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The Bigger Picture: Research Strategy for a Photo-Elicitation Study Investigating Positive Health Perceptions of Older Adults With Low Socioeconomic Status

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Abstract

Research focussing on older adults of low socioeconomic status (SES) faces several methodological challenges, including high rates of non-response and drop-out. In addition, older adults of low SES tend to be less willing to participate in research and are more likely to experience cognitive impairments and literacy problems. Photo-elicitation studies do not require high levels of literacy, and they might therefore be suitable for use in research with older adults of low SES. To date, however, little is known about setting up such studies with this target group. Our aim was to demonstrate how we systematically set up a researcher-driven photo-elicitation study to generate greater insight into the positive health perceptions of older adults of low SES. Our strategy consisted of three phases: development, testing and execution. In this article, we discuss each step of the research strategy and describe the limitations and strengths of our study. We also formulate recommendations for further research using photo-elicitation methods with this target group. Based on the results of this study, we conclude that the use of researcher-driven photo-elicitation is a powerful tool for enhancing understanding with regard to positive health perceptions and experiences of older adults of low SES. The usefulness of the method is particularly dependent on the careful development and testing of the study.

Keywords

photo-elicitation interviews, low socioeconomic status, qualitative research methods, older adults, visual methods, positive health, participatory research

Introduction

The health of older adults of low socioeconomic status (SES) is receiving attention from health professionals and policy-makers, in addition to being a relevant topic for social scientists. Related to education level, income and occupation, SES is a robust factor that influences health from childhood on into older age (World Health Organization, 2018). Despite its importance, however, studies focussing on older adults of low SES pose several methodological challenges. First, difficulties associated with the recruitment of older adults of low SES lead to high non-response in survey studies (Dibartolo & McCrone, 2003; McHenry et al., 2015; Mody et al., 2008). Second, the drop-out rate from health interventions for this target group tends

to be high (Dibartolo & McCrone, 2003; McMurdo et al., 2011). Third, older adults tend to be less willing to participate in

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research, for reasons including the physical or mental difficulties associated with advancing age (Dibartolo & McCrone, 2003). Members of this target group are also more likely to have literacy problems and experience cognitive impairment (Federman et al., 2009). This latter problem is particularly salient, as many studies investigating older adults of low SES use research methods that require relatively high cognitive skills.

Several research methods are available that do not require high levels of literacy from participants, and they could also be useful in research investigating older adults with low SES (Johnsen et al., 2008). These methods include the use of visual tools (e.g. photographs, videos and drawings), which are accepted in research and are gaining popularity in the social disciplines (Pain, 2012). The use of visual tools in research offers several advantages, including a possibility to investigate abstract topics (e.g. health experiences and identity, meaning of life), the facilitation of communication between interviewer and participants, and the elicitation of reflections and associations from participants (Bates et al., 2017; Hall & Mitchell, 2008; Keller et al., 2007; Pain, 2012; Vigurs & Kara, 2017). Commonly applied in qualitative research, photo-elicitation interviews involve using photographs to encourage participants to reflect on particular topics (Harper, 2002). Perhaps even more so than written words, photographs evoke emotions, and they are therefore used in research to elicit emotions, reflections perceptions and associations (Copes et al., 2018). The photographs used in a study can be collected by the researcher (a researcher-driven technique) or taken or collected by participants (a participant-driven technique) (Bates et al., 2017). The choice of researcher-driven or participant-driven photo-elicitation interviews may depend on the aim of the study, the analytical strategy of the data or the level of participant engagement in the study. For example, participants are likely to be more engaged in a study if it draws on photographs that they have taken or collected themselves (Bates et al., 2017; Pain, 2012). One advantage of the photo-elicitation method is that it gives participants a ‘voice’ and provides greater insight into their lived realities, perceptions and experiences with regard to particular topics (Wang & Burris, 1997). A disadvantage of photo-elicitation research, however, is that it can be time-consuming and demanding for both researchers and participants (Meo, 2010). Additionally, interviewers should be aware of the potential framing effects of researcher-driven photographs, which could influence the associations of participants (Leonard & McKnight, 2015). However, to investigate health perceptions of older adults with low SES advantages of the method could outweigh the disadvantages.

The popularity of photo-elicitation methods is also increasing in research with vulnerable groups (Bugos et al., 2014), including older adults or people of low SES (Baker & Wang, 2006; Gosselink & Myllykangas, 2007; Hanson et al., 2016; Novek et al., 2012; Prevo et al., 2018; Schwingel et al., 2015). These studies demonstrate that photo-elicitation can successfully facilitate conversations

about abstract or difficult subjects (e.g. experiences of chronic pain) (Baker & Wang, 2006), promote participant engagement in the research process and elicit the perceptions of participants (Hanson et al., 2016). In the studies described above, participant-driven photographs were used primarily to investigate either older adults in general or individuals of various ages of low SES. To date, however, little is known about the use of researcher-driven photo-elicitation with older adults of low SES specifically. Moreover, little is known about systematic processes of performing photo-elicitation studies and about potential challenges and advantages. To address this gap, it could be beneficial for researchers to share their applied processes and learn from other researchers, rather than exploring the method’s utility purely through trial and error (Bugos et al., 2014).

Although there is an abundance of research on the health of older adults of low SES, consensus has yet to be reached with regard to how older adults perceive the positive aspects of their own health. To this end, we developed a photo-elicitation study using researcher-driven photographs to explore the positive health perceptions of older adults of low SES (Huber et al., 2011). We also aimed to generate greater insight into the awareness of participants with regard to aspects of the self-management of physical, social and mental health. To our knowledge, this is the first investigation of positive health perceptions amongst older adults of low SES to apply the method of researcher-driven photograph elicitation. Current knowledge is also lacking with regard to how such interviews should be set up for this target group. For this reason, we developed our own research strategy, which consisted of three phases: development, testing and execution. In this article, we discuss each step of the research strategy and describe the limitations and strengths of our research. We also formulate recommendations for further research using photo-elicitation methods with this target group. In this way, we hope to enhance understanding concerning the usefulness of researcher-driven photo-elicitation methods with older adults of low SES.

Project overview

The strategy that we adopted for our project can be divided into three phases, as displayed in the flowchart displayed in Figure 1. Phase 1 consisted of developing the photo-elicitation study, with Phase 2 entailing the testing of the photographs and topic list and Phase 3 constituting the actual execution of the study.

Phase I Development of the Photo-Elicitation Study

Step 1a. Collect photographs

The main objective of our research was to explore the positive health perceptions of older adults of low SES. Before collecting the photographs, it was necessary to determine which

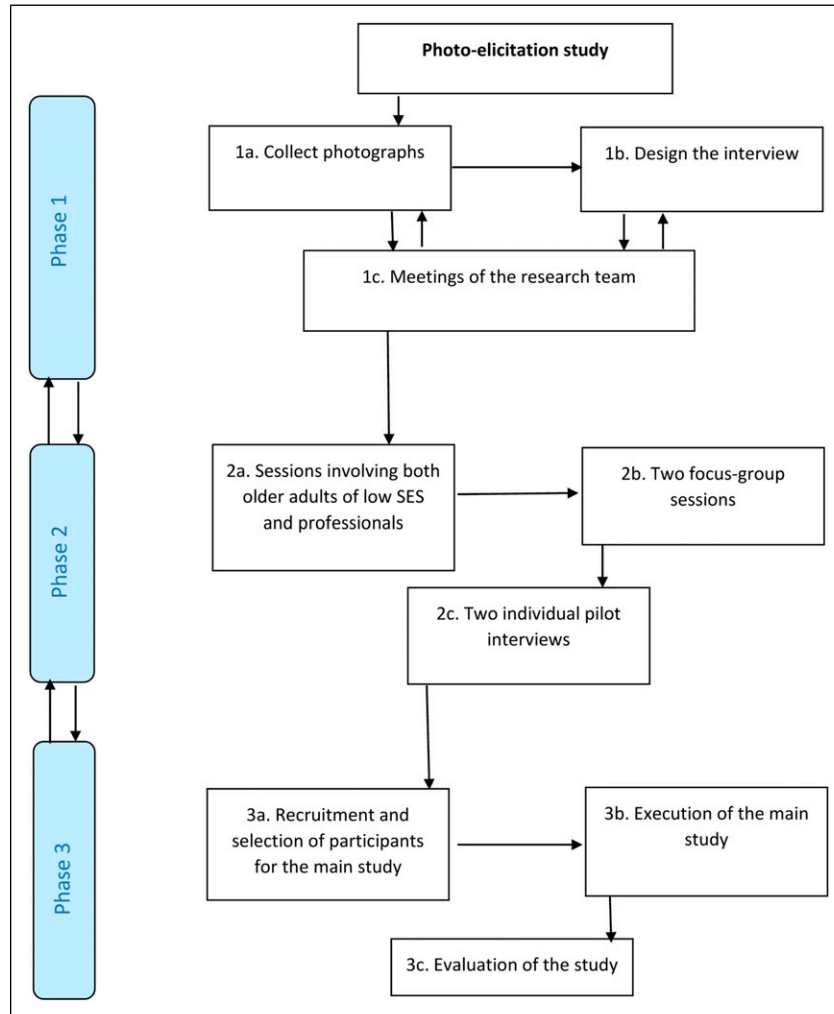


Figure 1. Project overview.

aspects of positive health we intended to address during the interview. According to Huber et al. (2011, p.2), health can be defined as the ability to manage challenges relating to physical, social and mental health. We collected photographs from royalty-free websites (Shutterstock, Pixabay and Pexels). The selection of photographs was based on two criteria. Firstly, the person depicted in the photograph was required to be an older adult, and secondly, the photograph was required to depict a healthy and/or unhealthy situation within the domain of physical, social or mental health. For physical health, we selected photographs depicting older adults with physical impairments, exercise classes for older adults, sport activities for older adults or the use of medicine. For social health, we collected photographs depicting older adults in interaction with children, grandchildren, partners and other older adults. For mental health, we collected photographs that we associated with emotions, such as sadness, frustration, loneliness, happiness and joy. During this step, we collected a total of 17 different photographs relating to positive health.

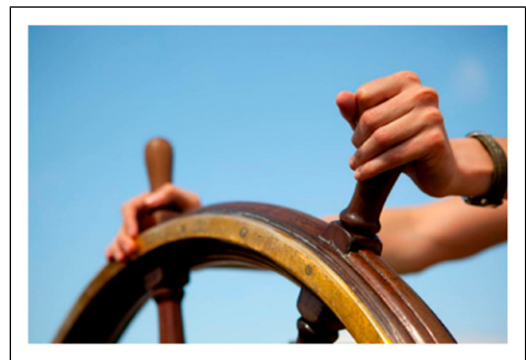


Figure 2. Photograph of a ship's helm used for the second part of the interview.

Step 1b. Design the interview

Several photo-elicitation studies start with an introductory question that is intended to invite participants to reflect on the topic of the study, followed by additional questions as needed



Figure 3. The assignment with the photograph of a ship's helm.

(e.g. Bugos et al., 2014). Our interview design called for asking the following introductory question for each photograph:

- Can you tell me something about this photograph?

Additional questions could be asked, depending on the openness and answers of the participant. These questions could be used to refocus the conversation on the topic of positive health, and they are therefore formulated in different ways. The following options for additional questions were available:

- Is the situation in the photograph healthy?
- Does the situation shown in the photograph have anything to do with health for you?
- Are the people depicted in the photograph healthy?

After developing the section reflecting on the photographs, we designed a second part of the interview, which consisted of an assignment intended to investigate participants' abilities to self-manage health, in other words whether participants perceived having a sense of control over their health. In the current study, the word 'control' was selected based on comments made during the first focus-group session (as described under Step 2b). For this assignment, we used a photograph of a ship's helm, which we found online using the Google search engine (Figure 2).

We intended the ship's helm as a metaphor for being in control over various aspects of physical, social and mental health. Our strategy called for presenting the photograph of the ship's helm to individual participants, and to ask whether they experienced control over the situations depicted in the photographs. We then invited participants to place a ship's helm on each of the photographs depicting specific health aspects over which they felt that they had control. They were also invited to explain their choices during the assignment (Figure 3).

Before the end of the interview, we asked participants about their experiences with the photo-elicitation method. After discussing these experiences, the interviewer asked several additional demographic questions (e.g. age, marital status, education level and former occupation).

Step 1c. Meetings of the research team

The research team consisted of five experienced behavioural and social scientists. The team discussed the photographs that had been collected, the design of the interview, the interview guide and the subsequent steps of the research strategy. During the discussion of the 17 photographs that had been collected, we noticed that some photographs called up a wide variety of associations. We therefore decided to test the photographs and the design of the interview with the target group, in order to ensure that the photographs would evoke associations about the intended topic of our study. This process is described under Phase 2 of the research strategy.

Phase 2: Testing the Photographs and Topic List

Step 2a. Testing the photographs with both older adults of low SES and professionals

Following the first phase, it was necessary to test the photographs, in order to enhance the reliability of the study. We tested the suitability of the photographs with three participants from the target group and three participants who were professionals working with the target group. Three of these six participants were above 60 years of age; four were female and two were male.

The goal of the test interviews was to explore the associations and reflections of participants. Instead of explicitly asking participants about their reflections and associations, we used an introductory question, in which participants were asked whether they could tell something about the photograph.

The associations and reflections were documented by the interviewer and summarised schematically. When participants reported having difficulty reflecting on a particular photograph, we discussed the matter in the research team, and we either selected a new photograph depicting a similar situation or decided to exclude the photograph from the study. In addition to the reflections and associations, participants were asked whether each photograph was suitable for use with the specific target group. This information was used to adapt the selection of photographs. For example, we had originally planned to use a photograph of multiple banknotes and coins to explore associations concerning the influence of money on health. When presented with the photograph that we had collected (Figure 4), several participants noted that it did not accurately represent the situation of the target group, as they could not imagine older adults of low SES having the amount of money depicted in the photograph. In response, we replaced the original photograph with one depicting a total of €70, in order to ensure it would correspond to the experiences of the target group (Figure 5).



Figure 4. Photograph of multiple banknotes and coins.



Figure 5. Photograph of €70.

Step 2b. Testing the photographs in two focus-group sessions

Following the six test interviews, we tested the remaining photographs in two focus-group sessions. During recruitment at an activity centre for older adults, multiple participants expressed a desire to share their associations with the photographs, and therefore we decided to test the associations of participants in two focus-group sessions rather than multiple individual interviews. In all, the focus-group sessions involved 11 older adults (with a mean age 65 years, ranging from 60 to 81 years). Four older adults participated in the first session, and seven participated in the second session.

During the focus-group sessions, we asked participants to reflect on a total of nine photographs. The participants found it difficult to identify with a photograph of two female tennis players (Figure 6), as they did not associate their own physical health with the photograph due to the younger age of the tennis players. We therefore decided that the photograph was not suitable for further study, and we replaced it with a photograph depicting a similar situation (older adults playing walking football (Figure 7)). We tested the new photograph during the second focus group.

With regard to the second part of the interview, a discussion emerged amongst the participants concerning the use of the phrases ‘control over health’ and ‘influence on health’.



Figure 6. Photograph of two female tennis players.



Figure 7. Photograph of older adults playing walking football.

Following this discussion, participants noted that the use of ‘control over health’ was easier to understand than ‘influence on health’.

Step 2c. Pre-testing the interview with two older adults individually

After testing the photographs during Steps 2a and 2b, we decided on a final selection of 10 photographs, based on the associations of the participants, as well as on the suitability of the photographs (see Table 1).

The next step involved pre-testing the interview with two older adults, who had been recruited at a retirement home. One of the interviews lasted 20 minutes, and the other lasted 45 minutes. The first participant (female, 71 years of age) described associations with physical, social or mental health when viewing the photographs. She found it difficult to reflect on the first photograph about mental health (Figure 8).

Oh, I think this man is very depressed. I don't really know what to say about this photograph (Participant 1, pre-test interview).

With regard to the assignment with the ship's helm, the first participant seemed to place the photograph of the helm on

Table 1. Final selection of photographs used in the study ($n = 10$).

Social health			
Mental health			
Physical health			
Money and place of residence			

situations that were important to her, and not specifically on situations over which she experienced having control. When the interviewer explained the assignment again, she stated that she did not really understand how one could gain control over one's health and that she had trouble understanding the question.

The second participant (female, 74 years old) expressed associations with all of the photograph-concerning aspects of physical, social and mental health, and reported having no trouble reflecting on them. During the assignment with the ship's helm, she placed the photograph of the helm on situations over which she perceived having control (e.g. going to exercise classes to meet new people and reduce loneliness). The only photographs over which she did not perceive having control were those relating to mental health (Figure 8 and 9).

I do not know if I control my mental health. I try to, because of problems with my family, but I think it's very hard (Participant 2, pre-test interview).

Although the first participant in the pilot interviews expressed having difficulty reflecting on the photograph relating to mental health and the assignment with the ship's helm, we decided to make no further adaptations, as the second participant in the pilot interview and all focus-group participants

indicated that they understood the assignment with the ship's helm and had no trouble reflecting on the photograph. Following discussion with the research team, however, we decided to add a test photograph (Figure 10), to be used before the start of the interview to help participants understand the purpose of the (method. When showing the test photograph, we would ask the introductory question (as described under Step 2b), in order to ensure that the method would work throughout the interview.

Phase 3. Execution of the Main Study

Step 3a. Recruitment and selection of participants for the main study

The participants for the main study were recruited in low SES neighbourhoods, and were included when above 60 years of age. Our study was designed to include older adults of low SES (i.e. low educational level and limited financial possibilities); however, given the sensitivity of the latter topic, we decided to ask questions about their educational level, former occupation and financial status at the end of the interview, rather than at the start of the interview. It was hoped that, at the

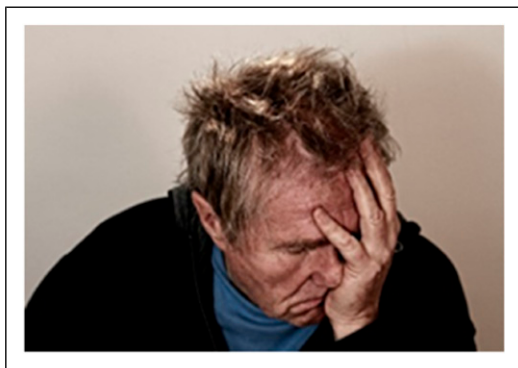


Figure 8. Photograph about mental health one.

end of the interview, the participants would feel sufficiently safe with both the situation and the interviewer that they would feel comfortable answering questions about their educational level, former occupation and financial status.

Multiple methods were used to recruit participants. Firstly, we made use of a recruitment drive for a health-promotion intervention targeting residents in a low SES neighbourhood through door-to-door interviews. Residents who declined to participate in the intervention were asked to participate in the current study. This process yielded five participants. Secondly, organisations working with older adults of low SES (e.g. sports centres and foundations for older adults) were asked to invite their members to take part in our study. This yielded an additional 10 participants. Finally, we used snowball sampling (Ghaljaie et al., 2017). After each photo-elicitation interview, the participant was asked to note any other older adults in their network who might be interested in participating in the study. This method yielded another four participants, resulting in a total of 19 older adults.

The average age of the participants was 77 years ($SD = 7.9$), ranging from 61 to 90 years. The majority of the participants were female ($n = 12$). Educational level was divided in three categories, based on the classification criteria applied by Statistics Netherlands (2016): low ($n = 11$), middle ($n = 8$) and high ($n = 0$).

Step 3b. Execution of the main study

The Medical Ethical Committee of the University Medical Centre Groningen granted exemption from ethical review, given the minimal burden that it imposed on the participants (METc2016.498). All of the participants gave written informed consent to participate in the study. The photo-elicitation interview started with an introduction of the interviewer and the participant, after which the participant was asked for consent to audio-record the interview. Before the start of the interview, the participant received information about the duration of the interview and was invited to talk about 10 photographs depicting situations in ordinary life situations. The interviewer also noted that full information

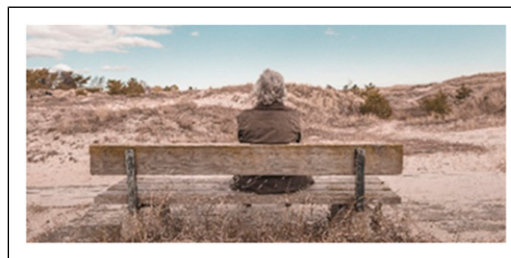


Figure 9. Photograph about mental health two.

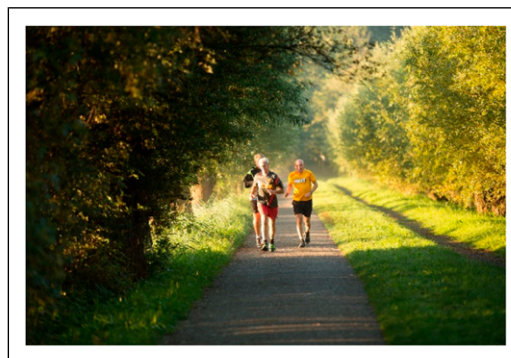


Figure 10. Test photograph.

about the study would be provided after the interview was finished. The decision to debrief participants about the purpose and topic of the study after the interview was intended to avoid influencing the participants' associations about health at the start of the interview.

During the first part of the interview, the use of photographs facilitated participants to share memories and reflections related to their health and the health status of their social network. The photographs about mental and social health triggered the most emotions, including happiness and joy, as well as sadness and frustration (e.g. due to family discord or the loss of a loved one). We observed that negative emotions tended to overwhelm some participants. For example, after reflecting on the photographs relating to mental and social health, two participants continued to talk about their sadness and anger throughout the remainder of the interview. During one interview, the interviewer paused the interview for approximately 10 minutes to allow the participant to recover. During this pause, the interviewer offered mental support to help the participant process her emotions. Thereafter, the loss of her partner did not seem to affect the discussions about the other photographs. During some interviews, it was necessary to refocus the conversation back to the topic of physical, social or mental health by asking one of the follow-up questions from the interview guide.

Even though participants were told at the start of the interview that there would be no right or wrong answers, some participants were unsure about their responses during the

interview. For example, some participants asked whether they had given the right answers when reflecting on the photographs.

Did I give the right answer? That you need to stay active? (Participant 3, photo-elicitation interview from the main study).

Only one participant indicated having difficulty understanding the researchers' choice of photographs and the purpose of the study. He seemed unwilling to wait for the debriefing in which, and he appeared to feel as if he was taking an examination, causing him to become suspicious about the purpose of the study. The interviewer's attempts to explain the purpose of the study and the choice of photographs were apparently unable to assuage the participant's feelings of suspicion.

Which psychologist collected all of these photographs to show to people? (Participant 1, photo-elicitation interview from the main study).

The second part of each interview consisted of the assignment with the photograph of a ship's helm. Although the intent of this photograph was explained clearly, the assignment turned out to be too abstract for most participants. Almost all of the participants placed the photograph of the ship's helm on photographs depicting situations that they considered important, instead of those over which they perceived having control. In addition, participants seemed to be unaware of the possibility of having control over certain aspects of health.

I did not know my mental health was something I could control (Participant 9, photo-elicitation interview from the main study).

Although most of the participants did not seem to understand the purpose of the assignment, it did provide additional insight into their self-management abilities with regard to physical, social and mental health. We observed that most of the participants were self-managing their health without being aware that they were doing so. For example, they described going to exercise classes, inviting friends for a cup of tea and talking with other people when they encounter mental health problems. All of these activities can be regarded as self-management health strategies. These strategies emerged as the participants reflected on the photographs, as well as in the conversation during the second part of the interview.

During the interviews, it became apparent that the participants did not always understand the metaphor of the ship's helm as a symbol for having control over health. We therefore advise caution in drawing any conclusions about the results of this assignment.

Step 3c. Evaluation of the study

At the end of the interview, participants were invited to reflect on the photo-elicitation method, to discuss experiences and

thoughts and to share their opinions on this method. All of the participants, including the one who had exhibited suspicion, gave positive feedback and described the use of photos as an enjoyable, interesting and pleasant experience. Moreover, they reported that the use of photographs had made it easier to talk about health.

You know what you need to talk about. It helps with the conversation (Participant 4, photo-elicitation interview from the main study).

One participant described that, during the interview, he had thought about health in ways that he had before considered, and that he learned from the experience.

I had never thought about health this way before. I have the idea that I will take something away from this experience (Participant 6, photo-elicitation interview from the main study).

Not all of the reactions were this positive. Two participants described to find the method challenging and the need for logical thinking, especially for the second part of the interview.

If you don't think logically, you can't finish the interview (Participant 2, photo-elicitation interview from the main study).

Evaluation of the method

Based on our experiences (as described in connection with the development, testing and execution of the study), we identified a number of strengths and limitations of the researcher-driven photo-elicitation method. In addition, we have ascertained several ethical considerations that should be taken into account when using this method with older adults of low SES.

Strengths

Given the current scarcity of knowledge concerning the processes used in researcher-driven photo-elicitation studies, we developed a systematic research strategy that helped us to develop, test and execute our photo-elicitation study in a structured manner. We identified three particular strengths of this study. Firstly, the systematic description of the research process ensured its transparency, thereby increasing the reliability of the study in general, while enhancing the possibility of replication (Aguinis & Solarino, 2019). Secondly, the photo-elicitation interview was developed in close collaboration with the target group and professionals working with the target group, thus ensuring the effectiveness of this form of triangulation. In other words, the use of suitable photographs allowed us to obtain a better understanding of positive health perceptions, experiences and behaviours of participants, as they were able to relate to the situations depicted in the photographs.

A third strength of this study is that the method was evaluated positively by the participants, thus indicating that photographs can facilitate conversations about positive health during interviews. As noted above, the photographs helped at least one participant think about health in a different way, and several noted that the photographs had made it easier to talk about health. Photo-elicitation might therefore be more suitable as a means of interviewing this target group, as compared to more conventional oral or written methods.

Limitations

Despite the clear strengths of the method, it should be acknowledged that the choice of photographs is crucial, as it affects the process and outcomes of the research (Padgett et al., 2013). Although the photos were selected with great care, and although they did indeed address various aspects of positive health, it is quite possible that we missed certain perceptions that participants might have had with regard to health. In future studies using participant-driven photo-elicitation, it could be informative to investigate whether this strategy might reveal different or additional positive health perceptions.

Another limitation concerns the use of the assignment with the ship's helm, for a metaphor misunderstood by most participants of the main study, even though most of the participants in the test phase had no difficulty understanding the assignment. This type of assignment apparently calls for more extensive testing, in order to determine its usability. In general, it will remain difficult to assess the usability of relatively abstract tasks in research involving older adults of low SES. For example, Flinterman et al. (2019) demonstrate that participants from this target group often misinterpret tasks of higher cognitive nature (e.g. prioritisation). The use of visual tasks as metaphors might cause difficulties for this target group thus calls for sufficient testing before they are included in a study.

Despite the fact that information about the method was given at the start of the interview, and despite the assessment of the method by means of the test photograph, some participants continued to ask whether they had given the right answers throughout the interview. This may indicate that some participants did not fully understand what was expected from them, or that they felt the need to answer in a socially desirable way. It therefore seems difficult to inform participants properly and to avoid framing thoughts of participants in certain directions before the start of the interview. Future researchers should be aware of this and test the materials to be used with the target group before the execution of the study to find the optimal way of informing and briefing participants in photo-elicitation interviews while minimising risk of framing.

The present study only explored the suitability of researcher-driven photo-elicitation techniques in research involving older adults of low SES, and therefore we are unable to make any comparisons with other methods that have been used with this target group. Future research could explicitly

compare researcher-driven photo-elicitation to other research methods within the context of older adults of low SES, in order to assess whether this technique indeed does generate more information than other methods.

Ethical considerations

In addition to current ethical laws and regulations that apply to scientific research, several specific ethical considerations should be taken into account when executing researcher-driven photo-elicitation studies with older adults of low SES. These considerations have to do with the extent to which the purpose of the study can be understood by participants, the processing of personal data and the skills of the interviewers. All information about recruitment, the purpose of the study the procedure, data collection and processing of the data should be as clear as possible for members of the target group, as should the information provided during briefing and debriefing. Moreover, it is important to allow sufficient time for any questions that participants might have. Interviewers should also possess specific skills, including the ability to answer questions in a comprehensible manner and to make participants feel confident in talking and reflecting freely when describing the photographs. They should also be sensitive to the needs of participants (e.g. the need for additional information or emotional support). Advanced assessment of these specific ethical aspects (i.e. clarity of information tested with potential participants) is therefore advised, as is the provision of training in these specific skills for interviewers.

Recommendations

This article is intended provide a research strategy and to enhance understanding concerning the research process, strengths and limitations of photo-elicitation as a method of research amongst older adults of low SES. Based on our experiences with this method, we have formulated three main recommendations for future studies involving the use of researcher-driven photo-elicitation with older adults of low SES.

1. **When using researcher-driven photo-elicitation, work closely with members of the target group throughout the research process.** To ensure that photographs call up associations about the intended topic of the study, we recommend cooperating with the target group throughout the entire research process, but especially during the selection of photographs. This increases the likelihood of using visual tools that are well suited to the experiences, perceptions and reality of the target group.
2. **Any doubts concerning the adequacy of photographs or assignments for the target group call for additional testing.** Despite the careful testing of our

photographs, the design of the interview and the assignment with the ship's helm with the target group, some participants in the main study did not understand that assignment. Future researchers using this method should take the time to conduct a thorough test of all photographs and potential assignments (with additional testing in case of conflicting results) before executing the main study.

3. **Find a good balance between informing participants properly and avoiding the possibility of framing the associations of participants before the start of the interview.** Although participants should obviously be properly informed about the purpose and process of the study, it is also crucially important not to influence the ways in which participants think about the photographs prior to the actual interview. It is therefore important to identify the best way to inform participants about the study, thereby ensuring that they understand what the study is about, while preserving their ability to reflect on the photos autonomously.

Conclusion

In order to explore the positive health perceptions of older adults of low SES, we developed a researcher-driven photo-elicitation study according to a systematic, step-wise research strategy. The research strategy consisted of three phases (development, testing and execution) and a total of nine steps. The use of researcher-driven photo-elicitation is a powerful tool to generate insight into positive health perceptions and experiences of older adults of low SES. In addition, photo-elicitation proved to be a facilitating method, not only the conversation between interviewer and participant but also with regard to the participants' reflections about health, possibly revealing greater insights. All of our participants evaluated the method positively.

Based on our experiences during this process, we have described strengths, limitations and recommendations for future studies using photo-elicitation with this target group. We recommend that researchers undertaking such studies should work closely with members of their target groups throughout the development and testing of the interviews. We further recommend that future researchers should thoroughly test all photographs, assignments, procedures and briefings with members of the target group, in order to increase the reliability of the study and avoid possible misunderstandings.

Additional research is needed in order to investigate the validity of using abstract tasks involving photographs (e.g. the assignment with the photograph of the ship's helm as a metaphor for having control) with this target group. The usefulness of the method depends on the development and testing phase of the study. In our view, photo-elicitation interviews offer a suitable method for interviewing older adults of low SES. We hope that the research strategy and recommendations that we described will inspire and support other researchers considering this method.

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References

- Aguinis, H., & Solarino, AM (2019). Transparency and replicability in qualitative research: The case of interviews with elite informants. *Strategic Management Journal*, 40(8), 1291–1315. <https://doi.org/10.1002/smj.3015>
- Baker, TA, & Wang, CC (2006). Photovoice: Use of a participatory action research method to explore the chronic pain experience in older adults. *Qualitative Health Research*, 16(10), 1405–1413. <https://doi.org/10.1177/1049732306294118>
- Bates, EA, McCann, JJ, Kaye, LK, & Taylor, JC (2017). "Beyond words": A researcher's guide to using photo elicitation in psychology. *Qualitative Research in Psychology*, 14(4), 459–481. <https://doi.org/10.1080/14780887.2017.1359352>
- Bugos, E, Frasso, R, FitzGerald, E, True, G, Adachi-Mejia, AM, & Cannuscio, C (2014). Practical guidance and ethical considerations for studies using photo-elicitation interviews. *Preventing Chronic Disease*, 11, E189. <https://doi.org/10.5888/pcd11.140216>.
- Copes, H, Tchoula, W, Brookman, F, & Ragland, J (2018). Photo-elicitation interviews with vulnerable populations: Practical and ethical considerations. *Deviant Behavior*, 39(4), 475–494. <https://doi.org/10.1080/01639625.2017.1407109>
- Dibartolo, MC, & McCrone, S (2003). Recruitment of rural community-dwelling older adults: Barriers, challenges, and strategies. *Aging & Mental Health*, 7(2), 75–82. <https://doi.org/10.1080/1360786031000072295>
- Federman, AD, Sano, M, Wolf, MS, Siu, AL, & Halm, EA (2009). Health literacy and cognitive performance in older adults. *Journal of the American Geriatrics Society*, 57(8), 1475–1480. <https://doi.org/10.1111/j.1532-5415.2009.02347.x>
- Flinterman, F, Bisscheroux, P, Dijkema, P, den Hertog, F, de Jong, M, Vermeer, A, & Vosjan, M (2019). Positieve gezondheid en gezondheidspercepties van mensen met een lage SES. *Tijdschrift Voor Gezondheidswetenschappen*, 97(3), 96–105. <https://doi.org/10.1007/s12508-019-0232-8>

- Ghaljaie, F, Naderifar, M, & Goli, H (2017). Snowball sampling: A purposeful method of sampling in qualitative research. *Strides in Development of Medical Education*, 14(3), 1–4. <https://doi.org/10.5812/sdme.67670>
- Gosselink, & Myllykangas (2007). The leisure of older U.S. women living with HIV/AIDS. *Health Care for Women International*, 28(1), 3–20.
- Hall, J, & Mitchell, M (2008). Exploring student midwives creative expression of the meaning of birth. *Thinking Skills and Creativity*, 3(1), 1–14. <https://doi.org/10.1016/j.tsc.2007.09.004>
- Hanson, S, Guell, C, & Jones, A (2016). Walking groups in socioeconomically deprived communities: A qualitative study using photo elicitation. *Health & Place*, 39, 26–33. <https://doi.org/10.1016/j.healthplace.2016.02.007>.
- Harper, D (2002). Talking about pictures: A case for photo elicitation. *Visual Studies*, 17(1), 13–26. <https://doi.org/10.1080/14725860220137345>
- Huber, M, Knottnerus, JA, Green, L, van der Horst, H, Jadad, AR, Kromhout, D, Leonard, B, Lorig, K, Loureiro, MI, van der Meer, JW, Schnabel, P, Smith, R, van Weel, C, & Smid, H (2011). How should we define health? *BMJ (Clinical Research ed.)*, 343, d4163. <https://doi.org/10.1136/bmj.d4163>
- Johnsen, S., May, J., & Cloke, P. (2008). Imag(in)ing ‘homeless places’: Using auto-photography to (re)examine the geographies of homelessness. *Area*, 40(2), 194–207. <https://doi.org/10.1111/j.1475-4762.2008.00801.x>
- Keller, C, Fleury, J, & Rivera, A (2007). Visual methods in the assessment of diet intake in Mexican American women. *Western Journal of Nursing Research*, 29(6), 758–773. <https://doi.org/10.1177/0193945907304471>
- Leonard, M, & McKnight, M (2015). Look and tell: Using photo-elicitation methods with teenagers. *Children's Geographies*, 13(6), 629–642. <https://doi.org/10.1080/14733285.2014.887812>
- McHenry, JC, Insel, KC, Einstein, GO, Vidrine, AN, Koerner, KM, & Morrow, DG (2015). Recruitment of older adults: Success may be in the details. *The Gerontologist*, 55(5), 845–853. <https://doi.org/10.1093/geront/gns079>
- McMurdo, MET, Roberts, H, Parker, S, Wyatt, N, May, H, Goodman, C, Jackson, S, Gladman, J, O’Mahony, S, Ali, K, Dickinson, E, Edison, P, & Dyer, C (2011). Improving recruitment of older people to research through good practice. *Age and Ageing*, 40(6), 659–665. <https://doi.org/10.1093/ageing/afr115>
- Meo, AI (2010). Picturing students’ habitus: The advantages and limitations of photo-elicitation interviewing in a qualitative study in the city of Buenos Aires. *International Journal of Qualitative Methods*, 9(2), 149–171. <https://doi.org/10.1177/160940691000900203>
- Mody, L, Miller, DK, McGloin, JM, Freeman, M, Marcantonio, ER, Magaziner, J, & Studenski, S (2008). Recruitment and retention of older adults in aging research. *Journal of the American Geriatrics Society*, 56(12), 2340–2348. <https://doi.org/10.1111/j.1532-5415.2008.02015.x>
- Novek, S, Morris-Oswald, T, & Menec, V (2012). Using photovoice with older adults: Some methodological strengths and issues. *Ageing and Society*, 32(3), 451–470. <https://doi.org/10.1017/S0144686X11000377>
- Padgett, DK, Smith, BT, Derejko, K-S, Henwood, BF., & Tiderington, E (2013). A picture is worth . . . ? Photo elicitation interviewing with formerly homeless adults. *Qualitative Health Research*, 23(11), 1435–1444. <https://doi.org/10.1177/1049732313507752>
- Pain, H (2012). A literature review to evaluate the choice and use of visual methods. *International Journal of Qualitative Methods*, 11(4), 303–319. <https://doi.org/10.1177/160940691201100401>
- Prevo, L, Stessen, K, Kremers, S, Wassenberg, M, & Jansen, M (2018). Shining light inside the tunnel: Using photovoice as a strategy to define the needs for health promotion among families of low socioeconomic status. *International Journal of Qualitative Studies on Health and Well-Being*, 13(1), 1542909. <https://doi.org/10.1080/17482631.2018.1542909>
- Schwengel, A, Linares, DE, Gálvez, P, Adamson, B, Aguayo, L, Bobitt, J, Castañeda, Y, Sebastião, E, & Marquez, DX (2015). Developing a culturally sensitive lifestyle behavior change program for older latinas. *Qualitative Health Research*, 25(12), 1733–1746. <https://doi.org/10.1177/1049732314568323>
- Vigurs, K, & Kara, H (2017). Participants’ productive disruption of a community photo-elicitation project: Improvised methodologies in practice. *International Journal of Social Research Methodology*, 20(5), 513–523. <https://doi.org/10.1080/13645579.2016.1221259>
- Wang, C, & Burris, MA (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health Education & Behavior*, 24(3), 369–387. <https://doi.org/10.1177/109019819702400309>
- World Health Organization (2018). Social Determinants of Health. *World Health Organization*. https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1.