

JURNAL ILMU DAN TEKNOLOGI KESEHATAN

Vol 11, No 2, March 2024

ISSN: 2338-9095 (Print)

ISSN: 2338-9109 (online)

A Modified Photovoice as A Strategy in The Selection of Healthy Snacks in SMPN Satu Atap LIK Layana

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Article history

Posted, Sept 15th, 2023

Reviewed, Mar 19th, 2024

Received, Mar 30th, 2024

ABSTRACT

Snacks are foods that are mostly found and also must be present in school children. The safety of snacks in the school environment needs to be considered because it will have a negative impact if its cleanliness and safety are not guaranteed. Photovoice is a photo that can describe a phenomenon and lead to awareness and concern. The research aimed to analyse the impact of a modified photovoice as a strategy for choosing healthy snacks for SMP Negeri Satu Atap students. This research uses a qualitative method with a case study design. The total number of informants was 13, determined by purposive sampling and data collection techniques using observation sheets, documentation, and in-depth interviews. This research indicates that a modified photovoice impacts students' choice of snacks. Through the photovoice method, they can understand how to choose healthy snacks and make decisions to bring lunch to reduce the consumption of unhealthy snacks. The selection of snacks using the photovoice method is easy to accept and effective, relieves boredom, and is fun. The knowledge about healthy snacks still needs to improve, but after the implementation of photovoice, students' learning has increased, and they understand more about healthy snacks. So, the conclusion mentioned that students buy the snacks they want because they are less exposed to information about healthy snacks, and someone with good nutritional knowledge will affect snack habits. Suggestions for Satu Roof Middle School include providing service facilities such as nutrition education for all students about the safety of choosing snacks.

Keywords: *Healthy snacks, Photovoice method, Knowledge, School*

ABSTRACT

Jajanan adalah makanan yang banyak ditemukan dan tidak terlepas dari anak sekolah. Keamanan jajanan di lingkungan sekolah perlu diperhatikan karena makanan jajanan akan berdampak negatif

jika tidak terjamin kebersihan dan keamanannya. *Photovoice* merupakan hasil foto yang menggambarkan suatu fenomena serta menumbuhkan kesadaran dan kepedulian. Tujuan penelitian ini adalah menganalisis pengaruh *a modified photovoice* sebagai strategi dalam pemilihan jajanan sehat pada siswa SMP Negeri Satu Atap. Penelitian ini menggunakan metode kualitatif dengan rancangan studi kasus. Informan dalam penelitian ini sebanyak 13 orang, ditentukan berdasarkan teknik *purposive sampling*, teknik pengumpulan data berupa observasi, dokumentasi dan wawancara mendalam. Hasil penelitian menunjukkan bahwa terdapat pengaruh *A modified photovoice* dalam pemilihan jajanan pada siswa, melalui metode *photovoice* siswa memahami bagaimana pemilihan jajanan sehat serta membuat keputusan untuk membawa bekal agar mengurangi konsumsi jajanan tidak sehat, pemilihan jajanan menggunakan metode *photovoice* mudah diterima, efektif, mengatasi kebosanan, serta menyenangkan. Pengetahuan mengenai jajanan sehat masih rendah, namun setelah pelaksanaan *photovoice* pengetahuan siswa meningkat dan lebih memahami mengenai jajanan sehat. Sehingga kesimpulannya adalah siswa membeli makanan jajanan yang diinginkan karena kurang terpapar informasi mengenai jajanan sehat. Saran bagi Sekolah SMP Negeri Satu Atap agar menyediakan fasilitas pelayanan seperti edukasi atau pendidikan gizi keseluruhan siswa tentang keamanan pemilihan makanan jajanan.

Kata Kunci: Jajanan sehat, Metode *Photovoice*, Pengetahuan, Sekolah

INTRODUCTION

Snacks are ready-to-eat food that is easy to find with a variety of menus and different variations so that they can attract other people to buy them. According to, there are 600 million cases of foodborne illness yearly, causing 1 in 10 people to get sick after consuming contaminated food. Based on the results of the supervision of School Children's Snacks (PJAS) by the Food and Drug Supervisory Agency (BPOM) testing of 602 PJAS samples, the results of unqualified PJAS samples were 121 (20.10%). The five most unqualified PJAS tests are *Escherichia coli*, cyclamate levels, formalin, borax, colouring levels and *Staphylococcus sp. bacteria*. Based on the results of the target sampling of food products in Central Sulawesi, 62 samples

(14.39%) still need to meet the requirements. Then, in 2021, 28 PJAS product samples were tested, and 8 (28.57%) samples were discovered not meeting the requirements. Research conducted in 2018 regarding PJAS did not meet the criteria, and nine snack food samples in the form of meatballs were found to be positive for containing formaldehyde.

Based on observations at several Middle and High Schools in Palu City, it is known that they have a variety of snacks. The interviews with several students found that students needed to learn what constitutes healthy food and food that is dangerous to health. Healthy and unhealthy snacks in the school environment influence children's snack

choices. A study using the *photovoice method* to examine gender sensitivity found that *photovoice* could change a person's actions and attitudes regarding a problem. *Photovoice* is research with action that can tell a portrait, describe a phenomenon, and raise awareness and concern for life's problems. *Photovoice* can help express views, thoughts and ideas through photos.

Steps for implementing photovoice: 1) Selected informants; at this stage, the researcher conducted school visits to obtain informants for this research. 2) Introduction to the photovoice method, 3) Taking photos: when taking photos, the camera used belongs to the informant, and the informant is free to be creative in taking photos according to his wishes. 4) Discussing photos: the photos taken by the informant are then discussed in two stages. In the first stage, the photos are collected and then displayed. The discussion technique in the first stage has 5 question points: 1) What do you see? 2) What happened? 3) How is it related to health? 4) Why does this problem or condition occur? and 5) What can we do? In the second stage, the photos are displayed again, and the researcher explores in-depth information about the photos. The questions discussed can be developed from the 5

points in stage one to achieve the same understanding in this research.

Based on the description above, the problem formulation in this research is "Is there an influence of a *modified photovoice* as a strategy in choosing healthy snacks among students at the One Roof Public Middle School in the Layana Small Industry Environment (LIK)?" This research aims to analyse the effect of *A modified photovoice* as a strategy for choosing healthy snacks for students.

METHOD

The research method used in this research is qualitative research with a case study approach. Qualitative research is a method used to explore and understand the meaning that comes from social or humanitarian problems. Case studies are in-depth research about individuals or groups over a certain period to obtain complete and in-depth descriptions from informants by producing data that will be analysed to create theories (Hardani, 2020). This research was conducted at Layana One Roof Public Middle School in August 2023.

Research Informant

In this research, 13 informants were used, consisting of 10 primary informants and three additional informants. Informants have

a significant role as individuals with information about the studied problem. Additional informants can also be used so that the information obtained is more complete and that the information they have matches research needs. Determining informants in this study used purposive sampling. The technique for determining informants was adjusted to the following criteria: 1) One Roof LIK Layana Public Middle School students aged 13 - 15. 2) Willing to participate in the entire research series, 3) Students often/ever buy snacks.

Data collection

Data collection techniques in qualitative research are divided into primary data, namely data obtained by in-depth interviews, observation, and documentation,

and secondary data in health profiles, BPOM annual reports, and general school descriptions.

Data processing

Data processing is divided into three stages. The first is data reduction, which simplifies data to provide an overview of the research focus. The next stage, data display, includes arranging the collected data to obtain a more detailed and comprehensive picture. Lastly, conclusions are drawn.

Data Validity

In this research, the data's validity is tested by triangulation. Triangulation in credibility testing is defined as checking data from various sources, techniques and time (Abdussamad, 2021).

RESULTS AND DISCUSSION

In this research, the number of informants was 13 people who lived in the Layana Indah sub-district.

Table 1. Characteristics of informants based on name, age, gender, status and information

| No. | Name | Age | Gender | Status | Information |
|-----|------|-----------------|--------|---------|----------------|
| 1. | FM | 14 years | P | Student | Main informant |
| 2. | CS | 15 years | P | Student | Main informant |
| 3. | IU | 13 years old | P | Student | Main informant |
| 4. | S | 14 years | P | Student | Main informant |
| 5. | NU | 14 years | P | Student | Main informant |
| 6. | A.M | 15 years | P | Student | Main informant |
| 7. | A | 14 years | P | Student | Main informant |
| 8. | S.A | 15 years | P | Student | Main informant |
| 9. | P.A | 13 years old | P | Student | Main informant |
| 10. | R.A | 13 years old | P | Student | Main informant |

| | | | | | |
|-----|-----|--------------|---|-------------------|-----------------------|
| 11. | MI | 49 years old | P | Canteen processor | Additional informants |
| 12. | TM | 30 years | P | Canteen processor | Additional informants |
| 13. | A.M | 38 years old | L | Siomai trader | Additional informants |

This research was carried out at One Roof State Middle School, which was carried out using in-depth interviews with the primary informants, namely ten students and additional informants, namely three canteen managers. In this research, *photovoice* was carried out according to the stages:

introduction of photovoice, taking photos and discussing the results. There are several photos taken from each canteen and siomai seller to be addressed, and each image will be discussed separately, starting from the canteen in the school area, siomai sellers and canteens available outside the school.

Analysis of the influence of *A modified photovoice* as a strategy for selecting healthy snacks School Canteen

What do you see regarding the following results of the photoshoot in the school canteen?



"In my opinion, this aunt's canteen and the snacks are pretty clean, sis, only the flies and the wrapper are okay, and I buy rice with auntie" (A)

"It's pretty clean, sis. The bakwan and the sausages are still closed, and that's the way it is. When many people buy it, it opens. When the kids don't buy it, it's closed straight away. I often eat rice here, the sausages are also normal" (RA)

"What I saw here was that there were flies in the sauce, but this is usually closed because I often eat napkin, so I saw it" (PA)

The canteen in the school area is in an excellent category, as seen from the closed snack storage area and the food processor who always pays attention to the snacks they sell. Based on the in-depth interviews, the results were obtained that according to students, the snacks in the school canteen were considered healthy snacks because the snacks sold in the form of bakwan and sausages were always covered. Interviews

were conducted with students regarding **what happened?** as follows:

"I want to tell you that sometimes the table is not clean because people are like spilling things there. I often wipe the table when I eat rice, and there are flies inside too" (CS)

"I'm the same, sis. I think the inside is a bit dirty, and then I once bought a drink, there were noodles inside, maybe the glass was used after I used it to make noodles and then I used it again to make my drink, it tasted like noodles tasted like that" (S)

"The cat was climbing up and down on the inside table. It was hard to get rid of. It was bothering me on the table here and there; I once ate there, but my aunt broomed it so the ashes flew around, but only that one time" (FM)

"Sis, if there is a table inside for eating rice, there are usually lots of flies inside that table, then the trash from the drink wrappers is just thrown inside so it looks like it's scattered inside because there's no trash can, then I never got it. "You can get flies here in the peanut sauce, and there's a cat inside, sis. It often bothers you" (SA)

"From what I see, Auntie's canteen is always neat and clean from the outside, but inside there are lots of chamber wrappers" (PA)

Almost all students have experienced incidents of being disturbed by animals while eating. Students also said that waste from drink *sachet wrappers* was scattered in the canteen. This was done because there were many buyers during break times. Apart from that, one of the students experienced that the drink he bought contained noodles. It is suspected that the glass used to make the drink was a glass used to make noodles. Interview results regarding **How is this related to Health ?** as follows:

"It's still safe, bro because the bakwan and sausages are a good place to store them" (RA)

"Not dangerous for health" (SA, PA, FM)

"It's safe, sis" (A, AM, NU, S, IU, CS)

The snacks in the school environment are not dangerous for health because students rarely see snacks infested with flies. The yellow rice they buy is safe, but if you eat it at the dining table, students will be disturbed by animals. The results of interviews conducted with students regarding **why this problem or condition can occur.** Are as follows:

"If it's plastic for Tahambur drinks, bro, because during the break, lots of kids order drinks, it gets so busy then there 's a rush, and there's a rush, especially since the trash can is only outside, so it's inside Tahambur" (SA)

" And in my opinion, the drink wrappers were done on purpose because later, when they came home, they would clean them" (A)
"I think the wrapping was left on purpose, but if the cat were thrown away, it would still come up without any other event" (AM)

"That's right, then go home and clean the wrapping" (FM)

The condition that occurs is cat disturbance, which continues to happen because the canteen processor ignores this; apart from that, no way can be done, so this continues to occur. Another thing that happened was the drink wrappers that were scattered around. This happened because of the canteen processor's deliberate intention, and they would be cleaned up when it was time

to go home. The results of the interview regarding **what we can do** for students are as follows:

"If I reduce it a little, but not too much because it's still safe" (RA)

"I still buy it, but if I take the sausage sauce, I just have to close the place so there won't be any more flies" (FM)

"If I don't, it will be reduced a lot because the bakwan and sausages there are always closed, so it's safe" (SA)

Outdoor Canteen

What do you see? What are the following results of the photocopier in the canteen outside the school?



"From here, I saw that the sauce jar was not closed. There were flies. I told you, just put the lid on the sauce and put it on the round tofu" (FM)

"Um, from here what I see is that the tablecloths are dirty, the kitchen is dirty too, the round tofu is never closed, even though there are lots of flies" (A)

" Sis, you can see from the kitchen that it's not clean, the tablecloth is also dirty, there are flies in the chilli sauce dish, and the wall near the stove is also filthy" (AM)

Based on the results of the interviews conducted, it was found that, on average,

Students will still buy snacks in the canteen because they are considered safe for consumption, but when eating, students will look for a safe place, such as in an area outside the canteen; apart from that, one of the students will try to bring lunch.



from the photos, students said that these snacks were considered unhealthy snacks. This can be seen starting from the kitchen, which needs to be kept clean; the walls and tablecloths are dirty, and the snack storage area needs to be better.

The results of interviews conducted with students regarding **what happened?** As follows:

"That's what it's called. The drink in the green kettle has mosquito larvae in it. I usually ask for a drink, and then the noodle

boiled water is very yellow and never replaced, it's just added and never replaced, the first time I saw the peanut sauce had caterpillars in it" (FM)

"The sauce jar is usually washed and wiped on the tablecloth. I often see that the tablecloth has never been changed, sis" (IU)
"It's less hygienic now. In the past, it was clean, sis, but now the water for boiling noodles is never replaced, you know it's never closed, even though there's a road being built, it's covered in ashes" (A)

"When my auntie cooks noodles, she never changes the water, until the water becomes chalky until it becomes cloudy, once she changes it, then a little water remains, and then she adds it" (SA)

Students said that in class VII, the snacks sold in the canteen were still kept clean, but in class VIII, the condition of the canteen was the same as now, and the cleanliness was less maintained. Students admitted that they had experienced several incidents, including seeing mosquito larvae in drinking water containers, boiling noodle water, which never changed until the colour was very cloudy, catching caterpillars, and breaking ice cubes using a dirty sack.

Based on the results of interviews conducted regarding ***why this problem or condition can occur and how it is related to health n?*** as follows:

"Auntie knows, Sis, it's like she's aware of that and, but she doesn't care" (NU)

"I'm not very conscious, Sis, and I don't think I'm too dizzy either" (CS)

"Yes, sis, because I don't care about that" (IU, FM)

"Yes, it's dangerous, sis" (S, NU, FM, IU, CS, PA)

"Auntie knows the condition is like that but is too lazy to clean it; it's not healthy for the body" (SA)

"Not enough, not healthy" (A)

"Unhealthy, dangerous for health" (AM)

"Not good for our health" (RA)

Based on the interviews conducted with the primary informants, the results were: The dirty condition of the canteen is caused by a lack of concern from the snack processors, which results in such a messy kitchen that students think the snacks are dangerous or unhealthy for health. The results of interviews conducted with students regarding **what we can do** are as follows:

"I want to try not to buy there anymore, but slowly, basically, I want to try not to buy snacks there anymore" (FM)

"If I want to buy snacks there one less time, I'll just buy them in the canteen inside" (NU)

"I want to reduce it once until finally I can do it so I don't have to eat snacks there" (S)

The step that the students will take is to reduce the amount of snacks they buy in the canteen until they reach the stage of stopping their purchases. One student said he would bring provisions to reduce buying snacks in the canteen.

Interviews were conducted with students regarding the influence of snack selection after implementing the photovoice method.

As follows:

"It will have an effect, sis, especially since I already know, so it's like, eh, I'll change it later because my health is important" (RA)

"I think it's very influential, is because now I can choose healthy snacks to buy" (CS)

"I will change my attitude when I buy snacks, so before buying, I will first see if this snack is healthy or not, according to what healthy snacks should be" (S)

All students said that *photovoice* influenced the snacks they would choose later. This was because, through this method, students knew what healthy snacks looked like so that in the future, students would pay attention before buying and choosing healthy snacks according to their characteristics.

A modified photovoice in choosing healthy snacks among students

The analysis results show the influence of the photovoice method based on *the informant's* decisions in choosing snacks. It can be seen that selecting snack foods using the *photovoice method* is easy, *acceptable, effective, and fun, as well as overcoming boredom*. This research also shows that students better understand how to choose healthy snacks using the photovoice method in the future. *Students* can choose healthy snacks by looking at the characteristics of healthy snacks. This is because *photovoice* provides a direct picture of the condition of snacks available in the school environment so that students can express their views and thoughts through the photos. The results of this research can raise awareness among students and help them decide to reduce the consumption of snacks that are considered

unhealthy based on the characteristics of healthy snacks. The way that can be done is by bringing provisions. This will help students reduce their consumption of unhealthy snacks.

Breakfast is a morning eating activity that humans need. Breakfast habits for school children need to be considered to provide energy for the body so that children will easily accept learning material (Aini, 2019). Researchers concluded that the habit of not having breakfast causes students to buy snacks every day at break time. This was done by inviting their peers, including students who had breakfast, so they would go to the canteen together every break to buy snacks. The high contribution of snacks is caused by children needing breakfast, so they replace breakfast with snacks available in the school environment (Anggiruling, Ekayanti, Khomsan, 2019).

This aligns with research that the *photovoice learning method* can increase effectiveness and cooperation in investigating learning outcomes. Hence, the researcher believes that applying the photovoice method can positively and effectively influence students' knowledge (Putra, R., 2023). Based on research states that the *photovoice method* can provide a different learning atmosphere for students by providing varied learning

resources, so learning the *photovoice method* has the advantage of encouraging more active participation in the research process, not only being the object of research but also playing an active role in taking photos, identifying problems, and processes in decision making (Ulviatun, 2020). Research by Hidayah, Sarwoprasodjo, and Matindas (2020) states that the *photovoice method* provides benefits as a medium of information and practical solutions for solving problems. Researchers concluded that there was increased knowledge before and after using the *photovoice method*. This can be proven by students' understanding of choosing snacks using the *photovoice method* and reducing buying unhealthy snacks because this will impact health. Through *photovoice discussions*, students can change their attitudes and behaviour regarding food choices to become more aware of the importance of healthy food and be motivated to make better food choices. Research (Candace IJ et al., 2011) where the *photovoice project* in health promotion provides an excellent opportunity to apply and critique the usefulness of *photovoice methodology* to explore residents' perceptions of communities in four different environments.

One of the causes of significant improvement is memory, which significantly influences a person's success in learning. Several memory processes are entering impressions, storing impressions and producing (reproducing) impressions. This is in line with research (Ronald., 2020), which states that there is an increase in students' memory abilities by applying the *photovoice method* with memory abilities above the perfect average. So, researchers believe that using the *photovoice method* influences learning. This way, *photovoice* can be a powerful tool for changing students' views on healthy and unhealthy snacks, providing more profound understanding and personal reflection, and facilitating meaningful discussion and dialogue.

CONCLUSION

The *photovoice method* can be used to choose healthy snacks; *photovoice* is easy to accept, effective, overcomes boredom and is fun, and influences students' decision-making regarding healthy snacks; this is indicated by students willing to bring provisions and try to reduce buying snacks. Considered unhealthy.

ACKNOWLEDGEMENT

Thank you to the Principal of One Roof State Middle School for allowing researchers to conduct research with the

supervisors and examiners who have provided input and suggestions for improvement. All parties who have helped, prayed for, and supported the author so that this research can be completed should also be included.

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