

Adherence to the Photovoice Method in Food Insecurity Research: A Methodological Review

Victoria R. Braynir^a, Amy T. Galloway^a, & Christopher M. Seitz^{a,b}

^aDepartment of Psychology, Appalachian State University, Boone, NC

^bDepartment of Public Health, Appalachian State University, Boone, NC

<https://doi.org/10.33697/ajur.2026.177>

Students: braynirvr@appstate.edu

Mentor: seitzcm@appstate.edu*, gallowayat@appstate.edu

ABSTRACT

Introduction: Photovoice is a community-based participatory research tool critical in engaging participants as collaborators to determine the health needs of their communities. The photovoice method is defined by its three major goals: (1) to support participants' use of photos to document community needs, (2) to facilitate participants' group discussion about community issues highlighted in their photos, and (3) to exhibit the photos as a way to reach policymakers and advocate for community change. The purpose of this methodological review was to assess the extent of how photovoice's three major goals were achieved in food insecurity research that used the photovoice method. **Methods:** Peer-reviewed articles were searched for using the search terms "photovoice" and "food insecurity" in the databases PubMed and CINAHL. Additional articles were located using backward and forward chaining of reference lists. Inclusion criteria were defined to determine the articles' eligibility for review. Articles were assessed for their level of achievement of each photovoice goal (e.g., full, partial, none). **Results:** A total of 19 articles were included in the literature review, which described 15 different photovoice projects. Overall, the photovoice projects underachieved the goals of photovoice. Specifically, only two of the photovoice projects fully achieved each photovoice goal, and five projects at least partially achieved each goal. **Conclusion:** In sum, the literature review's findings emphasize the need for projects labeled as "photovoice" to implement all the fundamental goals of the method.

KEYWORDS

Photovoice; Food Insecurity; Community; Participatory research

INTRODUCTION

During the 1990s, Wang and Burris developed the "photovoice" method of research. In their groundbreaking articles, Wang and Burris defined photovoice according to three major goals of the method: (1) to support participants' use of photos to document community needs and assets, (2) to facilitate participants' group discussion about community issues highlighted in their photos, and (3) to exhibit the photos as a way to reach policymakers and advocate for community change.¹⁻³ Wang³ described photovoice as a type of participatory action research, and others have characterized it as community-based participatory research (CBPR).⁴ These research methods view participants as colleagues who are involved throughout the entire research process, including the dissemination of findings and efforts to enact change and improve a community's wellbeing.³⁻⁵ There are several benefits to conducting CBPR, including that a study and its data are relevant to community members, that the health issue being studied is given context by community members' knowledge, and that positive change in the community is an expected outcome.⁵

To help others conceptualize and implement photovoice projects, Wang and Burris provided practical, concrete steps to fulfill photovoice's major three goals.^{2,3} In terms of photovoice's first goal, Wang and Burris recommend that participants be trained on: an introduction of the photovoice method with an emphasis on reaching policymakers, the assignment of what participants should take photos of (which could be determined by the participants), the ethical practices of taking photos (i.e., appropriate ways of approaching and asking others for permission before taking photos), the provision of cameras if participants did not have a camera, and simple tips on taking photos (e.g., lighting, framing). Participants are then given a specific amount of time (i.e., one week) to take photos before meeting again to discuss the photos.^{2,3}

Regarding the second goal of photovoice, a group discussion is facilitated for participants to share, contextualize, and analyze their photos. During the group discussion, each participant selects a few photos that are important to them and then shares their meaning with the other participants. Wang recommends that researchers guide participants through group discussion using the "SHOWeD" mnemonic,⁶ which stands for: What do you See here? What's really Happening here? How does this relate to Our

lives? Why does this situation exist? What can we Do about it? The SHOWeD mnemonic can help participants to provide a critical contextual story behind each photo, which identifies the root of a problem and provides space for discussing potential strategies for improvement. Afterwards, participants qualitatively analyze their photos by categorizing the issues that were discussed into major action-oriented themes.^{2,3}

The third goal of photovoice involves planning how to use the photos to reach policymakers. Based on the group discussion and analysis, researchers should work with participants to plan a format to share photos and stories with community leaders. By doing so, participants have an opportunity to have their voices heard, by using their photos as talking points to address issues in the community and to advocate for change.^{2,3}

The literature suggests that not all studies labeled as “photovoice” have adhered to the method’s defining characteristics, especially in terms of advocacy efforts. The use of photovoice has grown in popularity over the past several decades, with thousands of photovoice studies published in peer-reviewed articles from various fields (e.g., public health, medicine, social work, psychology).⁷ Several literature reviews have been conducted on photovoice studies and have specified where studies have not achieved the three major goals of photovoice. Seitz and Orsini⁸ summarized the limitations mentioned in 15 separate literature reviews, totaling 593 published photovoice studies, including the common critique of photovoice projects not using photo exhibits to give participants an opportunity to speak with policymakers.

Although previous literature reviews have critiqued photovoice projects in general, the purpose of this study was to assess the extent to which photovoice’s three major goals were achieved specifically within food insecurity research that used the photovoice method. Food insecurity is a major public health issue in the United States (U.S.), with 18 million households reporting food insecurity in 2023,⁹ being defined as “a household-level economic and social condition of limited or uncertain access to adequate food.”¹⁰ Several factors can influence food insecurity, including, socioeconomic status, race/ethnicity, disability, neighborhood conditions, and lack of transportation.¹⁰ Food insecurity increases the risk of several negative health outcomes and health disparities, including obesity, malnutrition, chronic diseases, and children’s physical development and mental health.¹⁰

In response to the challenge of food insecurity, Gallegos and Chilton¹¹ suggest there is a major knowledge gap between people who hold positions of power that seek to alleviate food insecurity (e.g., academics, politicians, leaders of non-governmental organizations) and those struggling with the issue, which can result in the exclusion, marginalization, and exploitation of people who are experiencing food insecurity. As such, Gallegos and Chilton¹¹ recommend that scholars collaborate with participants in food insecurity research and practice to co-create an understanding of both the problems and solutions of food insecurity. This recommendation is reflected in the growing body of research in which scholars have used participatory research to address food insecurity in communities.^{12–14}

Photovoice has been one method of participatory research used in several studies on food insecurity; however, a methodological review of those studies regarding adherence to the initial photovoice method goals as defined by Wang and Burris has yet to be conducted. As such, this methodological review of the literature aimed to assess the published studies that used photovoice to address food insecurity to identify if those studies achieved each of the three major goals of photovoice, and to suggest how photovoice methods could be improved in the future.

METHODS AND PROCEDURES

This study was conducted as a methodological literature review. These types of reviews summarize the literature with a focus on methodological practices, which can be used to address uncertain research methods and recommend appropriate methods for future studies.¹⁵ A common type of methodological literature review is a “critical review,” in which the literature on a certain topic is assessed for methodological inconsistencies when compared to a criterion.¹⁵ This review was grounded in Aguinis and colleagues’ systematic review and their checklist of best practices in conducting methodological reviews, which includes: demonstrating the need and value for the review, defining the scope of the review, being transparent in the search process, using seminal sources as the criterion for reviewing articles, organizing the review through a step-by-step methodological guideline, highlighting articles that used exemplary methods, and reporting the review’s findings using simple language.¹⁵

Relevant search terms and databases were used to identify peer-reviewed articles for the literature review. During February of 2026, PubMed and the Cumulative Index to Nursing and Allied Health Literature (CINAHL) were searched using the search terms “photovoice” and “food insecurity.” Additional articles were identified using “berry picking” methods of “backward chaining” (i.e., searching the reference pages of included articles) and “forward chaining” (i.e., searching the articles that cited the included articles)¹⁶ using Google Scholar.¹⁷

The authors used several inclusion criteria to determine article eligibility for the literature review. An article was included in the review if it: (1) was written in the English language, (2) was conducted in the U.S., (3) was published in a peer-reviewed journal,

(4) specified that photovoice methods were used in the study, and (5) described a photovoice project related to food insecurity. If an article did not meet the inclusion criteria, then it was excluded from the literature review. If more than one article was published describing the same photovoice project, those additional articles were included in the review to ensure the full context of the project was assessed.

Each article included in the review was then examined independently by the undergraduate student researcher and a faculty supervisor for several factors to determine the extent to which each major goal of photovoice was achieved. It is important to note here that the information that was analyzed for this literature review was solely based on the methods that were described in each article's text. It is possible, as noted in the limitations below, that the methods to achieve the goals of photovoice were actually used in the photovoice project, but not included in detail within the article's text.

For the first goal of photovoice, the following information was extracted from each article: the number of photovoice trainings, the training content (e.g., overview of the photovoice method, the participants' assignment of what they should take photos of, photo ethics, photo tips), if cameras were provided to participants, and the amount of time provided to take photos. Based on Wang and Burris^{2,3} defining elements of photovoice, the student researcher and a faculty supervisor graded each article's achievement of the first goal of photovoice as: Full (participants were trained in all of the following: the photovoice method, an assignment of what participants should take photos of, photo ethics, photo tips), Partial (the article failed to mention one or more training components), or None (the article failed to mention any training or any components of the training).

Regarding the second goal of photovoice, the following information was extracted from each article: how participants discussed their photos (e.g., group discussion, focus group interviews, individual interviews with researchers), if a type of mnemonic (i.e., SHOWeD) was used to guide group discussion, and if the photo data or discussion/interview data were analyzed by the participants and/or the researchers. The student researcher and a faculty supervisor graded each article's achievement of the second goal of photovoice as: Full (participants discussed their photos as a group or through focus group interviews, the photo data or discussion/interview data were analyzed by the participants), Partial (participants discussed their photos individually with the researchers, and/or the photo data or discussion/interview data were analyzed by the researchers, and/or the participants were only invited to validate the researchers' analysis), or None (the article failed to mention any participant discussion of the photos, or the participants discussed their photos individually with the researchers, and the photo data or discussion/interview data were only analyzed by the researchers).

Finally, for the third goal of photovoice, the following information was extracted from each article: if the photovoice project's findings were shared through the form of an exhibit or other types of display (e.g., print, digital), who planned the exhibit/display, if participants were involved with the exhibit/display, who attended the exhibit/display (e.g., community members, media outlets, policymakers), and if there was any impact as a direct result of the exhibit/display. The student researcher and a faculty supervisor graded each article's achievement of the third goal of photovoice as: Full (the photovoice project's findings were exhibited/displayed, the participants were involved with the exhibit/display), Partial (the photovoice project's findings were exhibited/displayed, but the participants were not involved with the exhibit/display), or None (the article failed to mention any exhibit/display of the photovoice project's findings).

After independently extracting information and grading the methods against the three goals of photovoice, the researchers then met to discuss their assessments. Any inconsistencies between the researchers in the information extracted from the articles or their grading of the methods' achievement of photovoice goals were resolved through discussion.

RESULTS

A total of 19 articles were included in the study **Figure 1**.¹⁸⁻³⁶ Those articles described 15 different photovoice projects, as three projects were described in more than one publication. The photovoice projects ranged in their: location (e.g., rural, urban, region of the US), number and demographics of participants (e.g. age, race/ethnicity), purpose, and participant photo assignments based on the project purpose (**Table 1**). Regarding the first goal of photovoice, the projects varied in achievement, participant trainings, cameras for taking photos, and allotted time for taking photos. Of the 15 projects, eight (53%) had full achievement (**Table 2**). The remaining seven (47%) projects had partial achievement, as they did not mention training components of photo tips and/or photo ethics (**Table 2**). There were 14 projects that used a single training session, and one used two training sessions. To take photos, participants used their cell phones, or were provided with cameras (e.g., digital, disposable). Of the 12 projects that specified the allotted time for taking photos, the time ranged from three days to six weeks, with the most common time being one week (**Table 2**).

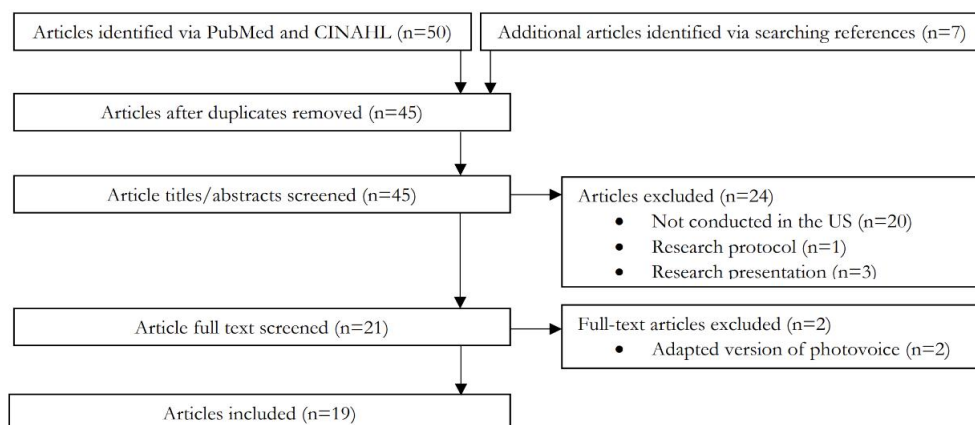


Figure 1. Flow diagram for article inclusion.

First Author	Location, Participants	Study purpose	Photo assignment
Boddie¹⁸	Waco, TX; 5 teens who lived in communities designated as food deserts	To explore teens' views on the barriers, impacts, coping mechanisms, and solutions to food security	Experiences, thoughts, and emotions of food and low food supplies
Burris¹⁹	Five communities in Tampa Bay, FL; 13 teenagers	To understand teenagers' experiences and coping strategies with food insecurity	What teen food insecurity looks like and the participants' ideas for solutions
Chilton,²⁰ Knowles²¹	Philadelphia, PA, Boston, MA, Baltimore, MD, Camden, NJ; 69 caregivers of young children and who use at least one public assistance program	To advocate to policymakers for changes to improve the health issues of young children living in poverty	Experiences with hunger and poverty, and the participants' ideas for change to share with the public, press, and policymakers
Colon-Ramos²²	Two low-income neighborhoods in Washington, DC; 10 African Americans mothers and grandparents	To determine how African-American caregivers living in a food desert provide food for their children	Barriers and facilitators to feeding children
Dailey²³	Adams County, PA; 47 low-income families	To understand the lived experience of food insecurity in a rural community	Experiences everyday with food
Heidelberger²⁴	Urban neighborhood in MN; 29 children	To explore the food environment of low-income adolescents	Foods that are commonly consumed at home, at school, and in the community
Hines²⁵	Baltimore, MD; 24 adults with hypertension	To explore the food environment of Black residents with hypertension	Issues related to food in the neighborhood
Jennings²⁶	Duluth, MN; 18 children experiencing food insecurity and transitional housing	To explore urban, Indigenous children's perceptions about healthy and unhealthy food	Foods that are healthy and unhealthy
Lemp²⁷	A large Midwestern university; 12 students who were food insecure and used the campus food pantry	To assess the impact of food insecurity on the health of college students	Impacts of food insecurity as a college student (e.g., what it looks like, health impacts) and resources used
McMorrow,^{28, 29} Saksena³⁰	Indianapolis, IN; 16 Congolese refugee women	To explore the health and integration experiences of refugee women	Barriers and facilitators of health and health care access
Sohlberg³¹	San Joaquin Valley, CA; 37 parents of K-12 students who participated in a school meal program during COVID-19 school closings	To understand parents' views of school meals during COVID-19 to improve participation in the meal program	Food provided by the school during the COVID-19 school closings
Spear³²	Rural AR; 7 food insecure adult residents	To explore the daily reality of food insecurity	Experiences with food insecurity as individuals, household, or community

Springer³³	Midwest city, USA; 8 teenage refugees from Iraq and Thailand	To understand adolescent refugees' experiences with food access	Representations of food access
Valera³⁴	New York City, NY; 9 low-income mothers	To document low-income women's challenges in accessing healthy food in New York City	Barriers to accessing healthy foods in the neighborhood
Weinstein^{35, 36}	Philadelphia, PA; 8 adult residents	To investigate weight loss factors for overweight/obese adults with serious mental illness	Barriers and facilitators in the environment for losing weight

Table 1. Summary of studies' location, participants, purpose, and photo assignment given to participants.

First Author	Methods for achieving photovoice goal #1	Achievement
Boddie¹⁸	One training on the photovoice method and photo assignment. Participants used their cell phones as cameras. One week was allotted for taking photos.	Partial (missing: photo ethics, photo tips)
Burris¹⁹	One training on the photo assignment. Disposable cameras were provided. The allotted time for taking photos was not mentioned.	Partial (missing: photo ethics, photo tips)
Chilton,²⁰ Knowles²¹	One training on photo assignment, photo ethics, and photo tips. Digital cameras were provided. Three weeks were allotted to take photos.	Full
Colon-Ramos²²	One training (and a take-home guide) on photo assignment and photo tips. Cameras were provided. Four days were allotted to take photos.	Partial (missing: photo ethics)
Dailey²³	One training on the photovoice method and the photo assignment. Digital cameras were provided. One month was allotted to take photos.	Partial (missing: photo ethics, photo tips)
Heidelberger²⁴	One training on the photo assignment, photo ethics, and photo tips. Disposable cameras were provided. The allotted time for taking photos was not mentioned.	Full
Hines²⁵	One training on the photovoice method, photo assignment, photo ethics, and photo tips. Provision of cameras was not mentioned. One week was allotted for taking photos.	Full
Jennings²⁶	One training on the photovoice method, photo assignment, photo ethics, and photo tips. Cameras were provided. Three days were allotted to take photos.	Full
Lemp²⁷	One training on the photovoice method and photo assignment. Participants used their cell phones as cameras. Two weeks were allotted to take photos.	Partial (missing: photo ethics, photo tips)
McMorrow,^{28, 29} Saksena³⁰	Two trainings on the photovoice method, photo assignment, photo ethics, and photo tips. Digital cameras were provided. The allotted time for taking photos was not mentioned.	Full
Sohlberg³¹	One training webinar on the photovoice method and the photo assignment. Provision of cameras was not mentioned. Five days were allotted for taking photos.	Partial (missing: photo ethics, photo tips)
Spear³²	One training on the photovoice method, photo assignment (developed by participants), photo tips, and photo ethics. Disposable cameras were provided. Six weeks were allotted for taking photos.	Full
Springer³³	One training on the photovoice method, photo assignment (developed by participants), photo tips, and photo ethics. Participants used their own camera devices. One week was allotted for taking photos.	Full
Valera³⁴	One training on the photovoice method, photo assignment (developed by participants), and photo ethics. Disposable cameras were provided. Four weeks were allotted to take photos.	Partial (missing: photo tips)
Weinstein^{35, 36}	One training on the photovoice method, photo assignment, photo ethics, and photo tips. Digital cameras were provided. One week was allotted for taking photos.	Full

Table 2. Studies' reported methods and achievement of photovoice goal #1 (training on photovoice method, photo topics, photo ethics, photo tips).

In terms of the second goal of photovoice, the projects varied in their level of achievement. A total of five (33%) projects fully achieved the second goal of photovoice, eight (53%) projects partially achieved the goal (due to lack of participants' involvement with data analysis), and two (13%) projects did not achieve the goal (due to lack of group discussion of photos and participants' involvement with data analysis) (**Table 3**). Of the projects that facilitated group discussion of photos, the SHOWeD mnemonic

was used in six projects, and the “ORID” mnemonic (objective, reflective, interpretive, and decisional questions used to spark discussion)³⁴ was used in one project (**Table 3**).

First Author	Methods for achieving photovoice goal #2	Achievement
Boddie¹⁸	Focus group interviews. Participants and researchers analyzed the interview data and photo data.	Full
Burris¹⁹	Group discussion using the SHOWeD mnemonic. Analysis of photos was not mentioned.	Partial (missing: participant analysis of data)
Chilton,²⁰ Knowles²¹	Individual interviews and group discussion using the SHOWeD mnemonic. Participants and researchers analyzed the photo data, while researchers analyzed the interview and discussion data.	Full
Colon-Ramos²²	Individual interviews and group discussion. Participants and researchers analyzed the photo data, while researchers analyzed the interview and discussion data.	Full
Dailey²³	Group discussion. Researchers analyzed the discussion data.	Partial (missing: participants' analysis of data)
Heidelberger²⁴	Individual interviews. Researchers analyzed the photo data and interview data.	None (missing: group discussion, participants' analysis of data)
Hines²⁵	Group discussion using the SHOWeD mnemonic. Researchers analyzed the discussion data.	Partial (missing: participants' analysis of data)
Jennings²⁶	Group discussion. Participants analyzed the photo data. Researchers analyzed the discussion data.	Full
Lemp²⁷	Group discussion or interviews were not mentioned. Researchers analyzed the photo data.	None (missing: group discussion, participants' analysis of data)
McMorrow,^{28, 29} Saksena³⁰	Group discussion. Researchers analyzed the photo data and discussion data. Participants were invited to validate the analysis.	Partial (missing: participant analysis of data)
Sohlberg³¹	Group discussion. Researchers analyzed the discussion data.	Partial (missing: participants' analysis of data)
Spear³²	Group discussions using the SHOWeD mnemonic. Researchers analyzed the discussion data. Participants were invited to validate the analysis.	Partial (missing: participants' analysis of data)
Springer³³	Group discussions using the SHOWeD mnemonic. Researchers analyzed the photo data and discussion data.	Partial (missing: participants' analysis of data)
Valera³⁴	Group discussion using the ORID mnemonic. Researchers analyzed the discussion data. Participants were invited to validate the analysis.	Partial (missing: participants' analysis of data)
Weinstein^{35, 36}	Group discussion using the SHOWeD mnemonic. Participants and researchers analyzed the photo data and discussion data.	Full

Table 3. Studies' reported methods and achievement of photovoice goal #2 (group discussion of photos, participant analysis of photos).

Regarding the third goal of photovoice, the projects also varied in their level of achievement. Only five (33%) projects fully achieved the goal, two (13%) had partial achievement (due to no participant involvement during the exhibits/displays), and eight (53%) of the projects did not achieve the goal (due to not mentioning any advocacy efforts) (**Table 4**). The exhibits/displays reached policymakers, stakeholders, and the general community, and three projects described the impact of the photovoice exhibit/display (e.g., free meals, food options, politicians' votes) (**Table 4**).

First Author	Methods for achieving photovoice goal #3	Achievement
Boddie¹⁸	Researchers planned several exhibits (two university events, a national conference, a youth council meeting) for various attendees (policymakers, social workers, nonprofit executives, community stakeholders). None of the participants were available to be involved at the exhibits. As a result of the project: the faith-based organization afterschool program that hosted the project began offering meals.	Partial (missing: participants' involvement at the exhibit/display)
Burris¹⁹	It was not mentioned who planned two exhibits (a community event, Juvenile Welfare Board) for various attendees (policymakers, members of the school board, Juvenile Welfare Board, and local hunger organizations). Participants were involved in presenting the exhibit. As a result of the project, school staff improved food handling procedures, eliminated some unhealthy food items, and allowed students to choose which food items they wanted to be served.	Full
Chilton,²⁰ Knowles²¹	Researchers planned 20 exhibits (PA Senate, a MA district, the US Senate, US House of Representatives, and news outlets). Participants were involved in presenting the exhibits. As a result of the project: politicians' votes were impacted on the 2014 cuts to SNAP funding.	Full
Colon-Ramos²²	Not mentioned	None
Dailey²³	Not mentioned	None
Heidelberger²⁴	Not mentioned	None
Hines²⁵	Researchers were planning a future exhibit.	None
Jennings²⁶	Not mentioned	None
Lemp²⁷	Not mentioned	None
McMorrow,^{28, 29} Saksena³⁰	Researchers planned several exhibits (World Refugee Day event, a public presentation at a university, academic conferences). Participants were not involved at the exhibits. Impacts of the exhibits were not mentioned.	Partial (missing: participants' involvement at the exhibit/display)
Sohlberg³¹	Not mentioned	None
Spear³²	Researchers were planning a future exhibit.	None
Springer³³	It was not mentioned who planned an exhibit at an unspecified venue. Participants were involved in the exhibit. Impacts of the exhibit were not mentioned.	Full
Valera³⁴	It was not mentioned who planned two exhibits (a participant letter writing campaign to local policymakers, a university health disparities conference). Participants were involved in the letter writing campaign. Impacts of the exhibit were not mentioned.	Full
Weinstein^{35, 36}	Participants and researchers planned several exhibits (state department of public health, a coalition conference about hunger, a coalition meeting, a demonstration outside a senator's office). Participants were involved with the exhibits. Impacts of the exhibits were not mentioned.	Full

Table 4. Studies' reported methods and achievement of photovoice goal #3 (reach policymakers).

After assessing the methods used for each photovoice goal, only a few projects fully or partially achieved each goal. Of the 15 projects included in this review, there were only two (13%) projects that fully achieved each goal of the photovoice method,^{20, 21, 35, 36} and five (33%) projects that at least partially achieved each goal.^{18, 19, 28–30, 33, 34}

DISCUSSION

The purpose of this methodological review was to determine how photovoice methods were used in research on food insecurity. Specifically, this study assessed if and how projects accomplished each of the three goals that define the photovoice method, as described in the publication text. We found that only two of the 15 projects included in this literature review fully achieved each photovoice goal as outlined by Wang and Burris' foundational articles that defined the method.¹⁻³

It is important to note that nearly half of the photovoice projects included in this methodological review did not mention training participants in the ethics of taking photos. Other literature reviews have also reported a lack of description in how photovoice participants are trained about the ethics surrounding photos.⁸ This finding highlights the need for researchers who are using photovoice to provide detailed training for participants to ethically achieve the goals of photovoice, with specific restrictions on taking photos of the community and the people within it. Oakes and colleagues³⁷ developed a helpful decision tree for photovoice

projects regarding the ethical and legal decision-making process in taking photos (e.g., privacy of person, privacy of place, illegal acts and obscenity, defamation, representation of truth versus actual malice, opinion versus assertion of fact), which could be used during photovoice trainings, group discussions, and exhibit planning.

Regarding the second goal of photovoice (e.g., group discussion of photos and participant analysis of photos), several projects in this review did not involve participants in data analysis. Other literature reviews have also critiqued photovoice projects that did not involve participants in data analysis.⁸ Given the participatory nature of photovoice, and the established outline of the method that specifies including participants in analyzing photos,^{2,3} future food insecurity research that uses photovoice should involve participants when categorizing participants' photos into major themes. Wang & Burris² emphasize the importance of participants taking the lead in analyzing patterns grounded in community data, as they should define the issues and potential solutions within their own communities.

Several studies in this literature review failed to describe if they hosted an exhibit/display, the crucial third goal of photovoice. This finding is reflected in previous literature, where many projects have fallen short of implementing comprehensive photovoice methods.⁸ Hosting an exhibit, or some type of display, creates an opportunity for participants to dialogue with policymakers and stakeholders about community concerns using real forms of evidence through participants' photos and stories.^{2,3} As such, by neglecting to host a photovoice exhibit, the full extent of participants' voices can be silenced.³⁸ In a reflective commentary on the method she created, Wang noted, "All kinds of limits and pressures can get in the way of staying true to the values and integrity of photovoice. Often, the policy component is the first to go. Photovoice organizers, eager to 'analyze' the 'data' on their own, eschew bringing policy makers to the table at the outset, or they neglect to facilitate ways for community people to share their policy recommendations. I want to say, please look in your heart, and may your work be rooted in the goals and core values that underlie photovoice."³⁹

This methodological review of the literature has important implications for future photovoice projects. First, there is a general need for assessing photovoice methods that are specific to each discipline or population of study. Replicating this type of methodological review can help to address the limitations of how photovoice is being used, and how projects could be improved in the future. Second, although completing all three major goals can be time consuming, implementing the basic steps of photovoice is necessary to realize the potential benefits for participants in this unique participatory research method.³⁹ Third, this review underscores the importance of those using photovoice to plan on how they will evaluate and report the impacts of a photovoice exhibit.⁴⁰ Practically, Wang and Burris' defining articles of the photovoice method¹⁻³ and this methodological review can serve as useful guides in planning the basic steps of a photovoice project (e.g., training participants in the photovoice method, providing a photo assignment, providing photo ethics and photo tips, conducting group discussions of photos, involving participants in photo analysis, and working with participants to share the photos with policymakers). Fourth, although the three goals of photovoice as outlined in Wang and Burris' foundational articles may be considered the "gold standard" of photovoice, researchers may modify the method. As such, it is important for researchers to clarify how the method was modified. If participants' photos are only used as an aid for interviews, the method should be classified as "photo elicitation"⁴¹ rather than photovoice. Or, if photovoice was only used to enhance participants' knowledge, skills, attitudes, behaviors, health, or efficacy for change at the individual level (versus at the community or policy level) this could be categorized as a "photovention" type of photovoice.⁴¹ Moreover, if the objective of photovoice was to map community assets or needs (without addressing policymakers), this could be specified that photovoice was used only as a community assessment.⁴¹

There are several strengths and limitations to this study. This study's findings support Gallegos and Chilton's¹¹ recommendation that scholars of food insecurity collaborate with their participants. The studies that achieved each photovoice goal engaged participants as co-researchers to enact change, suggesting that photovoice is a methodology that might be particularly useful for understanding and improving food insecurity without marginalizing participants and their lived experiences. In addition, this review indicates that photovoice can have real impacts on food insecurity. Although policy change can be difficult, three projects described in this review resulted in the availability of meals at an afterschool program,¹⁸ changes to food in a school setting (e.g., improved food handling procedures, elimination of unhealthy food items),¹⁹ and the influence on policymakers' votes on proposed cuts to SNAP funding.^{20,21} Although these impacts do not solve food insecurity in a broad sense, they do indicate that those who study food insecurity with a focus on sparking change in local communities or the national level may want to consider using photovoice as a tool for that work.

In terms of limitations, first, we only included studies that were conducted in the U.S., as food insecurity and advocating for policy change can look different from nation to nation, and we wanted the findings to be comparable by region within the same country. As such, it is possible that photovoice projects conducted outside of the U.S. achieved the three goals of photovoice methodology to a level different than those described in this literature review. Second, by only including photovoice projects that were published in the peer-reviewed literature, it is possible that other relevant photovoice projects (e.g., dissertations, theses,

presentations) could have provided additional insight into how photovoice is implemented within the scope of food insecurity. Third, it is possible that the study's limited search terms and only using the databases of PubMed and CINAHL did not retrieve an exhaustive list of photovoice projects about food insecurity using different terms (e.g., hunger, nutrition, food, grocery) from databases of various fields (e.g., anthropology, sociology, women's studies, economics). Finally, the projects listed in this literature review may have achieved aspects of photovoice goals, even though those details were not mentioned in the articles. This may be due to journal word limits that do not allow enough space for describing specific methodological details. As such, those who disseminate the findings from photovoice projects through peer-reviewed publication may want to use supplemental materials if journal word limits are too restrictive.

CONCLUSIONS

This study conducted a methodological review to assess the extent of how photovoice's three major goals were achieved in food insecurity research that used the photovoice method. A total of 19 articles were included in the literature review, describing 15 different photovoice projects. Overall, the photovoice projects as described in the articles' text underachieved the goals of photovoice. Specifically, only two of the photovoice projects fully achieved each photovoice goal, and five projects at least partially achieved each goal. In sum, the literature review's findings emphasize the need for projects labeled "photovoice" to fully implement the method's fundamental goals.

ACKNOWLEDGEMENTS

The authors thank Appalachian State University's Honors College and the Reviewers.

REFERENCES

1. Wang, C., and Burris, M. (1994) Empowerment through photonovella: Portraits of participation, *Health Educ Behav* 21, 171–186. <https://doi.org/10.1177/109019819402100204>
2. Wang, C., and Burris, M. (1997) Photovoice: Concept, methodology, and use for participatory needs assessment, *Health Educ Behav* 24, 369–387. <https://doi.org/10.1177/109019819702400309>
3. Wang, C. (1999) Photovoice: A participatory action research strategy applied to women's health, *J Womens Health* 8, 185–192. <https://doi.org/10.1089/jwh.1999.8.185>
4. Hergenrather, K. C., Rhodes, S. D., Cowan, C. A., Bardhoshi, G., and Pula, S. (2009) Photovoice as community-based participatory research: A qualitative review, *Am J Health Behav* 33, 686–698. <https://doi.org/10.5993/AJHB.33.6.6>
5. Israel, B. A., Schulz, A. J., Parker, E. A., and Becker, A. B. (1998) Review of community-based research: Assessing partnership approaches to improve public health, *Annu Rev Public Health* 19, 173–202. <https://doi.org/10.1146/annurev.publhealth.19.1.173>
6. Shaffer R. (1984) *Beyond the dispensary: On giving community balance to primary health care*, African Medical Research Foundation.
7. Golden, T. (2020) Reframing photovoice: Building on the method to develop more equitable and responsive research practices, *Qual Health Res* 30, 960–972. <https://doi.org/10.1177/1049732320905564>
8. Seitz, C. M., and Orsini, M. M. (2022) Thirty years of implementing the photovoice method: Insights from a review of reviews, *Health Promot Pract* 23, 281–288. <https://doi.org/10.1177/15248399211053878>
9. U.S. Department of Agriculture. Food security in the U.S. - Key statistics & graphics, <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/key-statistics-graphics> (accessed Feb 2026)
10. U.S. Department of Health and Human Services. Healthy People 2030: Food Insecurity, <https://odphp.health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/food-insecurity#cit2> (accessed Feb 2026)
11. Gallegos, D., and Chilton, M. M. (2019) Re-evaluating expertise: Principles for food and nutrition security research, advocacy and solutions in high-income countries, *Int J Environ Res Public Health* 16, 561. <https://doi.org/10.3390/ijerph16040561>
12. Doustmohammadian, A., Mohammadi-Nasrabadi, F., Keshavarz-Mohammadi, N., Hajjar, M., Alibeyk, S., and Hajigholam-Saryazdi, M. (2022) Community-based participatory interventions to improve food security: A systematic review, *Front Nutr* 9, 1028394. <https://doi.org/10.3389/fnut.2022.1028394>
13. Sacca, L., Garba, N. A., Clarke, R. D., Maroun, V., and Brown, D. R. (2023) Using community-based implementation frameworks and strategies to address food insecurity during the COVID-19 pandemic: A scoping review, *J Hunger Environ Nutr* 18, 396–414. <https://doi.org/10.1080/19320248.2022.2136024>
14. Scutts, T., Farnaz, N., Ganbold, G., Bhatti, A. J., Phan, S., Williams, M. J., and Mihrshahi, S. (2025) Co-designing solutions to tackle food insecurity in higher education settings: A scoping review, *Public Health Nutr* 28, 1–17. <https://doi.org/10.1017/S1368980025000485>
15. Aguinis, H., Ramani, R. S., and Alabduljader, N. (2023) Best-practice recommendations for producers, evaluators, and users of methodological literature reviews, *Organ Res Methods* 26, 46–76. <https://doi.org/10.1177/1094428120943281>
16. Booth, A. (2008) Unpacking your literature search toolbox: On search styles and tactics, *Health Info Libr J* 25, 313–317. <https://doi.org/10.1111/j.1471-1842.2008.00825.x>

17. Martín-Martín, A., Orduna-Malea, E., Thelwall, M., and López-Cózar, E. (2018) Google Scholar, Web of Science, and Scopus: A systematic comparison of citations in 252 subject categories, *J Informetr* 12, 1160–1177. <https://doi.org/10.1016/j.joi.2018.09.002>
18. Boddie, S. C., Howard, K., Hong, K., Nelms, S., O'Quin, A., Sessa, C., Williams, R., and Carter, S. (2022) Teen food insecurity in a central Texas city: Teen perspectives using photovoice, *J Hum Behav Soc Environ* 33, 232–264. <https://doi.org/10.1080/10911359.2022.2052222>
19. Burris, M., Bradley, S., Rykiel, K., and Himmelgreen, D. (2020) Teen food insecurity: Finding solutions through the voices of teens, *Hum Organ* 79, 13–23. <https://doi.org/10.17730/0018-7259.79.1.13>
20. Chilton, M., Rabinowich, J., Council, C., and Breau, J. (2009) Witnesses to Hunger: Participation through photovoice to ensure the right to food, *Health Hum Rights* 11, 73–85. <https://doi.org/10.2307/40285219>
21. Knowles, M., Rabinowich, J., Gaines-Turner, T., and Chilton, M. (2015) Witnesses to Hunger: methods for photovoice and participatory action research in public health, *Hum Organ* 74, 255–265. <https://doi.org/10.17730/0018-7259-74.3.255>
22. Colón-Ramos, U., Monge-Rojas, R., Stevenson, T. R., Burns, H., Thurman, S., Gittelsohn, J., and Gurman, T. A. (2018) How do African-American caregivers navigate a food desert to feed their children? A photovoice narrative, *J Acad Nutr Diet* 118, 2045–2056. <https://doi.org/10.1016/j.jand.2018.04.016>
23. Dailey, A. B., Hess, A., Horton, C., Constantian, E., Monani, S., Wargo, B., Davidson, K., and Gaskin, K. (2015) Healthy options: A community-based program to address food insecurity, *J Prev Interv Community* 43, 83–94. <https://doi.org/10.1080/10852352.2015.973248>
24. Heidelberg, L., and Smith, C. (2015) The food environment through the camera lenses of 9-to 13-year-olds living in urban, low-income, midwestern households: A photovoice project, *J Nutr Educ Behav* 47, 437–445. <http://dx.doi.org/10.1016/j.jneb.2015.05.005>
25. Hines, A. L., Brody, R., Zhou, Z., Collins, S. V., Omenyi, C., Miller III, E. R., Cooper, L. A., and Crews, D. C. (2022) Contributions of structural racism to the food environment: A photovoice study of black residents with hypertension in Baltimore, MD, *Circ Cardiovasc Qual Outcomes* 15, e009301. <https://doi.org/10.1161/CIRCOUTCOMES.122.009301>
26. Jennings, D. R., Paul, K., Little, M. M., Olson, D., and Johnson-Jennings, M. D. (2020) Identifying perspectives about health to orient obesity intervention among urban, transitionally housed indigenous children, *Qual Health Res* 30, 894–905. <https://doi.org/10.1177/1049732319900164>
27. Lemp, H., Lanier, J., Wodika, A., and Schalasky, G. (2024) Impact of food insecurity on the health and well-being of college students, *J Am Coll Health* 72, 3671–3680. <https://doi.org/10.1080/07448481.2023.2187631>
28. McMorro, S., and Saksena, J. (2021) Evidence from a longitudinal photovoice and interview assessment with Congolese refugee women in the midwestern United States, *Health Equity* 5, 577–586. <https://doi.org/10.1089/heq.2020.0121>
29. McMorro, S., and Saksena, J. (2017) Voices and views of Congolese refugee women: A qualitative exploration to inform health promotion and reduce inequities, *Health Educ Behav* 44, 769–780. <https://doi.org/10.1177/1090198117726572>
30. Saksena J, and McMorro SL. (2020) Through their eyes: A photovoice and interview exploration of integration experiences of Congolese refugee women in Indianapolis, *J Int Migr Integr* 21, 529–549. <https://doi.org/10.1007/s12134-019-00672-1>
31. Sohlberg, T. M., Higuchi, E. C., Ordonez, V. M., Escobar, G. V., De La Rosa, A., Islas, G., Castro, C., Hecht, K., Hecht, C. E., Bruce, J. S., and Patel, A. I. (2023) Parent perception of school meals in the San Joaquin Valley during COVID-19: A photovoice project, *Nutrients* 15, 1087. <https://doi.org/10.3390/nu15051087>
32. Spear, M. J., Vaughan, J. A., Barker, C., Faitak, B., Cole, J., Fleischacker, S., ... and Long, C. R. (2025) Daily reality of food insecurity: A photovoice study of food insecure residents in a rural, southern state, *J Hunger Environ Nutr* 20, 643–659. <https://doi.org/10.1080/19320248.2025.2505951>
33. Springer, P. R., Kang, J. S., Gratopp, E., and Franzen-Castle, L. (2024) Refugee youth's perspective on the role that food insecurity plays in a healthy community: A photovoice project, *IJMHSC* 20, 438–458. <https://doi.org/10.1108/IJMHSC-05-2023-0041>
34. Valera, P., Gallin, J., Schuk, D., and Davis, N. (2009) "Trying to eat healthy": A photovoice study about women's access to healthy food in New York City, *Affilia* 24, 300–314. <https://doi.org/10.1177/0886109909337378>
35. Weinstein, L. C., Chilton, M., Turchi, R., Klassen, A., LaNoue, M., Lamar, S., Yorgey, S., Kramer, L., Smith, I., and Cabassa, L. (2019) Reaching for a healthier lifestyle: A photovoice investigation of healthy living in people with serious mental illness, *Prog Community Health Partners* 13, 371–383. <https://dx.doi.org/10.1353/cpr.2019.0061>
36. Weinstein, L. C., Chilton, M., Turchi, R., Klassen, A. C., LaNoue, M., Silvero, A., and Cabassa, L. J. (2021) 'It's common sense that an individual must eat': Advocating for food justice with people with psychiatric disabilities through photovoice, *Health Expect* 24, 161–173. <https://doi.org/10.1111/hex.13101>
37. Oakes, L. R., Ewald, D. R., Orsini, M. M., and Strack, R. W. (2022) The photovoice decision tree: Legal considerations and ethical implications for photographs and captions, *Health Promot Pract* 23, 250–261. <https://doi.org/10.1177/15248399211053892>
38. Evans-Agnew, R. A., and Rosemberg, M. A. S. (2016) Questioning photovoice research: Whose voice?. *Qual Health Res*

- 26, 1019–1030. <https://doi.org/10.1177/1049732315624223>
39. Wang, C. C. (2022) The Tai Qi of photovoice. *Health Promot Pract* 23, 205–210. <https://doi.org/10.1177/15248399211069905>
40. Teti, M., and Myroniuk, T. (2022) Image to action: Past success, ongoing questions, and new horizons for photovoice exhibits. *Health Promot Pract* 23, 262–266. <https://doi.org/10.1177/15248399211054774>
41. Strack, R. W., Orsini M. M., and Ewald, D. R. (2022) Revisiting the roots and aims of photovoice, *Health Promot Pract* 23, 221–229. <https://doi.org/10.1177/15248399211061710>

ABOUT THE STUDENT AUTHOR

Victoria Braynin will graduate in May 2026 from the Honors College at Appalachian State University with a Bachelor of Science in Psychology and minors in Public Health and Nutrition and Foods. Following graduation, she will continue working on an organic vegetable farm and supporting an NIH grant for Hurricane Helene recovery in Western, NC. Victoria will begin New York University's Master in Public Health and Public Administration program in Fall 2026 and is interested in addressing food insecurity through a sustainable food systems lens.

PRESS SUMMARY

Photovoice is a community-based participatory research tool critical in engaging participants as collaborators to determine the health needs of their communities. The photovoice method is defined by its three major goals: (1) to support participants' use of photos to document community needs, (2) to facilitate participants' group discussion about community issues highlighted in their photos, and (3) to exhibit the photos as a way to reach policymakers and advocate for community change. The purpose of this methodological review was to assess the extent of how photovoice's three major goals were achieved in food insecurity research that used the photovoice method. Based on the authors' anecdotal observations, photovoice has been one method of participatory research used in several studies on food insecurity; however, a methodological review of those studies regarding adherence to the photovoice method has yet to be conducted. As such, this methodological review of the literature aimed to assess the published studies that used photovoice to address food insecurity. In doing so, the review can identify how those studies may have varied in achieving each of the three major goals of photovoice and suggest how photovoice methods could be improved in the future.