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# "Are we saying every time you drink, you'll get cancer?" Lessons learned from a focus group study of communicating difficult-to-swallow health-risk information

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This essay explores lessons learned when conducting focus group interviews with participants exposed to novel health-risk messages. Focus group participants exposed to new health-risk information might be defensive, affecting the quality of the data collected. Hence, accounting for potential participant defensiveness is of great importance for researchers who are developing and testing these health-risk messages. In this essay, I identify two forms of defensiveness that emerged in my focus group study evaluating cancer warning labels on alcoholic beverages: (1) actively counterarguing the health-risk message and (2) repeatedly modifying the health-risk message. I also offer four "lessons learned" to improve health-risk message testing in qualitative research practice: (a) communicate with empathy, (b) use personal stories, (c) forewarn participants, and (d) offer a self-affirmation opportunity. Overall, this essay contributes to the development of a typology of defensive strategies that focus group participants may use when exposed to novel health-risk messages. Additionally, it provides a methodological framework for quarding the integrity of the data and climate of the focus groups. These insights are valuable for health communication researchers and practitioners interested in conducting focus groups to assess health-risk messages.

KEYWORDS

focus group, health-risk information, defensiveness, alcohol, cancer

# Introduction

Focus group interviews ("focus groups" herein), moderated discussions concerning participants' shared experiences (Tracy, 2024), are a vital qualitative tool for health communication researchers exploring perceptions of personally relevant health-risk information. They are especially useful for assessing potential product warning labels (cf. Cornacchione Ross et al., 2021; Greiner Safi et al., 2023; Ma et al., 2024). However, the health risks associated with some products (e.g., cigarettes) are more well-known and widely accepted among the general public than others (e.g., alcohol; Klein et al., 2020), leading to well-documented defensiveness among focus group participants (Kessels et al., 2010; Liberman and Chaiken, 1992). Defensiveness describes individuals' reactions to protect aspects of their self-concept when exposed to persuasive messages that they find threatening (Dillard et al., 2018; Van't Riet and Ruiter, 2013). Defensiveness can manifest in different ways, such as avoiding the threatening information, challenging it, or downplaying its personal relevance (Dillard et al., 2018; Fransen et al., 2015; Van't Riet and Ruiter, 2013). Such defensiveness might harm

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the quality of the data collected by affecting the climate of the focus group.

Methodologically accounting for potential defensiveness among focus group participants who are exposed to novel health-risk messages is essential for future health communication researchers, as new health risks will always emerge over time and require the development and testing of new risk messages and product warning labels. Yet, explicit guidance for addressing this issue when assessing messages pertaining to novel health risks via focus groups is limited. Drawing from my experience conducting a focus group study testing pictorial warning labels for alcohol-related cancer risk, I (the first author) explain encounters with participant defensiveness and offer methodological "lessons learned" for researchers and practitioners evaluating novel health-risk warning messages in focus groups.

# Defensiveness in focus groups

This focus group aimed to gather insights from alcohol consumers to inform the design of health warning labels to communicate the cancer risk of alcohol, a message that is difficult for alcohol consumers to swallow (May et al., 2021). Participants (n = 30) were those who self-reported being moderate and heavy drinkers, an audience for whom the pictorial warning labels would be personally relevant. Participants were not informed about the specific purpose of the focus group in advance. Many were not aware of the fact that alcohol is a risk factor for cancer prior to participating in the focus group, and thus some focus group participants reacted defensively (Ma and Ma, 2022). When some members of a focus group reacted defensively to the risk information, other focus group members were also more likely to express defensiveness.

Defensiveness first appeared as participants actively *counterargued* the health-risk message. For example, when I asked for their feedback to improve the design of the health warning label, participants expressed skepticism by noting a lack of connection between the image and the text asserting that alcohol *causes* cancer. As one participant (FG#6, P#1) questioned, "Are we saying every time you drink something, you'll get larynx cancer?... It's too strong, and it's not accurate, I believe." Another participant (FG#4, P#2) similarly stated, "I have trouble believing that drinking one beer a week is going to give me larynx cancer... What is the moderate amount of consumption versus the extreme amount of consumption that causes this problem?" These comments demonstrate that alcohol consumers actively contest the content of the message, a type of resistance that often occurs when the new information is not consistent with their existing beliefs (Fransen et al., 2015).

Defensiveness also appeared when participants repeatedly *modified the health-risk message* by referencing *excessive* drinking. For example, when I asked them to explain what they had seen in these warning labels, a participant (FG#2, P#2) stated, "This man is sick because of consuming alcohol or excessively consuming alcohol." Similarly, another participant (FG#3, P#2) said, "This old man is receiving treatment, so you know he has an issue. A lot of alcohol leads to what he's going through." These comments illustrate that participants associate health issues depicted in warning labels with heavy or excessive alcohol consumption, using it as a way to justify the presented message. This defensive stance is further evident in their suggestions to revise the warning labels. For instance, a participant

(FG#6, P#4) commented, "For the warning, they should be like: High alcohol causes oral cancer." These suggestions indicate a reluctance among participants to accept the idea that light or moderate drinking increases cancer risks; instead, they insist that only heavy drinking can lead to cancer.

In summary, these discussions underscore the challenge of communicating personally relevant, novel health-risk information, as participants contest and modify the warning content based on their pre-existing beliefs about the relationship between alcohol and health.

# Lessons learned: Addressing defensiveness in health communication focus groups

Encountering defensiveness from focus group participants provides a valuable learning opportunity for researchers to (re) consider how health risk messages (e.g., the cancer risks of alcohol) will be received by the broader public. Therefore, we ask the following questions – what lessons can be learned from defensiveness? And, how can researchers better address defensiveness in their future formative research? Insights from persuasion research may offer plausible strategies. Existing research has identified several approaches to addressing defensiveness, such as communicating with empathy (Shen, 2010, 2015), using personal narratives (Ma, 2024; Moyer-Gusé, 2008), forewarning message recipients (Clayton et al., 2022; Richards and Banas, 2015), and providing an opportunity to self-affirm (Harris and Napper, 2005; Iles et al., 2019). We can use similar strategies to better anticipate and address defensiveness in future qualitative research studies.

# Lesson #1: Communicate with empathy

First, we should *communicate with empathy*. Empathy refers the ability to adopt another person's perspective in order to understand their thoughts and share their feelings (Davis, 1983; Shen, 2010). It has been found to reduce psychological reactance—a motivational state when people perceive their freedom is being threatened or eliminated, such as when faced with threatening health-risk information (Shen, 2010, 2015).

In focus group discussions, empathy can be fostered when the moderator demonstrates an understanding of participants' situations and emotions and expresses genuine concern for their well-being (Håkansson and Montgomery, 2003). For example, at the beginning of the discussion, the moderator can acknowledge the potential discomfort by saying, "I understand this topic might be challenging, and I appreciate your willingness to share your thoughts." Such acknowledgement helps reassure participants that their opinions and emotions will be respected and valued. Throughout the discussions, the moderator should carefully choose language that is respectful and avoid any wording that might be perceived as accusatory or judgmental. The moderator can also frame questions about the health risk in ways that provoke empathy from participants and prepare participants to engage in a conversation about the health risk (see also Lesson #3 below). For example, the moderator could pre-empt participants' appraisals of health risk information by asking questions such as, "Why is it Ma et al. 10.3389/fcomm.2024.1478435

important for researchers to inform consumers about the health risks of the products they use?" or "What potential risks might everyday people face if warning labels are not included on potentially cancer-causing products?" These responses encourage perspective-taking and ask participants to consider the risks and importance of the premise of the focus group. This approach helps create a supportive environment where participants feel comfortable engaging with difficult conversations.

# Lesson #2: Use personal narratives

Second, we can *use personal stories* to connect with participants. Storytelling is a fundamental way of human communication, and it can help people make sense of the world and forge emotional connections with others (Hinyard and Kreuter, 2007; Ma et al., 2023). Extensive research has found that stories can effectively overcome persuasion resistance, such as counterarguing and reactance (Hasell et al., 2020; Ma and Nan, 2018; Niederdeppe et al., 2011).

In focus group discussions, sharing personal stories is a great way to connect with participants, convey empathy, and build trust (Maguire, 1998). For example, the moderator might share their experience upon first learning about health risks. In fact, I, like many others, was unaware of the cancer risk associated with alcohol until began working on this project, and I was shocked when I first learned about it. If I had shared my experience, it might have helped pre-empt participants' defensive reactions by establishing common ground. By recognizing that participants might have similar feelings of shock or disbelief, such storytelling also helps convey empathy and foster a more open, trusting environment.

# Lesson #3: Forewarn participants

Third, we can address potential defensiveness by *forewarning* participants that they will be exposed to challenging health topics and may experience negative thoughts and feelings. Forewarning is a component of inoculation theory, which suggests that defensive reactions can be lessened by preemptively informing people, allowing them to mentally prepare to engage with health-risk information (Clayton et al., 2022; McGuire, 1964; Richards and Banas, 2015).

In focus group discussions, one way of achieving this is by informing participants beforehand that the discussion might trigger feelings of defensiveness. For example, at the beginning of the discussion, the moderator might say, "Before we delve into the details, I want to acknowledge that the information we are about to discuss might evoke feelings of defensiveness." This clear statement can set the tone for what participants can expect. Another way is to share the risk information before the discussion. In our case, participants knew that the study was about their knowledge about the health risks of alcohol, but not specific to cancer risks. The first section of the discussion sought to probe their knowledge about health risks. It turned out that most of them were not aware of the risk of cancer. I became the first to tell them that alcohol increases cancer risks. You can imagine how shocked they were when they heard about this information. If I had shared the alcohol and cancer risk information before the discussion, this might have allowed participants to digest the information and prepare for the discussion, potentially reducing the defensiveness.

# Lesson #4: Offer a self-affirmation opportunity

Lastly, we can provide participants with the opportunity to *self-affirm* by reflecting on their important values or personal strengths. Self-affirmation theory proposes that people have an inherent need to maintain a global sense of self-integrity. When an aspect of their self-worth is threatened, people can become more tolerant and accepting of that threat by reaffirming the self in other areas (Sherman and Cohen, 2002). This theory suggests that defensive reactions to threatening health-risk information may be alleviated by affirming the self in domains unrelated to the health risk (Harris and Napper, 2005; Iles et al., 2019).

In focus group discussions, the self-affirmation activity can be incorporated before discussing the health-risk information. For example, the moderator can invite participants to share their positive attributes or reflect on their core values. This activity may help participants become more receptive to the health-risk information and encourage more open and candid discussions.

# Conclusion

In summary, focus groups are an essential qualitative method for evaluating perceptions of health-risk messages. However, participants can become defensive when exposed to novel health-risk messages. In this essay, I have illustrated two ways defensiveness appeared in my focus group study testing alcohol-related cancer health warning labels: (a) counterarguing and (b) modifying the health-risk information. I have offered four "lessons learned" for researchers and practitioners interested in conducting focus group interviews to assess health-risk messages: (a) communicate with empathy, (b) use personal narratives, (c) forewarn participants, and (4) offer a self-affirmation opportunity.

# Data availability statement

The datasets presented in this study can be found in online repositories. The names of the repository/repositories and accession number(s) can be found below: Ma Zexin, Narrative Pictorial Warning Labels Focus Group Study. Ann Arbor, MI: Inter-university Consortium for Political and Social Research (distributor), 2023-11-29, https://doi.org/10.3886/E195441V1.

# **Ethics statement**

The studies involving humans were approved by Oakland University Institutional Review Board. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

# **Author contributions**

ZM: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration,

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Resources, Supervision, Validation, Writing – original draft, Writing – review & editing. EH: Formal analysis, Writing – original draft, Writing – review & editing. BC: Data curation, Methodology, Writing – review & editing.

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# References

Clayton, R. B., Compton, J., Reynolds-Tylus, T., Neumann, D., and Park, J. (2022). Revisiting the effects of an inoculation treatment on psychological reactance: a conceptual replication and extension with self-report and psychophysiological measures. *Hum. Commun. Res.* 49, 104–111. doi: 10.1093/hcr/hqac026

Cornacchione Ross, J., King, J. L., Lazard, A. J., Noar, S. M., Reboussin, B. A., Jenson, D., et al. (2021). Developing pictorial cigarillo warnings: insights from focus groups. *Nicotine Tob. Res.* 23, 383–389. doi: 10.1093/ntr/ntaa130

Davis, M. H. (1983). Measuring individual differences in empathy: evidence for a multidimensional approach. *J. Pers. Soc. Psychol.* 44, 113–126. doi: 10.1037/0022-3514.44.1.113

Dillard, J. P., Meczkowski, E., and Yang, C. (2018). Defensive reactions to threatening health messages: alternative structures and next questions. *Int. J. Commun.* 12, 973–995.

Fransen, M. L., Smit, E. G., and Verlegh, P. W. J. (2015). Strategies and motives for resistance to persuasion: an integrative framework. *Front. Psychol.* 6:1201. doi: 10.3389/fpsyg.2015.01201

Greiner Safi, A., Kalaji, M., Avery, R., Niederdeppe, J., Mathios, A., Dorf, M., et al. (2023). Examining perceptions of uncertain language in potential e-cigarette warning labels: results from 16 focus groups with adult tobacco users and youth. *Health Commun.* 39, 460–481. doi: 10.1080/10410236.2023.2170092

Håkansson, J., and Montgomery, H. (2003). Empathy as an interpersonal phenomenon. J. Soc. Pers. Relat. 20, 267–284. doi: 10.1177/0265407503020003001

Harris, P. R., and Napper, L. (2005). Self-affirmation and the biased processing of threatening health-risk information. *Personal. Soc. Psychol. Bull.* 31, 1250–1263. doi: 10.1177/0146167205274694

Hasell, A., Lyons, B. A., Tallapragada, M., and Jamieson, K. H. (2020). Improving GM consensus acceptance through reduced reactance and climate change-based message targeting. *Environ. Commun.* 14, 987–1003. doi: 10.1080/17524032.2020.1746377

Hinyard, L. J., and Kreuter, M. W. (2007). Using narrative communication as a tool for health behavior change: a conceptual, theoretical, and empirical overview. *Health Educ. Behav.* 34, 777–792. doi: 10.1177/1090198106291963

Iles, I. A., Nan, X., Ma, Z., Feldman, R., Butler, J., Wang, M. Q., et al. (2019). Self-affirmation and defensive processing of graphic cigarette warning labels by African American smokers: a community-based study. *Health Educ. J.* 78, 301–314. doi: 10.1177/0017896918805129

Kessels, L. T. E., Ruiter, R. A. C., and Jansma, B. M. (2010). Increased attention but more efficient disengagement: neuroscientific evidence for defensive processing of threatening health information. *Health Psychol.* 29, 346–354. doi: 10.1037/a0019372

Klein, W. M. P., Jacobsen, P. B., and Helzlsouer, K. J. (2020). Alcohol and cancer risk: clinical and research implications. *JAMA* 323, 23–24. doi: 10.1001/jama.2019.19133

Liberman, A., and Chaiken, S. (1992). Defensive processing of personally relevant health messages. *Personal. Soc. Psychol. Bull.* 18, 669–679. doi: 10.1177/0146167292186002

# Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Ma, Z. (2024). "I can see a story from the warning": understanding the role of perceived narrativity in pictorial warning labels. *Health Commun.* 39, 675–684. doi: 10.1080/10410236.2023.2181050

Ma, Z., Hintz, E. A., and Cassano, B. (2024). "You are telling the story yourself": defining and developing narrative pictorial warning labels. *Health Commun.* 39, 2920–2930. doi: 10.1080/10410236.2023.2293324

Ma, R., and Ma, Z. (2022). Social media use and demographics predicted knowledge about alcohol as a cancer risk factor. *Am. J. Health Promot.* 36, 1025–1028. doi: 10.1177/08901171221087098

Ma, Z., Ma, R., Zhao, X., and Wang, X. (2023). Stories that engage the audience: an investigation of popular breast cancer narratives on social media. *Telematics Inform*. 85:102048. doi: 10.1016/j.tele.2023.102048

Ma, Z., and Nan, X. (2018). Role of narratives in promoting mental illnesses acceptance. *Atlant. J. Commun.* 26, 196–209. doi: 10.1080/15456870.2018.1471925

Maguire, J. (1998). The power of personal storytelling: Spinning tales to connect with others. New York, NY, USA: Penguin Publishing Group.

May, N. J., Eliott, J., and Crabb, S. (2021). 'Alcohol causes cancer': a difficult message for Australians to swallow. *Health Promot. Int.* 37:daab024. doi: 10.1093/heapro/daab024

McGuire, W. J. (1964). "Inducing resistance to persuasion: some contemporary approaches" in Advances in experimental social psychology. ed. L. Berkowitz, vol. 1 (New York, NY, USA: Academic Press), 191–229.

Moyer-Gusé, E. (2008). Toward a theory of entertainment persuasion: explaining the persuasive effects of entertainment-education messages. *Commun. Theory* 18, 407–425. doi: 10.1111/j.1468-2885.2008.00328.x

Niederdeppe, J., Shapiro, M. A., and Porticella, N. (2011). Attributions of responsibility for obesity: narrative communication reduces reactive counterarguing among liberals. *Hum. Commun. Res.* 37, 295–323. doi: 10.1111/j.1468-2958.2011.01409.x

Richards, A. S., and Banas, J. A. (2015). Inoculating against reactance to persuasive health messages. *Health Commun.* 30, 451–460. doi: 10.1080/10410236.2013.867005

Shen, L. (2010). Mitigating psychological reactance: the role of message-induced empathy in persuasion. *Hum. Commun. Res.* 36, 397–422. doi: 10.1111/j.1468-2958.2010.01381.x

Shen, L. (2015). Targeting smokers with empathy appeal antismoking public service announcements: a field experiment. *J. Health Commun.* 20, 573–580. doi: 10.1080/10810730.2015.1012236

Sherman, D. K., and Cohen, G. L. (2002). Accepting threatening information: self-affirmation and the reduction of defensive biases. *Curr. Dir. Psychol. Sci.* 11, 119–123. doi: 10.1111/1467-8721.00182

Tracy, S. J. (2024). Qualitative research methods: Collecting evidence, crafting analysis, communicating impact. Malden, MA, USA: Wiley.

Van't Riet, J., and Ruiter, R. A. C. (2013). Defensive reactions to health-promoting information: an overview and implications for future research. *Health Psychol. Rev.* 7, S104–S136. doi: 10.1080/17437199.2011.606782