias and Blecha, 2007) and a call to reanalyze gender, place, masculinism, and positivistic high theory tendencies in contemporary geography (Bondi, 1992; Cresswell, 2013; Massey, 1994).

For the feminist geographer, disembodiment (objectivity) has allowed an epistemological debate to emerge. Embodied epistemologies acknowledge the sense of being located at many positions in terms of knowledge and space based on socially constructed, masculinist, concepts including class, race, and gender (Bondi, 1992; Massey, 1994; Rose, 1993; Rose, 1995). Sandra Harding and Donna Haraway specifically arose to the challenge of critically thinking about this epistemological issue with contemporary geography and positivist science (Harding, 1986; Haraway, 1988). Reinventing what it is we mean by objective and apolitical knowledge, Harding based knowledge upon the individual position of the person producing the knowledge
(Cresswell, 2013; Harding, 1986). She called this “standpoint theory” (Harding, 1986) or situated knowledge (Haraway, 1988). This viewpoint was considered radical in geography, conflicting against the traditional disembodied, objectivity of traditional positivistic science. These positivistic views may now be seen as the radical viewpoint and feminist geography prescribes that the discipline explores, in greater depth, the perceptions and positions of individuals. In this way, feminist geography plays an important role in how photovoice connects with geographical research. Photovoice is a PAR that utilizes participants expertise, their situatedness and positionality as a tool of achieving empowerment and way to think about the forces acting upon themselves and their community. More critically, this subjective knowledge production may be the way back from the danger of objective positivistic science. This aspect is explored further when Donna Haraway (1988) put forth her “situated knowledges” theory explaining that contextuality is the key to knowledge production (Cresswell, 2013). These studies are particularly interesting regarding photovoice, as participants are situated as the experts of their lives and communities in a contextual place in space and time.

Feminist geographers view space as non-binary; produced continually and contextually specific to each person (Bondi, 2005; Rose, 1993). To masculinist, positivistic geography, the disembodied, rational, objective point of view is validated but feminist geography shifts the point of view to how the researcher influences the research and focuses on context and specificity (Haraway, 1988; Massey, 1991). Space is completely contextual based upon socially constructed systems such as class, race, and gender (Bondi, 1992; Cresswell, 2013; Rose, 1993). This shifts the focus away from
masculinist vs feminist power differences and focuses on the view of the individual and this parallels the photovoice process, where participants are situated as the experts of their lives and communities in a contextual place in space and time.

This thesis research pulls from this body of work of new cultural, feminist, and critical landscape geographies. My aim is to contribute to this history of academic debates with this thesis research. Landscape studies are constantly changing and evolving over time and this is how true progress is made. Power dynamics and issues of gender provide ample room to discuss the effects of conducting PAR in different ways where researchers and participants interact. Photovoice can act as bridge in geographical research by concerning ourselves with situated knowledges. The expertise of those that live in their communities (Bunge, 1977, 2001; Benge et al., 1971), in their cultural landscape, is why photovoice is positioned to be a unique research tool for geographers. It is a methodology that goes beyond the visual.

Having completely explored and reviewed the literature, I want to describe the study area, its location, history, and unique characteristics in next chapter.

Chapter III
BACKGROUND OF STUDY AREA

K.I. Sawyer, MI is an unincorporated community in the central Upper Peninsula of Michigan. The story of K.I. Sawyer speaks to the evolution of rurality around one specific industry and thus mirrors the boom-bust parable of the mid-nineteenth century
in the United States. I want to describe the history of K.I. Sawyer within the context of multiple events that may have shaped how it is in its present state. In many ways, the agents of change and the results of that change are not isolated to K.I. Sawyer as hundreds of small unincorporated communities around the United States and especially in the Midwest have experienced economic and demographic change as primary industries moved elsewhere.

K.I. Sawyer was created in the 1940s as a civilian use airport and then, in 1956, transitioned to an Air Force base aptly named, K.I. Sawyer Air Force Base and remained operational until 1995. 1995 marked the year where, K.I. Sawyer Air Force Base was closed under the direction and recommendation of the U.S. Department of Defense Base Realignment and Closure (BRAC) program (K.I. Sawyer Heritage Museum, 2019; Wiitanen, 2017; Bertossi et al., 2013).

The area is historically tied to the traditions established during its active period. K.I. Sawyer functioned as an important military installation throughout the Cold War as it was a Strategic Air Command base, housing B-52 bombers and nuclear armament, that were actively ready to use, if the war escalated (K.I. Sawyer Heritage Museum, 2019; Wiitanen, 2017). The base and it’s forty-year service history and subsequent closure left an impression on the region culturally, economically, and socially (Sommerfeld, 2016; Rohan, 1993; Anderson and Prokopowicz, 2002 via Gwinn-Sawyer Area Chamber of Commerce).

I want to start by discussing K.I. Sawyer’s geographical attributes and then transition to a more detailed account of its early history. Following that, sections on K.I.
Sawyer’s operational history, closure, and the transitional years will be described culminating with a discussion on the post-transitional years in K.I. Sawyer.

Geographical Characteristics

K.I. Sawyer is situated South of the city of Marquette and Northeast of the unincorporated community of Gwinn, MI (Figure 2). It is important to note that no major roadways run near it. U.S. Highway 41 runs around the airport up through Marquette, MI and is approximately 7 miles East of the airport connected by county road 460 (Iwanicki, 2017). U.S. Highway 2 runs South through Escanaba and the tri-city area of Iron Mountain, MI, Norway, MI, and Kingsford, MI. K.I. Sawyer is very closely associated with Gwinn. Gwinn is smaller in population but functions as the administrative and services hub for K.I. Sawyer residents. Both K.I. Sawyer and Gwinn are uniquely situated in the center of Marquette county and near abundant recreational resources near the Gwinn State Forest Area.
Figure 2: Map of Study Area. Created by Author
Early History

The area that makes up K.I. Sawyer was largely vacant before the development of an airfield. During the late-1930s a civilian airport was built and operated near Negaunee, MI. However, a local engineer Kenneth Ingalls Sawyer, saw a perfect opportunity and prime land available Northeast of Gwinn, in the flat, Sands Plains area to develop a larger regional airport with a longer runway and greater capacity. In the late 1940s, Sawyer Airport was opened for civilian use (Wiitanen, 2017; Bertossi et al., 2013; Martin, 2010; K.I. Sawyer Heritage Museum, 2019). By the mid-1950s the tensions of the Cold War facilitated the U.S. Government to create more Air Force bases to add to the Strategic Air Command system (Scheetz, 2016). The rural and Northern location of Sawyer Airport was perfect for the United States Air Force. The land that Sawyer Airport was on and nearby was leased to the Air Force and the airport itself was prepped and recommissioned as an Air Force base. Civilian flights were moved back to the Negaunee facilities. K.I. Sawyer Air Force Base was officially opened in 1955 (K.I. Sawyer Heritage Museum, 2019; Wiitanen, 2017; Bertossi et al., 2013). The mid-to-late 1950s saw major construction of Air Force and residential facilities and extension of the runway. The transition to a functional United States Air Force base occurred during the 1960s (K.I. Sawyer Heritage Museum, 2019).

Operational History

K.I. Sawyer functioned as an important military installation throughout the Cold War as a Strategic Air Command base, housing B-52 bombers and nuclear armament. During the 1960s more squadrons of fighters, bombers, and refueling tankers were
welcomed to the base (Wiitanen, 2017; Scheetz, 2016; Bertossi et al., 2013). Subsequent decades would see K.I. Sawyer peak as an operational facility. Much of the infrastructure was constructed during the early operational years providing an economic boost to the region. County road 460 (also designated Michigan Highway 94) was created to connect the base to U.S. Highway 41 near Skandia and provided greater access between the base and the rest of the Central Upper Peninsula, despite still being 7 miles from U.S. Highway 41 (Iwanicki, 2017). Michigan Highway 94 also connected K.I. Sawyer to Manistique and U.S. Highway 2 almost 85 miles away. K.I. Sawyer was thriving and influencing the region economically, especially with the larger population that accompanied the base, since then, the population has fluctuated greatly over the decades in K.I. Sawyer, Marquette county, and Gwinn (Table 1)

K.I. Sawyer was heralded as “K.I. Siberia” by Air Force personnel, however, the monicker contained positive connotations because of the amount of recreational opportunities near the base despite the implied detriment of the cold winters (K.I. Sawyer Heritage Museum, 2019). This was also what made the area meaningful to the Air Force as the area was isolated and in the Northern reaches of the contiguous U.S. which was important during the decades of the Cold War (Wiitanen, 2017; Scheetz, 2016). Following the 1980s, the lessening of the tensions of the Cold War saw the need for extensive military resources less important and the 1990s usher in talks of closing military installations around the country to save governmental funds. The end of the Cold War meant a de-militarized period punctuated with the Base Realignment and Closure program (BRAC, 1993).
Table 1: U.S. Census and ACS Compiled Data

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<tr>
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<tbody>
<tr>
<td>1940</td>
<td>n/a</td>
<td>n/a</td>
<td>15,928</td>
<td>47,144</td>
</tr>
<tr>
<td>1950</td>
<td>n/a</td>
<td>n/a</td>
<td>17,202</td>
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<tr>
<td>1960</td>
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<td>1970</td>
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<td>2010</td>
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<td>1,917</td>
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</tr>
<tr>
<td>2017 ACS</td>
<td>3,255</td>
<td>2,072</td>
<td>21,081</td>
<td>67,145</td>
</tr>
</tbody>
</table>
This program analyzed the costs and benefits of keeping military installations operational or consolidating and closing them. In 1993 the Base Realignment and Closure commission slated K.I. Sawyer for closure, despite community support to keep the base open (Sommerfeld, 2016; Rohan, 1993; Anderson and Prokopowicz, 2002 via Gwinn-Sawyer Chamber of Commerce).

Concurrent with the closure was the outmigration of Air Force personnel and their families leaving K.I. Sawyer and Marquette county with a reduced population and vacant infrastructure (Figures 3 and 4).

Figure 3: Comparison of Population change. Created by Author.
The Transition Plan

The most interesting period for K.I. Sawyer was the decade between 1990 and 2000. Prior to closure the plan was to have the Air Force create a base conversion authority, authorized to work for a five-year period to help ease the transition from operational military installation to civilian use airport, and create and foster local businesses (Anderson and Prokopowicz, 2002 via Gwinn-Sawyer Chamber of Commerce; Sommerfeld, 2016; Bertossi et al., 2013). The point was to ease the economic impact of the closure on the region. With over 1,500 housing units and 5,200 acres of land area, K.I. Sawyer was predicted to succeed in transition due to
infrastructure being in place and the relocation of the civilian airport from Negaunee back to K.I. Sawyer (Rohan, 1993). The following sections provide a yearly analysis of the transition from U.S. military installation to Regional Airport, residential community, and industrial park. With detail on how this transition may have influenced the trajectory of K.I. Sawyer.

1993

The base conversion authority was created and commissioned to ease the economic impact of the closure at K.I. Sawyer. This ushered in a promising new future for the K.I. Sawyer area, even as unemployment was predicted to reach as high as 24 percent in the area (Anderson and Prokopowicz, 2002 via Gwinn-Sawyer Chamber of Commerce). Prior to closure there was an outpouring of support from the region to keep K.I. Sawyer in operation, providing a look at the cultural importance of K.I. Sawyer to the Marquette county region.

1994

The last B-52 bombers depart the base. Base conversion authority officials are hopeful of a promising transition from military to civilian use (Anderson and Prokopowicz, 2002 via Gwinn-Sawyer Chamber of Commerce).

1995

Mid-1995 produces the K.I. Sawyer Development Department and new businesses locating within the borders of K.I. Sawyer, including the Gwinn-Sawyer Veterinarian Clinic, the opening of the Red Fox Woods Golf Course and multiple heavy
industries providing new job opportunities (Anderson and Prokopowicz, 2002 via Gwinn-Sawyer Chamber of Commerce).

1996

Midnight, September 30, 1996 K.I. Sawyer officially closes as an Air Force base. This year also sees the Lake Superior Jobs Coalition form to transition airport operations from military to civilian use. The Sault Ste. Marie Native American tribes purchase residential property and open them for rental, providing new life for some of the vacant residential units (Anderson and Prokopowicz, 2002 via Gwinn-Sawyer Chamber of Commerce).

1997

Marquette County assumes control of the K.I. Sawyer Development Department and the K.I. Sawyer Business Alliance is created for proper business representation in the area. A lumber mill opens providing immediate job opportunities and West Branch Township assumes ownership of the old Fitness center with plans for it to be the future site of the South Marquette county YMCA facility (Anderson and Prokopowicz, 2002 via Gwinn-Sawyer Chamber of Commerce).

1998

The Sawyer Medical Center opens and the Sawyer Business EXPO occurs showcasing current businesses and potential opportunities. Overall, the business health of the area is strong and thriving (Anderson and Prokopowicz, 2002 via Gwinn-Sawyer Chamber of Commerce).
1999

1999 marks a very productive year for the community of K.I. Sawyer as the South Marquette county YMCA facility officially opens, the Sawyer Medical Center expands its operations, a restaurant opens and the second Sawyer Business EXPO occurs. The K.I. Sawyer Elementary School also receives and expansion and resident numbers peak at 1,200 people with over 800 jobs in the area (Anderson and Prokopowicz, 2002 via Gwinn-Sawyer Chamber of Commerce). New facilities are discussed as well as working towards asking for community input on the future direction of K.I. Sawyer.

2000

To address future development in K.I. Sawyer, community input is gathered to establish what residents would like to see within the area. Multiple new businesses open, and community activities include picnics, outings, and community flower planting, primarily sponsored by AmeriCorps positions. The Sawyer Business Alliance merges with the Gwinn Area Chamber of Commerce establishing a joint coalition with over 130 members (Anderson and Prokopowicz, 2002 via Gwinn-Sawyer Chamber of Commerce). The K.I. Sawyer Business District and Industrial Park is designated as a Renaissance zone under the Michigan Renaissance Zone Act to provide businesses with tax breaks to help boost growth.

2001

An important milestone occurs during 2001 as Charter Communications extends its fiber optic network to the residents of K.I. Sawyer. The Sawyer Medical Center expands its operations in collaboration with Marquette General Hospital and multiple
residential properties become available for purchase by potential homeowners. AmeriCorps volunteers aid in beautification projects of local parks and the old Air Force library begins a conversion process to be utilized by residents. Population peaks near 2,000 residents with over 1,000 jobs (Anderson and Prokopowicz, 2002 via Gwin-Sawyer Chamber of Commerce).

The Transition Process Explained

The timeline outlines the transition process from the very important early years of conversion from military operations to civilian use. The transition initially brought in many new businesses and the ability for residents to thrive with new job opportunities, volunteers and external support. This transition was primarily successful under the management of multiple authoritative commissions to guide the process of base conversion; however, these authorities eventually went away (Bertossi et al., 2013). Many of the success have not been sustained (Bertossi et al., 2013).

Post-Transition Process

The initial success of the development of economic diversity and community development at K.I. Sawyer hinged on sustained leadership and if success wanted to continue, sustained leadership would be key (Bertossi et al., 2013). Very early on, residents were interested in continued economic development, successful implementation of local governance, and community improvements (Bertossi et al., 2013). Many of these issues were addressed but not sustained (Bertossi et al., 2013). Local governance issues were an important factor early on as Marquette county took interest in the airport facilities and the industrial park. With K.I. Sawyer being
unincorporated, local services for residents were left to the two townships that split the residential areas of K.I. Sawyer between Forsyth Township and West Branch Township (Figures 5 and 6). A renaissance tax zone that was enacted for K.I. Sawyer limited the tax base for the Townships which could have used tax revenue to promote community services, into the future (Bertossi et al., 2013).

Economic development has been anchored by the industrial and business district closest to the airport but has had little impact on residents in the form of generation of positive development in the community (Bertossi et al., 2013). Most of the community improvements, from the very beginning, were done via a strong supply of volunteers and passionate community members but are still, limited (Anderson and Prokopowicz, 2002 via Gwinn-Sawyer Chamber of Commerce).

The history of K.I. Sawyer is not an isolated occurrence (Fernandez and Langhout, 2014, 2018), however, the events leading up to its present state, are unique. The cultural and economic impact of the closure of the military installation left an indelible mark on the central region of the Upper Peninsula, primarily Marquette county.
Figure 5: Map of K.I. Sawyer

Source: (Marquette County, 2008)
Figure 6: K.I. Sawyer Residential Areas

Source: (Marquette County, 2009)
Residents of K.I. Sawyer represent a unique group of hopeful individuals who are willing to create a successful community if given the resources to do so. The timeline makes it clear that many initiatives developed during the transitional years between the base closure and the opening of the civilian airport were successful but needs assessment surveys show that these have not been sustained (Martin, 2010; Bertossi et al., 2013). There remains a gap in key services that could only help the community (Bertossi et al., 2013). The avenue forward may be an approach that allows residents to identify their needs and explore their perceptions of K.I. Sawyer using a new model of photovoice. I will move on to discussing the new model of photovoice I chose to implement and the changes that occurred while conducting this research.

Chapter IV
METHODOLOGY AND RESULTS

The Wang and Burris (1997) photovoice methodology establishes a procedure for researchers that is clear and organized but has limitations. This thesis research involves making changes to the photovoice methodology to test a new model of photovoice and its ability to be a geographical research tool and the positive and negative aspects of utilizing photovoice as a methodology. To accomplish this, I wanted to focus on the implementation of mobile technology and social media into the photovoice methodology to be cost efficient in conducting research and be as
inclusionary as possible to participants as access to mobile phones and social media has risen (Perrin and Anderson, 2019; Taylor and Silver, 2019).

This proposed model incorporates most aspects of the photovoice methodology, but places focus on the integration of mobile technology and social media. In the end a meta-analysis was conducted to critically discuss what worked and what did not. This chapter examines the new model and the results of the field work period conducted during the Summer of 2019. The intent was to implement the new model of photovoice (Figure 7) fully during the months of June, and if need be, July. However, it became clear very early into the recruitment phase that changes needed to occur. Some of these changes included deleting the focus group portion of the methodology, changing the meeting place, reducing the number of interview sessions and having two successive photo taking weeks. Other steps in the methodology were completed the new model in its entirety was unable to be conducted. The driving influences of why these changes occurred and what implications those carry are expounded on more thoroughly in the discussion chapter.

This methodology and results chapter will move through each portion of the new model and explain what the resulting changes were. In this way, this chapter mirrors the previous allowing for easy interpretation on what aspects of the methodology changed. I'll start with the describing the recruitment phase of the methodology.
Figure 7: New model: Modified photovoice methodology. Created by Author.
Recruitment

The recruitment material was prepped during May and sent out during early June. During May, multiple steps were taken to ensure the proper materials were mailed to the residential areas within K.I. Sawyer. The Every Door Direct Mail (EDDM) service through the United States Postal Service (USPS) was utilized as a cost efficient option to send recruitment materials out. No specific number of participants was required but the study would only involve adults (>19 years of age) who have the mental capacity to provide consent.

In total, 900+ households were targeted for recruitment in the residential areas of K.I. Sawyer. Over 900+ envelopes were purchased, and thousands of Avery labels printed to adhere to the mailing standards of the EDDM service. Specific USPS retail indicia were needed on each flyer, along with return address labels and the "Local Postal Customer" label (Figure 8).

![PRSRST STD ECRWSS U. S. POSTAGE PAID EDDM RETAIL](image)

**Figure 8**: Every Door Direct Mail Retail Indicia and Postage Examples

Concurrent to these steps was the adherence to Human Subjects Institutional Review Board (HSIRB) standards approved by the board, of having mailed material contain a flyer, a specific longform description of the research being conducted, why the research is being conducted, and if there are any risks or benefits. Consent forms for
participating and photographic release forms were also included. It is important to note that no specific benefit was referenced as the research was focusing on the methodological implications. No payment for time involved in the research was referenced either.

These steps took considerable time, effort, and cost to complete. The mailed material had to be mailed from the post office in Portage, MI to the post office in Gwinn, MI so they could be distributed by the Post Office near the mailing route within K.I. Sawyer. Although a cost-efficient option, it still came at a considerable cost to me in both time and finances as the sole graduate student researcher. Due to these factors, a second recruitment period was not embarked upon. It would have not been a complete process and the EDDM service requires that all targeted households receive “promotional materials”. You cannot target only half of the households on a delivery route. Recruitment material was sent out via the one mail route that was only delivering to households in the K.I. Sawyer residential areas. There were two routes to choose from, but since the Post Office is in Gwinn, MI, the second route would have also sent recruitment material to households in Gwinn which would have required well over 1500+ sets of recruitment material to be sent out instead of the 900+ sets and would have nearly doubled the cost.

Towards the end of May, all the recruitment material was shipped, and sent to the 900+ households on the EDDM delivery route to ensure the recruitment material reached the households in early June during the field work period (Figure 9).
Not long after the recruitment material was sent a woman called explaining that she and others in K.I. Sawyer, did not want any photographic research conducted in their neighborhood or near their houses. This was an interesting occurrence following the recruitment period that I will talk about in the discussion chapter in greater detail. I wanted to note it here, primarily, because it came only a few days after the recruitment material reached K.I. Sawyer households. The final product of the recruitment was one participant.

Figure 9: Every Door Direct Mail Online Interface.
A final note is that multiple attempts were made to contact the leaders of the K.I. Sawyer Community Alliance through social media, email, and phone. No contact was established, and this may have contributed to low recruitment. The recruitment methodology was thus carried out as it has been outlined. Recruitment was labor, time, and financially intensive, even with the cost efficiency of the EDDM service. I had a budget of $1,000 and nearly one-half of this was spent on recruitment materials and the other half was spent on travel expenses. K.I. Sawyer is approximately 650 miles from Kalamazoo (nearly 7 hours away driving). The distance, travel time, and travel cost also contributed to a second recruitment period not being conducted. Following the recruitment period was where more meaningful changes occurred to the new model during training.

Training

Training remained the same. The training workshop was utilized to explain the intentions of the researcher, issues of power, ethics, and allow the one participant an opportunity to sign consent and photographic release forms. Looking at specifics, the power and ethics of photography were discussed alongside describing what the research was about, who I was, and Michigan law regarding privacy, confidentiality, and defamation. This study focused on two aspects that have not been explored much with the photovoice methodology, mobile-technology and social media (Volpe, 2018; Yi-Frazier et al., 2015). The preferred method of photo-taking was mobile phones. It was assumed, at the start, that any recruited participant would have access to a phone (or other mobile device) with the ability to take photos. Regarding the use of social media,
one potential ethical dilemma involved anonymity of research participants, this issue was resolved by giving research participant(s) a letter as a code (i.e. Participant A, B, etc…) to preserve their anonymity.

The training workshop phase was supposed to be held at and utilize office space at K.I. Sawyer Regional Airport. However, after numerous attempts to contact airport officials via phone and email with no returned messages, it was clear the meeting place would have to be changed. The original timeline sent in the recruitment material stated K.I. Sawyer Regional Airport as the meeting place (Figure 10). The outcome of the recruitment period was not known at the time as recruitment material had been created before confirming a meeting place, this was primarily due to timing issues with the EDDM service. A new meeting place had to be established. Arrangements were then made to meet at Victory Lutheran Church, a church within the residential area of K.I. Sawyer and closer to the recruitment area. The first meeting for the workshop was held on June 8th at Victory Lutheran Church. Due to the fact that the recruitment material had been sent stating that K.I. Sawyer Regional Airport was to be the meeting place I waited in the airport lobby prior to the training workshop to see if any participants would show up so I could redirect them to Victory Lutheran Church. I waited for forty-five minutes before an airport clerk agreed to redirect anyone who asked about the workshop towards Victory Lutheran Church.

One participant called ahead of time to confirm the meeting place and time and that same person was the only one who came to the training workshop. During the training workshop the participant was given handouts explaining issues of power, ethics,
and privacy regarding the research project as originally intended. The consent forms were discussed, and the research participant signed the consent forms and continued with the research project.

Figure 10: Original Research Timeline. Created by Author.

To conform to the original plan of keeping anonymity, the moniker of Participant A was given to the participant, even though Participant A consented verbally to use their name in the research. Participant A was 53 years old during the field work, female, and had been a resident of K.I. Sawyer for four years. The research procedure was discussed and modified to aid both the researcher and Participant A in allotting time for
picture-taking and a final meeting. These changes affected the rest of the general framework of the model.

Participatory Analysis

The intention of the participatory analysis was to follow the new model (Figure 6). This would include two separate weeks of photo-taking with two interview sessions and two focus group sessions. The interviews would include the selection and contextualization process while the focus groups were to include the codification process, however, this had to be changed due to the low recruitment period. Instead of continuing with two separate weeks of photo-taking and two separate interview sessions and focus group sessions, arrangements were made with Participant A to complete two weeks of photo-taking in a row. This occurred between June 9th and June 22nd (Figure 11). This fit within the work schedule of myself and Participant A.

Participant A opted to use their tablet as the photo taking tool. This stayed in-line with the use of a mobile phone or similar technology as the photographic tool. Two general prompts were utilized to help guide Participant A in taking photos but not limiting what they can take photos of, with the exception being taking pictures of other people. This research focused on the physical space of K.I. Sawyer and Participant A was asked to refrain from taking pictures of people, mainly, because this mitigated ethical issues and conformed with HSIRB approval.

The two prompts were: 1. What about K.I. Sawyer concerns you? 2. What about K.I. Sawyer makes you happy? The hope was for Participant A to ruminate on what they
were taking photographs of. Following the two consecutive weeks of photo-taking, Participant A and myself met once for the in-depth interview on June 22nd.

![June 2019 Calendar with highlighted dates and notes](image)

**Figure 11:** Updated Research Timeline. Created by Author.

The interview was where the selection and contextualization process occurred. Participant A chose ten photos from the pool of photos they had taken and then given time to free write creating a caption for each of the selected photos. These images were viewed on Participant A’s tablet and were sent to me via email. This was the easiest option for them. The emailed photos and captions (Table 2) were downloaded by me and prepared to post to Instagram.
Table 2: Photos and Captions for Research Participant A

<table>
<thead>
<tr>
<th>Photo</th>
<th>Caption</th>
</tr>
</thead>
</table>
| ![Photo #1](image1.jpg) | Photo #1  
Big Trout Lake – I see a lake that provides advantages for fishing, boating, and life sustaining purposes for nature. |
| ![Photo #2](image2.jpg) ![Photo #3](image3.jpg) | Photo #2 and #3  
Snow Hill/Sand Dune – Summer or Winter, there’s something to do outdoors courtesy of mother nature, from riding the dunes to sledding. |
Table 2: Photos and Captions for Research Participant A—Continued

<table>
<thead>
<tr>
<th>Photo</th>
<th>Caption</th>
</tr>
</thead>
</table>
| ![Photo #6 and #7](image1) | *Photo #6 and #7  
A multitude of trails and ponds can be found surrounding the base; blueberries are able to be harvested in abundance by many residents during the month of August in most of the areas. |
| ![Photo #12](image2) | Photo #12  
Only one elementary school remains open on base, titled appropriately, K.I. Sawyer Elementary; Principal Paulsen recently received an award for being exceptional individual and managing both K.I. Sawyer Elementary as well as on Gwinn Elementary. |
Table 2: Photos and Captions for Research Participant A—Continued

<table>
<thead>
<tr>
<th>Photo</th>
<th>Caption</th>
</tr>
</thead>
</table>
| ![Photo #16 and #43](image1.jpg) | *Photo #16 and #43  
Although K.I. Sawyer has a reputation of less than desirable housing, those of us who choose to live here, maintain our homes very nicely, and more places that exist that are decent residences than those are which not; the base currently has a higher population than that of the entire Gwinn populous. |
| ![Photo #16 and #43](image2.jpg) | |

59
<table>
<thead>
<tr>
<th>Photo</th>
<th>Caption</th>
</tr>
</thead>
</table>
| ![Photo #24](image1.png) | *Photo #24  
The Abandoned Red Fox Inn: once was a flourishing motel and lounge on an active base, then became an activity center when the government closed it down; now sits quietly like so many other abandoned units at K.I. Sawyer. |
| ![Photo #30](image2.png) | *Photo #30  
Another abandoned building = the former P.O. on base: this unit is completely un-locked and accessible to anyone who dares to enter the abandoned building; once a useful 6-station, operational post office with large sky lights within; very sad to see such potential go to waste. The unfortunate closing of the base so many decades ago leaves little hope for deteriorating structures with asbestos that remains in so many of them. |

*Disclaimer: Some photos were determined to be incorrect, however, when reaching out to Participant A, it was determined that they had since deleted the photos, so the original incorrect photos attached to the correct captions will remain.*
One unanticipated event from this and was an error on my part, was incorrect images matched to caption which was discovered when images were being prepped. Incorrect images had been sent to me and the captions did not match. Participant A was contacted about this issue but had since, deleted all of the photos taken during the study. I still had the ten photos Participant A had chosen but a disclaimer is attached to the incorrect images that takes ownership of this error (Table 2).

Normally, following this step, focus groups would occur but due to the low recruitment, focus groups were unable to be completed and were completely omitted from the process. Instead, following the interview, Participant A was given the exit survey. The exit survey was used to gauge Participant A’s experience (Table 3). Following the exit survey, Instagram was utilized to showcase photos and captions after the fact, however, this was taken down following the month of July, as this was when the specified study period ended, in accordance with the Human Subjects in Research Review Board (HSIRB) approved research design and timeline. The changes made during the study period were necessary.

Recruitment was much less than predicted and because of this, multiple aspects of the research methodology had to be changed. This included the omission of focus groups, basically eliminating the codification and theme generation phase. There are multiple possible factors involved with why this attempt failed, however, time and financial limitations were a factor in not being able to conduct another recruitment period.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>How long have you lived in K.I. Sawyer?</td>
<td>I’ve lived on base here for 4 years now; moved here in July of 2015.</td>
</tr>
<tr>
<td>What aspects of K.I. Sawyer make you want to live there?</td>
<td>I enjoy the accessibility of the surrounding natural environment as well as the affordability of the area to live and enjoy life.</td>
</tr>
<tr>
<td>Describe challenges you’ve faced living in K.I. Sawyer regarding access to community services.</td>
<td>Community services can be limited here on base for those without transportation, although community medical services are located near a small communal store.</td>
</tr>
<tr>
<td>Do you think Photovoice helped you recognize the positive or negative aspects of your community?</td>
<td>Photovoice gave me an opportunity to put into words the thoughts I’ve had regarding an area I have admired, even before moving here.</td>
</tr>
<tr>
<td>What were your thoughts on the using Instagram to share experiences during the study?</td>
<td>No thoughts, actually, negative or positive.</td>
</tr>
<tr>
<td>What were your thoughts on the effectiveness of using cellphones to take pictures during the study?</td>
<td>My cellphone takes nice enough pics, and it’s what I’ve used most of the time in the past for photo apps, but the pics my tablet took appear more effective for the purpose of this research study.</td>
</tr>
<tr>
<td>Do you have any ideas to make another research study involving Photovoice more effective?</td>
<td>As Nolan and I discussed, I believe residents in the Gwinn area could be approved and may take an interest more so than many starter families living on base, who are mostly low income and working parents – whereas, so many more individuals who are retired and live in Gwinn, could devote spare time to this type of research. We also discussed the advantage of more business individuals being approached and gaining their perspective for this type of study.</td>
</tr>
</tbody>
</table>
These results were both frustrating and interesting. For the discussion chapter, I discuss, in greater depth, aspects of this research that worked and aspects that did not. I critically analyze photovoice as a methodology, how the results of this study can better enhance future studies utilizing photovoice, and the implications this study has on using photovoice in geographical research.

Potential Risks

The risks included in the research were loss of confidentiality and anonymity. These were addressed in the research design by codifying the one participant as Participant A as mentioned during the training workshop. The potential loss of confidentiality was mitigated by me being the sole manager of the Instagram account. Photos were not kept on my phone. Once posted to Instagram, photos were deleted from my phone. Photos were securely stored on a USB drive and laptop only accessible by me. During the field work, the research methodology did have to adapt to unexpected changes. This is not an uncommon occurrence in research involving people.

Despite the shortcomings of this thesis research, particularly the low recruitment, there is ample room to conduct a meta-analysis on what worked and what did not. I want to discuss these aspects in the next chapter through a more critical lens. I want to speak on the new model, photovoice, and PAR methodologies. This is an important step, especially in refining the future iterations of photovoice and PAR methodologies.
Chapter V

DISCUSSION

Photovoice and similar PAR methodologies have risen in popularity in social science research (Hall, 2005). With this rise comes multiple issues that need to be mitigated or accounted for. Issues of power between researcher and participant, privacy and confidentiality concerns, and especially issues concerning working with the disabled, children, teenagers, or any sensitive population that is put at risk when involved with politically charged research methods (Wang et al., 1996; Wang et al., 2000; Wang and Burris, 1997; Wang and Pies, 2004; Wilson et al., 2007; Power et al., 2014; Hergenrather et al., 2006; Hergenrather et al., 2009). Further, the legitimization and challenging of what constitutes valid knowledge in academic research must also be grappled with when implementing a PAR (Stoecker, 1999). Photovoice, then, is exposed to all of these issues as a PAR. Photovoice attempts to be proactive in letting participants find their voice, with the goal of leveling the power dynamic between researcher and participants. The goal is democratization of the research process and the attempt to enact positive changes for oppressed populations (Wang and Burris, 1997). This aspect, however, has been challenged (Packard, 2008).

I wanted to implement photovoice in a different way, by using mobile technology and social media. The base of the photovoice methodology remains but changing certain aspects means involving mobile technologies and social media that a large amount of the population of various demographics in the U.S. are accustomed to (Pew Research Center, 2019; Perrin and Anderson, 2019). The study area, K.I. Sawyer,
represented a unique area that has had previous community needs assessment surveys conducted indicating a community that has a desire for more amenities and services, and recognizes an outside negative perception from around Marquette county that conflicts with K.I. Sawyer residents perception of K.I. Sawyer as a community (Martin, 2010; Bertossi et al., 2013).

I failed at implementing the new model of photovoice which greatly reduced the amount of data produced and eliminated certain key steps from the methodology. Out of these changes however, came a unique opportunity to analyze photovoice and add this research to existing works to better aid others in implementing photovoice more effectively in the future, and to assess how this affects its usefulness as a methodology for geographical research and how it could challenge contemporary geographical research.

This chapter will focus on recruitment, who benefits from photovoice and PAR methodologies, power dynamic issues, and aspects of this new model of photovoice that worked and those that did not. It will also be a commentary on PAR methodologies and a meta-analysis of the various components of the methodology and results. I will start with the recruitment phase first.

Recruitment

The normal recruitment period for photovoice involves working with community groups or community advocates to aid a marginalized population in democratizing and validating their experiences and knowledge (Wang and Redwood-Jones, 2001). The
unique history and two previous community needs assessment surveys were the primary motivator for testing the new model of photovoice model in K.I. Sawyer.

One survey brought to light a perception by residents that the rest of Marquette county saw K.I. Sawyer as a burden (Martin, 2010). Eight formal interviews were given during the 2010 needs assessment survey and when asked about the outside perception of the community, all eight spoke of a negative connotation associated with K.I. Sawyer (Table 4) (Martin, 2010). This negative bias perceived by residents has managed to persist throughout the transitional and post-transitional periods of K.I. Sawyer’s history, following base closure, and could be a manifestation of internalized oppression (Figures 12 and 13) (Minkler, 2004; Bertossi et al., 2013). The possible acceptance of the outside negative perception towards K.I. Sawyer from other communities in Marquette county may have informed residents of a reason why more growth has not occurred, despite residents of K.I. Sawyer believing K.I. Sawyer is a decent place to live even if it needed work (Bertossi et al., 2013; Martin, 2010). There seems to be a dynamic at play between the everyday experience of place residents of K.I. Sawyer experience and how that is affected by the negative perception from the rest of Marquette county.
<table>
<thead>
<tr>
<th>Interviewee #1</th>
<th>As a sore. I’ve heard comments that it would be better to drop a bomb on the place and be done with it.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviewee #2</td>
<td>Negatively. It’s perceived as a dysfunctional, low-income, group of irresponsible people.</td>
</tr>
<tr>
<td>Interviewee #3</td>
<td>I don’t think they are completely aware of what it’s like to live on base, but they do everything they can to avoid the base. I think they see it as a place where “bad people” go.</td>
</tr>
<tr>
<td>Interviewee #4</td>
<td>Not positively. We try really hard to put as much positive stuff as possible in the paper and the kids are awesome. I have heard people call it “little Detroit”.</td>
</tr>
<tr>
<td>Interviewee #5</td>
<td>I don’t think it’s perceived very well. “Oh! You’re at K.I.!?” People are judging the book by its cover – boarded up houses, closed businesses.</td>
</tr>
<tr>
<td>Interviewee #6</td>
<td>Poorly. If you’re in Marquette and you say you live at Sawyer, you feel them cringe. You hear terms like “Little Detroit.” The perception is that Sawyer is not a good place to live.</td>
</tr>
<tr>
<td>Interviewee #7</td>
<td>They say, “Oh be careful while you are out there.” The people at Sawyer feel that they are looked down upon. Some people get a more stable job and they move out of there.</td>
</tr>
<tr>
<td>Interviewee #8</td>
<td>The rumor on the street is that its “Little Detroit.”</td>
</tr>
</tbody>
</table>

Table 4: Needs Assessment Survey 2010 Interview answers for one question

Interview answers from (Martin, 2010)
Residents also recognized the lack of services and described which services they thought were needed, many of these services are the same as those identified in the year 2000 when the first community needs assessment survey occurred. Residents identified a grocery store, gas station, library, fitness center, fast food businesses, and a bank, among many others, as services they would want to see within K.I. Sawyer (Bertossi et al., 2013). Further exacerbating the need for services is the K.I. Sawyer community center closing despite passionate support from citizens (Bleck, 2018; Buchmann, 2018; Bertossi et al., 2013). I found this as an opportunity for community members to share their experiences and ‘voice’ through photovoice and test a new model of photovoice simultaneously.

![Pie chart showing responses to question 3: What is YOUR perception of KI Sawyer?](Image)

Figure 12: Results from Question 3 (Bertossi et al. 2013, pg. 55)
Photovoice’s goal is the democratization of the academic process with the priority in the research process being the participants and not the researcher. The process of recruitment is interesting though. The objectivity derived in the process of identifying a pool of participants and study area seems at odds with the process of uncovering situated knowledges (Haraway, 1988). What I mean by this is that photovoice as a methodology aims for local knowledge production and to mitigate the power differential between researcher(s) and participants but requires recruitment that takes into account objectivities derived from the researcher(s) perspective to identify potential research participants (Bengle and Schuch, 2018). Perhaps these are populations that would rather not be identified and targeted in recruitment? Perhaps this aspect is mitigated when utilizing local workers or organizations close to the recruitment pool?
Having grown up near Marquette, MI it struck me that possibly being from the U.P. would help in recruitment. Upon revisiting the recruitment materials, it is clear I omitted the fact that I am from the U.P. This may have been a factor in why recruitment was low. I think the suddenness of receiving materials from an unknown institution not associated with the community, and the lack of tangible results from the previous needs assessment surveys may have contributed to this ‘weight of authority’ affect (Minkler, 2004). This ‘weight of authority’ affect is the phenomenon of an institution of higher learning and the academic researcher, hold power over those who do not have a relationship with the institution which may affect recruitment (Amstrong et al., 2012; Bengle and Schuch, 2018; Minkler, 2004). Once recruitment materials were mailed to the 900+ households it only took a few days to hear back from someone who was not only not interested in the study but was afraid of having other people walking around the neighborhood taking pictures, even if it was K.I. Sawyer residents, especially near their house. I think this speaks directly to the power photography has in the minds of people, it is political and charged with power and perhaps upon reading the research description, those concerned K.I. Sawyer citizens were worried about their privacy.

Being a sole graduate student researcher could have limited the credibility of the research to possible participants (Bengle and Schuch, 2018). In sending out recruitment materials I may have further entrenched a power differential between myself (the academic researcher) and the participant pool (K.I. Sawyer residents) (Amstrong et al., 2012; Minkler, 2004).
The issue, here, is that I assumed that engagement in the research process would be far greater than what occurred \( (n=1) \). It is possible the recruitment period would have benefited from contact with the Sawyer Community Alliance as well as residents knowing I was from the U.P. A compounding factor was lack of time, financial restrictions, and distance to study area (Amstrong et al., 2018). I did not have the ability to be close to the study area throughout or prior to the research field work from the beginning. This did not help in facilitating trust between residents, myself, and this thesis research study. Bengle and Schuch (2018) recognize that often, “Without the long-term partnership and knowledge of the community, it would be unlikely that we could develop research agendas that meet the needs of community members” (pg. 623). The relationship building and ability to see the researcher as a real person, in my case, a graduate student from the U.P., was absent from this thesis research. This omission can heavily influence a PAR study (Bengle and Schuch, 2018). I tried to identify research questions from the previous needs assessment surveys and my own interests in the area from a historical perspective but lack of connection to the community long-term may have played a major role in limiting recruitment.

Who Benefits?

The research design was heavily influenced by multiple factors. Not only HSIRB but time and financial restrictions as well. When designing the recruitment phase, I opted for the EDDM service and included material that stated there would be no real benefit to this research if K.I. Sawyer residents opted to participate. I think this brings to light a duality in PAR methodologies, specifically who benefits when conducting PAR
methodologies in academia? The researcher or participants? Early in the research design and when working with HSIRB I wanted to focus on the methodology of photovoice and making sure I did not promise anything to K.I. Sawyer residents that could be considered coercive. PAR methodologies can be proactive in bringing to light participants own personal agency but may not always succeed in creating a change in a community (Liebenberg, 2018; Call-Cummings and Martinez, 2016). As mentioned previously, one part of my decision to try a new model of photovoice within K.I. Sawyer was the perception difference between what they personally thought of K.I. Sawyer and what others in Marquette county thought of K.I. Sawyer (Bertossi et al., 2013). I went into this research not promising an outcome but hoping to both test a new model of photovoice and, possibly, aid K.I. Sawyer residents in looking at their community differently but in their own way. To become cognizant of some of these underlying stigmas of the community and to explore if they are persisting since the previous surveys. I went into the research project with good intentions unsure of how it would be received. Was this a realistic thing to ask of one PAR methodology? I wanted to help the community but was also trying to adhere to thesis research timeline. I think this brings to question who was to benefit from this study. I think the outcome for Participant A was positive, during the exit survey Participant A was asked if photovoice had helped them understand the negative and positive aspects of K.I. Sawyer and their response was promising, “Photovoice gave me an opportunity to put into words the thoughts I’ve had regarding an area I have admired, even before moving here.” I think, in retrospect, it is very important to address the question of how a PAR, such as photovoice, can impact or will benefit a community or group of people because the product of the
research is not always certain. Even with the low recruitment it seemed Participant A enjoyed the process and was able to recognize aspects of K.I. Sawyer that are admirable. One aspect previously mentioned that deserves mentioning again is that I was unable to connect with community leaders. I also did not think to contact township officials, those creating policies that affect the life of K.I. Sawyer residents. Studies involving photovoice tout having to connect with policy makers for it to truly be a PAR (Nykiforuk et al., 2011; Liebenberg, 2018). I think this thesis research creates more questions about whether we as researchers should be more concerned with the process or the product (Harley, 2012; Prins, 2010; Pain, 2009).

Power Dynamics and why it Matters?

The attempt at mitigating the barrier between researcher and participant, objectivity and subjectivity, is a priority in participatory action research (PAR), which includes photovoice. Since the creation of photovoice it has evolved from a tool for public health concerns to a photographic and ethnographic methodology aimed at letting research participants and community members, in different demographic cohorts, be the primary knowledge producers. This continues to be a contested issue and many studies argue caution when using photovoice, especially concerning ethics and the power of photographs (Nakamura, 2008; Packard, 2008; Prins, 2010). I want to discuss this issue and connect it to aspects of the new model of photovoice I attempted to implement.

Josh Packard (2008) worked with the homeless population in Nashville to explore the power dynamics involved with participatory action research (PAR) and examine
limitations. In his study, he worked with disposable film cameras and attributes this to simplifying the technology being used. This eliminates the need for the researcher to teach participants and Packard (2008) argues that the act of teaching a participant skews the balance of power towards the researcher. Ultimately in my research design, mobile phones were utilized as the primary photo-taking tool. In the modern digital photography and smartphone age, this technology is commonplace and by utilizing mobile phones, I did not have to teach Participant A how to utilize it. The elimination of disposable film cameras was a benefit as it eliminated developing and printing costs while also actively dissuading the power issue involved in becoming a ‘Teacher’.

This is an important point to make as photovoice as a methodology involves a training phase prior to the distribution of cameras. This could be a contradictory and problematic step in the photovoice process that may be unintentionally perpetuated if not addressed. For example, Packard (2008) worked with homeless white men, primarily, and chose to utilize disposable film cameras due to their simplicity. Because of this, few of the participants asked for instruction but two did, reluctantly, and while receiving instruction, explained that they had used them before and seemed embarrassed by asking. This fact prematurely halted the training for the two men who felt confident in being able to use the camera properly even though their prints showed otherwise. One participant had a finger in multiple shots and seemed embarrassed by that fact (Packard, 2008). Packard points out that the link between knowledge and power is strong and that the lack of ability to use a simplified version of an object used by many people every day (a camera) and the shame associated with using it
incorrectly directly affected the relationship between himself and the participant (Harley, 2012; Packard, 2008).

**Paradox of Process**

The training component of photovoice and similar PAR methodologies is potentially problematic and could exacerbate power dynamic issues between researcher and participant. In many ways this is due to the double-edged sword that is photography. As a commodity that not everyone can afford to utilize or have experience with, teaching the use of the equipment and techniques may influence the data that is collected, shifting the power towards the researcher (Packard, 2008). Perhaps a participant is looking for something specific to satisfy the requirements of the project or documenting things they would not normally document (Nakamura, 2008).

Perhaps, in future iterations of photovoice a training on utilization and use of the primary photo-taking tool will no longer be needed across demographic cohorts. The importance and global presence of mobile phones is large and growing, with over 5 billion people having access to mobile phones, even if there seems to be a larger gap in developing countries (Taylor and Silver, 2019). Regarding the use of mobile-phone technology, it could be said the gaps in knowledge and ownership of such devices in older populations could cause issues for future photovoice studies, especially when attempting to be as inclusive as possible. These aspects have room for exploration in photovoice.

With the rise in mobile phones also comes a rise in features that are now standard, such as a camera, creating new opportunities to utilize mobile phone
technology in PAR and photovoice, with the possibility of mitigating the power related issues of training others in photographic techniques (Prins, 2010). However, the ethical dilemmas involved in photographic research, such as the political nature of photographs (Pain, 2009; Prins, 2010), the issues of privacy (Minkler, 2004), confidentiality, and safety of participants require training (Wang and Redwood-Jones, 2001). In this lies a paradox of process. The nature of research that grants participants the ability to create knowledge is at odds with the aspects of research ethics and training employed by photovoice studies. What truly is at odds here is academic ethical principles and PAR ethical principles (Nykiforuk et al., 2012; Harley, 2012; Minkler, 2004). In implementing the training, researchers retain power from participants but then the process turns the cameras over to participants to utilize and explain their position, experience, emotions, and perception. This is a paradox that cannot be ignored when implementing photovoice as a methodology or in any PAR. The training is counted as a step that is needed to teach basic concepts but Harley (2012, pg. 333) notes, “…the general lack of discussion of the ethics involved in the process” and that how this can be problematic in understanding how best to implement the training. The training phase in most photovoice studies is often vague and this may be problematic when dealing with at-risk populations such as children and those with disabilities or medical conditions (Harley, 2012). I think as researchers we must strive to stay open in research design and expect that changes will occur. The power differential between researcher and participant will never be an equal relationship (Pain, 2009) but I think striving for a better dynamic takes real exploration of research design and implementation (Harley, 2012). Photovoice is positioned to attempt to shift the power differential from researcher to participant and
create more opportunities for participants to guide the research[er]. Despite these issues perhaps a way around the issues involved with training participants and community liaisons is to create a training environment that not only explains issues of PAR and photovoice but also creates an atmosphere that fosters relationship building and community building for participants. Asking continual questions on how best to implement the training without creating an atmosphere that shifts power towards researchers (Harley, 2012).

**Does PAR Fit into Academia?**

An aspect of my research study that inextricably held back the intent of the field work was the rigid research design proposed to the institutional review board. Packard (2008) describes the need for a project to be, “exploratory in nature so as not to be confined by preconceived ideas upon entering the field” (pg. 66). The rigidity involved with this research attempt may have negated the participatory aspect of photovoice (Clifford et al., 2016). Furthering this point is the lack of time and constraint imposed upon researchers (Pain, 2009), specifically graduate students (Amstrong et al., 2012; Moss, 2009) and even doctoral students (Bengle and Schuch, 2018).

Amstrong et al. (2012) describes that implementing PAR methodologies like photovoice require great amounts of time and finances and that because of this, the relationship the graduate student researcher has with the project is strained. I think it is also fair to ask if participatory action research can truly serve its purpose if, on the front end, it is also a part of graduate thesis research paper (Stoecker, 1999). A document curated by a single researcher which has the dual purpose of being a guide into further
research, possibly at the doctoral level, and as a university and departmental requirement to graduate seems at odds with the goal of PAR. What then is the end goal of a PAR thesis at the graduate level? What is the goal of PAR methodologies such as photovoice when the principles of academic research do not align with the process of doing PAR (Stoecker, 1999; Pain, 2009)? This is a difficult aspect of the research to grapple with. When creating the research design for my study I attempted to be as thorough as possible to appease the institutional review board requirements as a graduate student researcher and stay within budgetary constraints having to do with cost of travel. One part of this is the tension between academic institutional ethics and participatory action research ethics and research dealing with people (Minkler et al., 2004).

When I was designing the new model, I wanted to adhere closely to institutional ethical principles without allowing room for the design to be flexible. This was a limitation and I think careful consideration needs to be taken by student researchers when designing a PAR to allow the design to be flexible and truly be guided by participants (Pain, 2009). Despite these challenges, there remains optimism that PAR research can fit into academia even if there remain some challenges to graduate and doctoral level researchers (Klocker, 2012).

I want transition to my conclusions on photovoice as a PAR and how it fits into geographical research, and what did and did not work during my attempt at implementing a new model of photovoice.
Conclusions

Photovoice is a participatory action research methodology (PAR) created initially for use in public health studies. It has its theoretical underpinnings in the work of Paolo Freire (1970, 2014) and various other photographic and ethnographic techniques. It is a process of photo taking, selection, contextualization, and codification of themes via written description, interviews, and focus groups. The end goal being to engage participants to be the research experts and enact change in their communities (Wang et al., 1996; Wang and Burris, 1997).

This study attempted to implement a new model of photovoice model by using mobile phone technology and social media in the form of Instagram. The intent was to answer questions regarding how using mobile phone technology and social media would be received by participants and to think critically on PAR, photovoice, and the new model, as a methodology and a tool for geographic research. I want to conclude this thesis paper in next sections by focusing on what I thought worked and did not work during the research process, implications photovoice has on geographical research, and provide avenues for future research.

Self-Evaluation: What worked?

Failure with this research occurred during recruitment but there were aspects of the design that did work and may aid in helping others use the same design in the future. The recruitment period utilized the Every Door Direct Mail (EDDM) service and mobile technology to try and be cost-efficient in both time and money. These two aspects seemed to work well for this specific thesis research, and I want to talk about
why. I want to discuss the EDDM service, the use of mobile technology, and how the interview and exit survey were received by Participant A.

**Every Door Direct Mail (EDDM) Service**

The EDDM service did work well during the recruitment phase. The service required a large amount of work in preparation of printed material and was one of the most cost-efficient methods of sending recruitment material to the study area. The service allowed for geographical selection of households in the K.I. Sawyer residential area. The price of 18 cents per mailed piece makes it an affordable option for non-profits, advocacy groups, governmental units, and researchers. The one hurdle during my field research was the limited funding available to me ($1000), and the priority of spending these funds on travel expenses, however, I would say the EDDM service is a viable alternative to classic recruitment strategies, especially door-to-door recruitment. It is also a standardized process through the postal service which provides instructions on how to prepare materials, postal service support call centers, and an easily repeatable process. These traits make it desirable for use in research and grants potential for other research endeavors.

**Mobile Phone Technology**

Digital technology is not new in photovoice (Hergenrather et al., 2006; Hergenrather et al., 2009; Mamary et al., 2007; Volpe, 2018; Yi-Frazier et al., 2015). Disposable film cameras or digital point and shoot cameras are still being utilized for taking pictures, the former, due to its simplicity, and the latter for its storage capacity and ability to look at pictures instantaneously (Hergenrather et al., 2009; Nykiforuk et
al., 2011). Very little of the literature reviewed prior to this study discussed the use of mobile phones as the primary photo-taking tool.

I utilized mobile phone technology for the study due to its accessibility, universality, and flexibility as a research tool. I did not have to provide any teaching on how to use the photo taking tool or provide the tool myself. I was hoping that this would allow for any participants to feel more comfortable. Participant A utilized their tablet, but the technology is similar. I do believe there is room for mobile phones in PAR, especially photovoice. I think that using mobile technology in this study was successful insofar as it worked for Participant A. When asked on the exit survey, “What were your thoughts on the effectiveness of using cellphones to take pictures during the study?” Participant A wrote, “My cellphone takes nice enough pics, and it is what I’ve used most of the time in the past for photo apps, but the pics my tablet took appear more effective for the purpose of this research study.” The pictures were taken and viewed on Participant A’s tablet. Prints were not created primarily because they were not budgeted for and did not seem necessary. However, regardless of using mobile phone technology as the primary photo-taking tool, prints could have easily been made and would have provided a tangible, physical medium from which to view the images. I would be worth investigating further how participants respond to tangible physical prints of their digital photos, providing personal connection to their photos. Maybe this is a shortcoming of digital photos viewed on a mobile device. There remains a very wide gap in using mobile phone technology with photovoice, but digital technologies do show promise with most structured around involving children (Erlger et al., 2016; Volpe, 2018; Yi-Frazier et
Participant A was 53 years old at the time of the field work and was receptive to using mobile phone technology and suggested multiple options they could use. This is very promising, and it would really be interesting to explore more with multiple age cohorts the effectiveness of mobile phone and digital technologies.

Self-Evaluation: What didn’t work?

The use of social media in photovoice studies is still in its infancy with the primary inspiration for attempting to utilize it coming from a recent study involving adolescents with Type I Diabetes sharing their stories via social media (Yi-Frazier et al., 2015). Even with one participant I utilized Instagram, but it was not truly successful, and I want to discuss perhaps, why that is.

**Social Media Usage: Instagram**

Social media in research is a relatively new occurrence but platforms such as Flickr and Instagram have been utilized in various capacities (Yi-Frazier et al., 2015; Sessions et al., 2016). The recognizability, ease of use, and exposure factor allow for possibilities in utilizing social media platforms in research. I attempted to rely on Instagram for my photovoice study, but it failed primarily due to the recruitment failure; despite it not working for this thesis research, there still remains potential for use in the future.

The use of Instagram was meant to function as the artistic exhibition portion of the new model. It was also utilized to try and be an avenue for more community exposure than a traditional exhibit. A new account was created, and I functioned as the sole curator (Figures 14 and 15). This was in-line with HSIRB requirements and was
meant to prevent issues involved with any participant using their own social media accounts.

The reason I say this did not work is varied. One aspect that was not able to be explored was participants utilizing their own social media account which seems common (Kia-Keating et al., 2017; Yi-Frazier et al., 2015). When Participant A was asked “What were your thoughts on using Instagram to share experiences during the study?” in the exit survey, their response was, “No thoughts, actually, negative or positive.” What I think occurred here was a disengagement from the process of posting because I was the social media mediator. If implementing Instagram again, I would have participants utilize their own social media account in conjunction with their mobile phone.
Figure 14: Photovoice Instagram page.
nolan.p.bergstrom Participant A "Although KI Sawyer has a reputation of less than desirable housing, those of us who choose to live here, maintain our homes very nicely, and more places exist that are decent residences than those which are not; the base currently has a higher population than that of the entire Gwinn populous."

Figure 15: Specific Post from Photovoice Instagram page.
This was done to inhibit possible complications with HSIRB, and sensitive material being placed on Instagram, but I think connecting to the process individually can make the use of social media, like Instagram, more impactful. If I were to attempt this again, I would follow Yi-Frazier et al. (2015) in letting the participants decide and to let them use their own Instagram account. It offers a way of utilizing photovoice differently and keep participants actively engaged in the process and allow for immediate feedback from those that follow the research process.

There would certainly be issues with HSIRB requirements but Kia-Keating et al. (2017) argued that the “the youth in our study all had personal cell phones with cameras, it is important to acknowledge that they already had constant access to a form of digital picture-taking and, as such, had the freedom to be taking photographs of any content, regardless of our study.” (pg. 4). Despite this point, Kia-Keating (2017) still attempted to mitigate issues with extensive training prior to photo-taking. The issue being dissemination of research data during the research process which could prove problematic needs to be considered when using social media (Ergler et al., 2016). The use of social media is experiential and ethereal, and information posted to social media lives in a constantly engaged, dynamic, and changing space with varied content and audiences (Kia-Keating et al., 2017). I think social media shows promise, however, in the context of this research, it was not as impactful as it could have been.

Implications for Geographic Research

I want to end the discussion chapter by focusing on the implications this study, photovoice, and PAR methods regarding geographic research. Photographic methods
in geographic research can be a primary data resource but also as a data source that can enhance map making initiatives that lack perspective at a human scale. For example, ESRI products have created tools that attempt to combine the human scale visual photographic multimedia and maps with their ArcGIS StoryMap product. There is great potential for geography’s primary tool, maps, to pair with the visual. Imagine how William Bunge’s (1971, 2011) exploration of Detroit would have been enriched by the addition of photovoice data from Detroit residents? Really, Bunge’s work in Detroit offers a first glimpse at how geography could include validated knowledges at small scales, such as in neighborhoods, and create an environment where participants are both researcher and participant. His early works really questioned the status quo in geography. Mirroring this, photovoice and PAR methodologies can help us question the power that maps possess, as data is easily manipulated and displayable in a way that can make us wonder about the validity of the data and the positionality of academic research to that of what we are researching (Pain, 2004; Pain, 2009). It also grants access to answering or discovering more questions across various scales (Pain, 2004).

To think critically about the field of geography, not in general modernist terms, but in a local, culturally textured and nuanced way (Bondi, 1992). Especially important here is to experiment with how photovoice can be utilized to discover the ‘situated knowledges’ of a place (Haraway, 1988) and examine how photographs are used in geographic research. Not that photographs are objective, empirical tools for the geographer to use to make an inference about a place (presently or historically), but a tool to bridge geographical research with situated knowledges (Sidaway, 2002).
photovoice has also found a connection exploring emotional geographies and how people are emotional attached to place (Burles and Thomas, 2014; Power et al., 2014).

I think a major area to explore further when utilizing photovoice is the impact that geo-social motivation has on the pursuit of PAR methodologies. Specifically, the idea that lived experience and connection to a geographical location inspires the need to want to make a difference or try new strategies in research to aid others who may share specific experiences or experiences of place (Daniels, 2018). This alignment with the goals of PAR, including photovoice, focuses on specific geographical contexts and the experiences associated with them (Daniels, 2018). As mentioned earlier in the discussion, I am from the Upper Peninsula of Michigan and thus can understand living in a place that has faced economic fluctuation and rurality and thought that if K.I. Sawyer residents knew I was from the same geographical context that they may be more responsive to a PAR like photovoice (Daniels, 2018). Essentially, photovoice has an opportunity to explore the intersectionality of place and gender, sex, disabilities, and illness (Valentine, 2007).

Although photography has been utilized in geography for a long time (Hall, 2005), there remains room for photovoice, and other visual PAR's to create unique opportunities for the discipline to expand in breadth (Sidaway, 2002).

Future Research

There is still a lot work to be done in implementing social media and mobile technology into the photovoice study. These aspects may help bridge the methodology to greater demographics and mitigate issues involved with the training phase. It would
be interesting to attempt this same model again at a smaller scale, perhaps with students’ perceptions or sense of place regarding campus life. Another interesting avenue to explore methodologically, is how photovoice and other PAR methods are perceived in current geographical literature and to compare this perception to current undergraduate, graduate, and doctoral level teachings and advisement on PAR methodologies. There seems to be a gap in graduate and doctoral level geography teaching and advisement of students who are interested in taking on a PAR project or research study (Pain, 2009; Klocker, 2012; Bengle and Schuch, 2018; Moss, 2009). This provides avenues of critique of geography as a discipline but also exploration of how these methodologies fit in to the neoliberal university setting and current geography department curricula and research. It also provides ample room for creating avenues that avoid scaring students away from exploring how to utilize the photovoice methodology (and other PAR) more effectively and purposefully in geography while still striving to meet department and university requirements (Pain, 2009; Klocker, 2012).

The product of this thesis research will hopefully provide ample opportunity for assessing the model I attempted to implement and help others navigate the turbulent process of implementing a PAR methodology at the graduate level. It is important to constantly refine the methodology to meet the context of the study area, participant pool and to allow it to be flexible as to enable mutual goals to be met during the research process and to embrace and learn from mistakes.
REFERENCES


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Appendix A

Recruitment Flyer
PHOTOVOICE AS AN EXPLORATORY RESEARCH TOOL: K.I. SAWYER CASE STUDY

Photographic Study
We invite Residents of K.I. Sawyer to Participate!

Summary of Study:
This study involves testing the ability of a photo-taking methodology, Photovoice, to be utilized as a geographical research tool. Participants will be using mobile phones to take pictures of the built and natural spaces within K.I. Sawyer. Participants are leading the researcher by discussing the photos they take and what thoughts, experiences, memories, negative and positive aspects are associated with these spaces.

Time Commitment:
- June – July 2019
- One 2-hour initial workshop
- Two, 1-hour interviews
- Two, 2-hour focus groups
- Two weeks of photo taking

Requirements:
- Must be 19 years of age or older
- Be a resident of K.I. Sawyer or official representing K.I. Sawyer
- Have access to a mobile phone that can take pictures

Western Michigan University
Appendix B

Workshop/Training Material
Ethical Considerations with Research and Photography

(Rose, 2016; Wiles et al., 2011) five critical factors for ethical research.

**Factor 1: Anonymity (and Confidentiality)**

**Anonymity**

Anonymity is not necessary for studies involving visual methodologies (Rose, 2016), however, in this study, participants will be kept anonymous. This will be done by giving participants coded titles (Participant A, B, C, and so on). These coded titles will represent the individual throughout the research study and thesis write-up. The goal is to keep individuals from being identified and keeping anonymity as a core principle during the study. The location of the study, however, will not be anonymous.

Interviews will be recorded using an external microphone, but actual audio will not be used in the thesis write-up. It will be used as a reference tool and possibly to provide context to the photos. No names are identifying characteristics will be used.

Participants will be asked to not share any images they take during the study with anyone outside of the study. Pictures being posted on the research study Instagram page will follow the coded guidelines; no identifying information will be used on the account.

Note: any images depicting illegal activity would void anonymity and would be liable to be used in court.
Confidentiality

During the course of the research study, photos taken by participants will be kept on an external hard drive, along with any other pertinent material. Following the conclusion of the study, the material will remain on the external hard drive and kept within the Geography department away from others for a number of years, ensuring data is not misplaced or available to others.

Factor 2: Consent

Consent

The consent forms for the research study and the photographic release form, alongside the research study itself, was approved by the Institutional Review Board at Western Michigan University. If you sign the consent forms and participate for a portion of the study and then decide to leave the study, your anonymous data and input is still able to be used in the thesis write-up. The dissemination of the data collected from this study will be presented to a thesis committee and the academic community.

Photos taken in public spaces do not require consent of individuals being photographed.

Factor 3: Frameworks: Regulations and Committees

Regulations and Committees

This research study has been approved by the Institutional Review Board at Western Michigan University. Ethical concerns have been addressed by both the board and my thesis committee.

Factor 4: Copyright

Copyright

Ownership of the images taken during the study are with the takers of the photos. The photographic release form provided is there to grant permission to use the images taken by participants to be disseminated.
Factor 5: Researcher’s Moral Framework

Moral Framework

My personal statement is to not include pictures of other people in compromised positions and to adhere to the approved ethical review board guidelines. I also do not want to make anyone feel uncomfortable and if they do so, they are free to leave the research study at any time. I’m hoping to learn from participants, and I want to go into this research study with an open mind.

Issues of Power – Participant, Researcher Relationship

Power dynamics between researcher and participants can be hard to navigate. The photos themselves can also carry political weight.

- Photovoice aims to let participants be the experts in the research process.
- The camera is in the hands of the participants
- Creation of an image grants power to that image

Privacy Laws in Michigan including Photography

The Four Privacy Torts (all recognized by Michigan)

1. Intrusion
2. Private Facts
3. False Light
4. Misappropriation

1. Intrusion: One who intentionally intrudes, physically or otherwise, upon the solitude or seclusion of another or his private affairs or concerns, is subject to liability to the other for invasion of privacy, if the intrusion would be highly offensive to the reasonable person.
   - Is a tort
• Three types of intrusion claims: surreptitious surveillance, traditional trespass, occasions when consent to be in a private area is granted but then exceeded

2. Private Facts: One who gives publicity to a matter concerning the private life of another. Charges can be filed if, the matter being publicized is the kind that can be labeled as highly offensive to a reasonable person and is not of legitimate concern to the public.

• More of a concern for photojournalists but still important

3. False Light: One who gives publicity to a matter concerning another that places the other before the public in a false light is subject to liability to the other for invasion of his/her privacy, the false light in which the other was placed would be highly offensive to a reasonable person, and the actor had knowledge of or acted in reckless disregard as to the falsity of the publicized matter and the false light in which the other would be placed.

• Photos can lead to false light claims when incorrectly captioned or used to illustrate stories not directly connected to the photo.

4. Misappropriation: One who appropriates to his own use or benefit the name or likeness of another is subject to liability to the other for invasion of privacy.

• Basically, protects one from the mental anguish of having their image in the public eye without their consent and to benefit a party other than the individual

Private vs Public Space (Property)

It is legal to photograph anything or anyone in a public place or while on public property. This includes streets, sidewalks, parks, etc. NO pictures will be used if taken on private property without EXPRESS PERMISSION by the OWNER of the property. If you do not adhere to this rule you can be charged with trespassing.

Reasonable Expectation of Privacy: Within a private space like the home or apartment, homeowners and tenants are afforded a reasonable expectation of privacy. This is different in public spaces but can be extended to include any portrayal of a person in a public space that defames them or humiliates them.
Appendix C

Follow-up/Exit Survey Form
Photovoice Follow-up Survey

Q1 How long have you lived in K.I. Sawyer?
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

Q2 What aspects of K.I. Sawyer make you want to live there?
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________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

Q3 Describe challenges you've faced living in K.I. Sawyer regarding access to community services.
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
Q4 Do you think Photovoice helped you recognize the positive or negative aspects of your community?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Q5 What were your thoughts on the using Instagram to share experiences during the study?

________________________________________________________________________

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Q6 What were your thoughts on the effectiveness of using cellphones to take pictures during the study?

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________________________________________________________________________

________________________________________________________________________
Q7 Do you have any ideas to make another research study involving Photovoice more effective?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
Appendix D

HSIRB Approval Letter and Approved Consent
Date: March 15, 2019

To: Lucas Hallett, Principal Investigator
    Nolan Bergstrom, Student Investigator for thesis

From: Amy Naugle, Ph.D., Chair

Re: IRB Project Number 19-02-50

This letter will serve as confirmation that your research project titled “Photovoice as an Exploratory Research Tool: K.I. Sawyer Case Study” has been approved under the expedited category of review by the Western Michigan University Institutional Review Board (IRB). The conditions and duration of this approval are specified in the policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may only be conducted exactly in the form it was approved. You must seek specific board approval for any changes to this project (e.g., add an investigator, increase number of subjects beyond the number stated in your application, etc.). Failure to obtain approval for changes will result in a protocol deviation.

In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the IRB for consultation.

The Board wishes you success in the pursuit of your research goals.

A status report is required on or prior to (no more than 30 days) March 14, 2020 and each year thereafter until closing of the study.

When this study closes, submit the required Final Report found at https://wmich.edu/research/forms.

Note: All research data must be kept in a secure location on the WMU campus for at least three (3) years after the study closes.
Western Michigan University
Geography Department

Principal Investigator: Lucius Hallett, Ph.D.
Student Investigator: Nolan P. Bergstrom
Title of Study: Photovoice as an Exploratory Research Tool: K.I. Sawyer Case Study

STUDY SUMMARY: This consent form is part of an informed consent process for a research study and it will provide information that will help you decide whether you want to take part in this study. Participation in this study is completely voluntary. The purpose of the research is to test a modified Photovoice methodology and its ability to aid residents in describing aspects of their community through photo-taking and narrative description and will serve as Nolan P. Bergstrom's thesis research project for the requirements of the Master of Science in Geography Degree. If you take part in the research, you will be asked to participate in photo-taking activities, one-on-one in-depth interviews, and larger focus groups discussions with others. Your time in the study will take two months. Participation requires you to be present for two large focus group meetings, two in-depth interviews, and an initial training workshop. Both focus groups will be approximately two hours in length and refreshments will be provided. Each interview will be one hour in length. The initial training workshop will be 2-3 hours long with refreshments provided. Focus groups and in-depth interviews will occur later in the week or during the weekend. Possible risk and costs to you for taking part in the study may be political involvement and loss of confidentiality, however, these aspects will be mitigated by training during the initial workshop phase of the research study. Anonymity will also be considered. Benefits of the research study are limited, as it's a methodological case study. Your alternative to taking part in the research study is not to take part in it.

You are invited to participate in this research project titled PHOTOVOICE AS AN EXPLORATORY RESEARCH TOOL: K.I. SAWYER CASE STUDY and the following information in this consent form will provide more detail about the research study. Please ask any questions if you need more clarification and to assist you in deciding if you wish to participate in the research study. You are not giving up any of your legal rights by agreeing to take part in this research or by signing this consent form. After all of your questions have been answered and the consent document reviewed, if you decide to participate in this study, you will be asked to sign this consent form.

What are we trying to find out in this study?
This study is testing the effectiveness of a participatory photo-taking research methodology called Photovoice. In this study the methodology will be modified to incorporate mobile-phones and social media to allow research participants to take pictures of their community and provide a description with the picture to provide more detailed information on the picture. Pictures will be of infrastructure, greenspaces in the community, or natural features in the community, however, photos of other people, especially of children or teenagers, will be prohibited. So, the research study is studying the effectiveness of an alternative Photovoice methodology.
Who can participate in this study?
Any consenting adult may participate in the study (>19 years of age). Children, teenagers, and people with cognitive disabilities will be omitted due to ethical concerns. You must also have access to a mobile phone with photo-taking abilities.

Where will this study take place?
K.I. Sawyer is the research study area.

What is the time commitment for participating in this study?
The research study will take place over a two-month period (June - July) during the summer of 2019, in intermittent time-spans. An initial workshop will take place in early June which will be 2-3 hours in length. Following this, participants can expect two, 1-hour in-depth interview sessions, two 2-hour focus group sessions, and 2 weeks of photo-taking. The meeting place will be the K.I. Sawyer International Airport. Pictures will be taken within the city of K.I. Sawyer of the physical environment. The primary research will occur during the month of June with July being a month of make-up time, in-case more meeting time is needed. In total, each research participant should expect, 9-hours of total meeting time and two weeks of photo-taking. The photo-taking process and length of time taking photos during the photo-taking weeks is up to the participant.

What will you be asked to do if you choose to participate in this study?
The sequence of events during the study are as follows: You will be asked to participate in an initial workshop to provide consent, be explained the specifics of the study, discuss issues of power, ethics, and what Photovoice is. Following this workshop, you will take photos for one week of the physical environment of K.I. Sawyer, natural and human built, using your phone. After that, you will participate in individual in-depth interviews to discuss the photos that were taken, select photos that you find the most important, and do a free-write providing a description of the photos you select. The description will be a time where you can describe your feelings, memories, experiences, etc. regarding the photo you took. Once all the in-depth interviews are finished, the first focus group will occur, where you will meet in a large group to discuss the photos with the other research participants, choosing photos and writing descriptions accompanying them. Certain images will then be chosen to be posted on the research studies Instagram page. This will be managed by the researcher to avoid issues of confidentiality. Once this process is complete, it will repeat, with you and other research participants taking photos for a week, meeting with me for in-depth interviews, and then meeting again with the other research participants for the final focus group. In early July, you will complete a follow-up survey.

What information is being measured during the study?
The primary source of information during the study will be the photos and descriptions accompanying the photos. This will be the data gathered. The research study Instagram page will be the sharing tool for the duration of the research study. It acts as an artistic exhibition where participants can share their stories and photos.
What are the risks of participating in this study and how will these risks be minimized?
There are three major risks involved with this research study. You’re confidentiality, anonymity, and privacy are kept during the research to preserve your confidence in the research. To keep your confidentiality, you will be asked to not share photos taken for the research during the research period. Your anonymity will be kept by assigning you an alternative descriptor (i.e. Participant A, B, C, AA, BB, CC, etc.). Your name will not be used during the research study. You will be asked to not take pictures of others (children, adults, people) to insure your privacy is protected and you remain safe.

What are the benefits of participating in this study?
The benefits of this study are limited. There is no immediate benefit of this research study to you, however, the research study is important when assessing how best to explain how residents of communities feel about their built environment.

Are there any costs associated with participating in this study?
The only true cost will be time and effort. You will be asked to take photos, but not quick snapshots. Critical thinking and dedicated time will be the only cost of participants.

Is there any compensation for participating in this study?
There will be no compensation for participating in the research study. Food will be provided during in-depth interviews, focus groups, the initial workshop, etc. This will be the only form of compensation to participants.

Who will have access to the information collected during this study?
The only person(s) with access to the information both during and prior to the research study will be the participants and the researcher. Data will be kept secure on the researcher’s computer and a separate hard-drive. Posts on Instagram will not include any participants name or identifiable information.

What if you want to stop participating in this study?
You can choose to stop participating in the study at anytime for any reason. You will not suffer any prejudice or penalty by your decision to stop your participation. You will experience NO consequences either academically or personally if you choose to withdraw from this study.

Who will have access to the information collected during this study?
No other person will have access to the collected data besides the principal researcher. Any data (photos, descriptions, survey results, etc.) will be codified so that research participants will not be traceable through outside sources. Data will be kept safe with the researcher on a hard drive.
The investigator can also decide to stop your participation in the study without your consent.

Should you have any questions prior to or during the study, you can contact the primary investigator, Nolan P. Bergstrom at 906-362-4085 or nolan.p.bergstrom@wmich.edu. You may also contact the Chair, Institutional Review Board at 269-387-8293 or the Vice President for Research at 269-387-8298 if questions arise during the course of the study.

This consent document has been approved for use for one year by the Western Michigan University Institutional Review Board (WMU IRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in this study if the stamped date is older than one year.

I have read this informed consent document. The risks and benefits have been explained to me. I agree to take part in this study.

Please Print Your Name

Participant’s signature __________________________ Date ___________
Photograph Release Form

I, ____________________________, give permission to Western Michigan University to use my photographs in artistic exhibition, presentations, project related work, or scholarly publication from the PHOTOVOICE AS AN EXPLORATORY RESEARCH TOOL: K.I. SAWYER CASE STUDY. They are free to use the photographs for any of the above purposes.

Signature: ____________________________
Date: ________________

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