


Co-Designing Effective Pediatric Vaccine Promotion Strategies: Insights From Rural Wisconsin Parents

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Rural distrust in science, intensified during the COVID-19 pandemic, has led to concern about the ongoing uptake of pediatric vaccination. It is also unclear how to most effectively promote health behaviors within rural communities. This study was designed to explore how rural parents interpret vaccine promotion message components, including text, images, and sponsorships, and design their own messages to provide insights for public health. Rural-living parents in Wisconsin (n = 27) were recruited to participate in virtual, 90-minute focus groups/co-design sessions regarding vaccine promotion in which they were asked to evaluate the effectiveness of researcher-provided textual messages, images, and sponsorship and create final public service announcements (PSAs) with elements they believed would resonate with other rural parents. As the conceptual model guiding this work was the theory of planned behavior, our focus was on the interpretations and attitudes that participants brought to the task of creating PSAs and their perceptions of social norms in their community. Braun and Clarke's 6-step thematic analysis was applied to qualitative data. Participants created PSAs that affirmed active parental roles in health care and emphasized local context and "relatability." Feelings were mixed about national-level organizations. While some reported negative connotations, others recognized knowledge and competence. Participants

had negative assessments of message elements that referred to rural communities as stereotypical or homogeneous. Tailoring to include local, familiar, and relatable messages, images, and sponsors that emphasize parent roles in health decision-making and the knowledge of local providers is preferred among rural parents.

Keywords: health promotion; vaccine confidence; pediatric health; health communication; rural populations; health equity; qualitative methods

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► BACKGROUND

Disparities in pediatric immunization rates between rural and urban communities have been well documented, especially since the COVID-19 pandemic (Carter et al., 2022; Mbaeyi et al., 2020; Mical et al., 2021; Olson et al., 2020). While in many rural contexts, low vaccination uptake may result from a lack of access, in the United States, issues related to low trust in science and high levels of misinformation spread through social media contribute to vaccine hesitancy (Adhikari et al., 2022; Choi & Fox, 2022; Suarez-Lledo & Alvarez-Galvez, 2021). Health promotion in such circumstances must address how to encourage health behaviors from a position (e.g., state and national public health agencies) that priority populations may see as untrustworthy.

Our field has made many attempts to solve the problem of vaccine hesitancy in rural communities, including face-to-face promotion and community-engaged methods (Schoeppe et al., 2017; Shen et al., 2023). We have found less success with communication campaigns originating from national agencies or organizations, although they can reach a larger audience (Yang et al., 2023). While the reach is broader, developing messages that are interpreted as intended has been shown to be a challenge and frequently the meaning that local audiences attribute to message components differs from that of the creators (Choi & Fox, 2022; Kowitt et al., 2017). In this way, the application of conceptual models for health promotion, such as the theory of planned behavior (TPB), which depend on concepts such as attitudes and social norms are handicapped by a lack of information about local interpretations of health messaging (Seale et al., 2024). In addition, identifying viable paths forward in creating meaningful and action-promoting messaging is complicated by other factors, including the complexity of messages that include various components. Understanding how rural parents perceive even a static public health message may require interpretation of meaning from images, language, and sponsors, among other elements. Fortunately, human-centered design or co-design processes have been helpful in addressing the complexity of messaging (Aya Pastrana et al., 2023; McKinnon et al., 2022).

We present the results of a qualitative exploration of static public service announcements (PSAs) promoting flu vaccine uptake with rural parents. Our approach was to combine the properties of a co-design process with qualitative data collection. While the co-design method produced PSAs promoting vaccine uptake for children, we also explored the meaning parents attributed to specific ad components.

► METHOD

This study was designed to explore the attitudes and perceptions of social norms held by key health decision-makers regarding rural children's vaccination. This focus was guided by the Theory of Planned Behavior, which explains behavior as the natural consequence of intention, which is, in turn, shaped by three key factors: attitudes, subjective norms, and perceived behavioral control or self-efficacy (Ajzen, 1991). By using co-design, we enlisted rural-living parents and caregivers to identify the components of messages that they saw as potentially contributing to attitudes and social norms rather than making assumptions about such meaning and interpretations. This use of co-design as an initial step toward health promotion using the theory of planned behavior has also been used in reference to health promotion for cancer patients (Lipson-Smith et al., 2019), mental health seeking (Liu & Wang, 2024), and oral care (Lievesley et al., 2022) (see Figure 1).

Participants and Recruitment

Participants in this study identified themselves as caregivers of children living in rural areas ($n = 27$). They were recruited through our partners at the University of Wisconsin Division of Extension, Wisconsin Council of Churches, Wisconsin Head Start Association, and Southwestern Wisconsin Community Action Program, each of whom serves rural communities across the state. Flyers were distributed and posted with team contact information, and the opportunity for participation was announced by partner staff. When interested caregivers contacted the team, they were provided with additional details (e.g., amount of incentive, virtual format, etc.). They were also asked to confirm that they were caregivers of rural-living children before scheduling for data collection. Verbal informed consent was obtained at the beginning of virtual focus groups. However, once a participant was scheduled to attend a group, they were sent an information sheet with study details, including risks and benefits, as well as other information typically communicated in written informed consent forms. A waiver of signed consent was provided through a University of Wisconsin—Madison Institutional Review (2022-1247).

Data Collection

We held four 90-minute co-design groups over Zoom in Spring of 2023. Co-design tasks were designed regarding a previous round of focus groups with rural parents, which produced some general themes regarding attitudes toward vaccination and perceptions of social

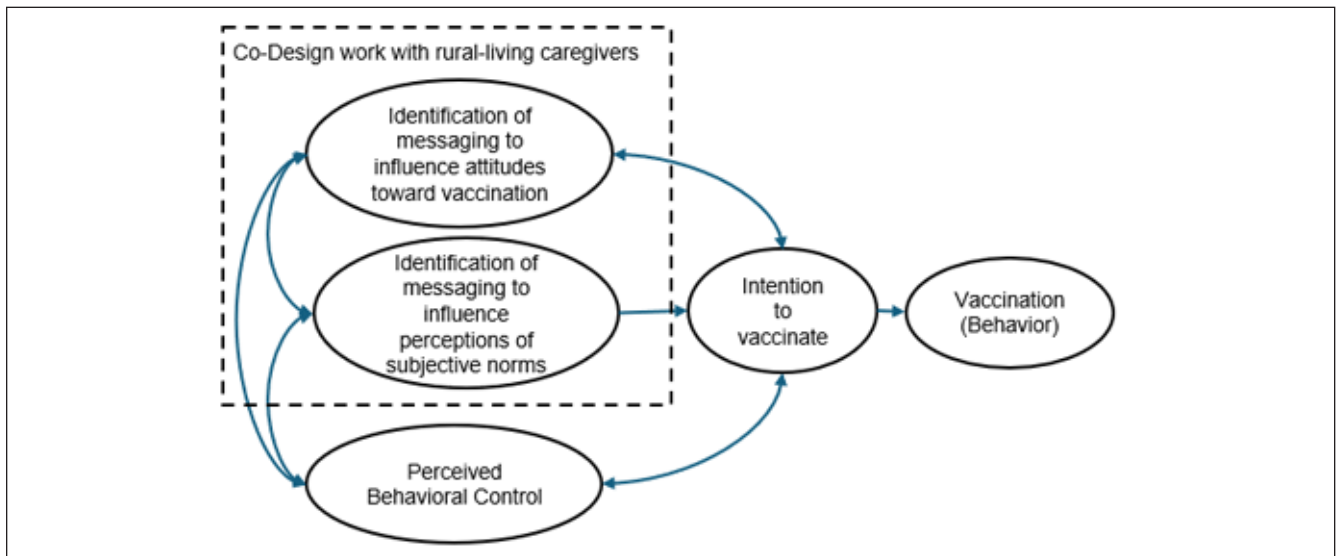


FIGURE 1 Co-Design Work and the Theory of Planned Behavior

norms that participants interpreted to be meaningful (Passmore et al., 2025). Participants were asked to work together to create a PSA promoting flu vaccinations comprising three elements—a text message, an image, and a sponsor represented as a logo. We focused on flu vaccination for this exercise to keep the discussion focused and avoid emotionally charged exchanges following a precedent set by Quinn et al. (2019; Shacham et al., 2021). While we provided ideas for each element, participants were encouraged to adapt or create their own elements as desired. By providing pre-selected options and breaking the task into components, we organized a co-design process that was “do-able” given time constraints. All co-design work was captured on a virtual whiteboard managed by a study team member. Sessions were also audio recorded and transcribed.

Task 1: Text. Participants were presented with four pairs of textual messages, which included statistics, paternalistic-type messages, messages highlighting parent knowledge and autonomy, messages establishing a geographically local connection, etc. (see Supplemental Files 1–3 for a sample of the board that groups worked from and Supplemental File 4 for the focus group guide). Each textual message was designed to influence attitudes toward vaccination or perceptions of social norms, based on the theory of planned behavior. Groups discussed each pair and selected one message per pair to advance to a finalist category, from which participants chose a final textual message (Task 4). Participants were encouraged

to edit textual messages to suit their preferences or create their own entirely.

Task 2: Image. Participants were presented with 18 images and encouraged to suggest others. They chose three favorites to proceed to the final round of PSA construction. Images included those featuring health care professionals, families and children, charts, rural locations, and University of Wisconsin referents (e.g., University of Wisconsin banner).

Task 3: Sponsor or Logo. Participants were presented with nine potential logos and again encouraged to add their own ideas. Collectively, they selected three sponsor organizations to proceed to the final phase of PSA design. Logos represented a range of real organizations at national, state, and local levels. Other logos included local hospitals, clinics, and advocacy groups. While all components were chosen for their alignment with the theory of planned behavior, the logo was specifically designed to identify the social norms that resonated most strongly with rural-living parents.

Task 4: Development of Final PSA. In the final task, participants were asked to make final decisions for each element based on the choices made in Tasks 1–3, creating a unified and unique PSA to promote flu vaccinations.

Qualitative Data Collection. Each task was a “think-aloud” process in which the facilitator asked participants to provide details on motivations, decision-making, and

TABLE 1
Participant Characteristics (*n* = 27)

<i>Age</i>		<i>21–62 (range)/34 (mean)</i>	
Gender		Man	3 (11.1%)
	Woman		24 (88.9%)
	Non-binary		-
Race (select all that apply)	American Indian or Alaskan Native		1 (3.7%)
	Asian		3 (11.1%)
	Black or African American		1 (3.7%)
	White		22 (81.5%)
	Other		2 (7.4%)
Ethnicity	Latino/a or Hispanic		8 (29.6%)
Education	Less than high school diploma or GED		1 (3.7%)
	High school diploma or GED		7 (26%)
	Some college		8 (29.6%)
	2-year degree		1 (3.7%)
	4-year college degree		9 (33.3%)
Income	Grad or professional school		1 (3.7%)
	0–25k		9 (33.3%)
	50–75k		5 (18.6%)
	25–50k		8 (29.6%)
	100k+		4 (14.8%)
Children in participants' care	No response		1 (3.7%)
	# of kids in care		1–5 (range)
	Ages	Under 5 years of age	19 (70.4%)
	(select all that apply)	6–11 years of age	17 (44.4%)
		12–17 years of age	8 (29.6%)

interpretation. Think-aloud methodologies are specifically valuable for studies of participant decision-making (Padilla & Leighton, 2017; Ryan et al., 2009; Stewart & Ogden, 2021; Wolcott & Lobczowski, 2021). Discussions were recorded and professionally transcribed.

Data Analysis. Our analysis was directed by iterative coding of the transcripts using the NVivo software. We employed a constructivist approach, concentrating on how participants interpreted the trustworthiness of health messages and messengers. Beginning with a period of data immersion, we adhered to the analytical framework proposed by Braun and Clarke (2006). Preliminary codes were identified, and two team members actively engaged in coding and memo writing. Decisions regarding code and theme development were made collaboratively with the team. After an initial set of themes was developed, a second round of coding was completed by an additional team member not

involved in data collection to ensure that the themes were thoroughly grounded in the data. Initial themes were extracted to create a thematic map and subsequently refined through another dive into the dataset. Any discrepancies revealed were resolved through team discussion.

► RESULTS

The characteristics of participants in the co-design/focus groups are presented in Table 1.

Because data collection in this study was somewhat complex, we present the outcomes of the decision-making process for each element (text, image, sponsor/logo) for each group and the final PSAs developed for each group below. It is important to note that group choices for any element might have evolved during the tasks so that the outcomes of Tasks 1–3 were often, but not always, reflected in the final product.

TABLE 2
Top Three Choices for Language/Message Content for Each Group

	<i>First choice</i>	<i>Second Choice</i>	<i>Third Choice</i>
Group 1	You and your child's doctor are the real experts on your child's health. Talk with your child's doctor about flu vaccines.	Getting my kids their flu vaccines every year is one more way I can keep them healthy and active.	Having to lose time at work sucks. Talk with your family doctor about flu vaccines.
Group 2	You and your child's doctor are the real experts on your child's health. Talk with your pediatrician about flu vaccines.	This year, I got my whole family vaccinated to help keep us and my community safe.	Getting my kids their flu vaccines every year is one more way I can try to keep them healthy and active.
Group 3	605 Wisconsin children were hospitalized for influenza in the 2019–2020 flu season. Getting my kids their flu vaccines every year is one more way I can keep them healthy and active. Talk with your pediatrician about flu vaccines for your child.	-none chosen-	-none chosen-
Group 4	605 Wisconsin children were hospitalized for influenza in the 2019–2020 flu season. That's 605 too many. I'll never think of the flu as "no big deal" for my kids again.	605 Wisconsin children were hospitalized for influenza in the 2019–2020 flu season. That's 605 too many.	Getting my kids their flu vaccines every year is one more way I can keep them healthy and active. And I can't afford to miss work when they get sick. That's why the whole family got their flu shots this season.

Textual Message/Language Choices

Interestingly, all groups creatively reshaped the message provided by the research team (see Table 2). Text selected by more than one group is coded with matching highlighting to illustrate the commonly chosen language, including cases where participants chose to combine provided text or change wording slightly. Language that is not underlined in Table 2 was only used by one group. Group 3 combined three original messages and did not make second or third choices.

Overall, participants preferred short messages and were frustrated by wordy language. Another commonality was a preference for the message, “*Getting my kids their flu vaccines every year is one more way I can keep them healthy and active,*” which appeared among the top choices for all groups. Participants appreciated this message as it emphasized a practical and active role for parents. For example, a participant in Group 1 noted,

I think it feels empowering. There's a lot of things that you can't control . . . like the economy and

banks and whatever. But if we can do our part to protect young people, it feels empowering. (Group 1, Participant 1)

Three other messages were also popular across groups. The first of these—“*You and your child's doctor are the real experts on your child's health. Talk with your child's doctor about flu vaccines*” was a top choice for three groups and appeared twice on Group 1's list, although in a shortened form. The group selected only the final sentence because they felt it communicated respect for parental decision-making. Group 1 participants, like the members of Group 2, valued health recommendations that explicitly related to their child and circumstance, in contrast to blanket recommendations meant for the public in general:

The CDC, everybody knows it's like . . . not . . . personalized. They don't go by cases or by people or by children. It's like, you know, the average or overall. . . So, I liked “the doctors and you are real experts.” (Group 1, Participant 2)

The message, “605 Wisconsin children were hospitalized for influenza in the 2019–2020 flu season,” was chosen by two groups, and Group 3 chose the message twice among their top three. Participants saw offering simple health statistics as powerful. A participant from Group 4 stated,

... you know, as much as hearing about a kid dying is impactful. It might be a statistical outlier . . . And so, if just one kid dies, then it's likely not going to be mine. But when you start looking at 600 kids, well, now, mine might be in that mix. (Group 4, Participant 4)

The message, “*I can't afford to miss work. That's why the whole family got their flu shots this season,*” resonated with two groups, although the language was changed in Group 1. Participants perceived the strength of this message as reliant on “*that element of being relatable, being personal*” (Group 4, Participant 3). Of course, for those participants whose experience or context was different, the threat of missing work was not relatable, as a Group 1 participant noted,

And I know in the town where I live, homeschooling is huge . . . and I almost feel like the second one kind of leaves that group out of the equation . . . (Group 1, Participant 3)

Another important thread about the language used in messages was that participants generally disliked content that referred to “rural” communities. Instead, participants saw such language as condescending and stereotyping. For example, in Group 2, a participant noted,

I feel like that puts us right at the borderline of showcasing economic differences. [The] perception of rural life is that everybody is poor and impoverished and uneducated, and that's why, you know, they may not be getting vaccinated. (Group 2, Participant 3)

A participant also expressed this sentiment in Group 4,

... I don't feel like I was attacked by number one, but I feel like a lot of people in my area could be like, “Oh, you're in a rural area.” I'm having a hard time coming up with words, but I feel that some other people in my community wouldn't like the message . . . (Group 4, Participant 2)

Image Choices

Table 3 presents the images each group chose for their “top three,” although Group 1 chose two images for their first and third slots, and Group 2 chose only one.

No groups chose to use graphics incorporating statistical information. All final images chosen depicted children. Adults did not appear in all images, but when they did, they were either health care providers or parents with only one image, including other generations of a family (Group 2). Most images depicted emotional connections between children and adults, whether family members or providers, and there was disagreement about using images portraying children as ill or healthy. A participant in Group 1 said,

I like number two because it reminds people that your kids are getting sick. It's a kid lying in bed looking like she's sick and needs a vaccine . . . sometimes people need a little bit of scare to get the message through. (Group 1, Participant 5)

In Group 3, participants opted for healthy children in all choices, and one participant explained their reasoning, saying, “I like the picture with the kids playing soccer . . . because *it kind of goes with keeping your kids healthy and active.*”

Group 2 varied from the theme of providers, parents, and children by choosing an image intended to symbolize community, which they agreed should include more diversity. “*I feel like including more people to kind of get. . . , that almost looks like a family unit, but it could be a community unit,*” Participant 1 noted. Participant 4 added, “*I would change that though to different races and cultures instead of not just one family. Because you talk about the community, and there's, you know, a variety.*”

For Group 3, the soccer image was also chosen for its relatability, with one participant saying, “. . . you could see soccer in every community throughout the state, pretty much” (Group 3, Participant 5). Emphasizing this theme of relatability, Group 3 integrated an additional symbol—an outline of the state of Wisconsin into all images.

Sponsor/Logo Choices

Table 4 illustrates that public health and health care figured prominently in group choices. Interestingly, two groups chose the Wisconsin Department of Health Services as their first choice. Health care provider organizations included the, academic health system, and a more rurally located health system (Marshfield Clinic). Provider organizations were the American

TABLE 3
Top Three Choices for Images for Each Group






	<i>First choice</i>	<i>Second choice</i>	<i>Third choice</i>
Group 1			
			
Group 2			
Group 3			
Group 4			

TABLE 4
Top Three Choices for Sponsor/Logos for Each Group

	<i>First choice</i>	<i>Second choice</i>	<i>Third choice</i>
Group 1	 WISCONSIN DEPARTMENT of HEALTH SERVICES	 UW Health American Family Children's Hospital	 Marshfield Clinic Health System
Group 2	 voices for vaccines credible vaccine information for families, from families ♥	 Wisconsin Chapter AMERICAN ACADEMY OF PEDIATRICS	N/A
Group 3	 WISCONSIN DEPARTMENT of HEALTH SERVICES	 UW Health American Family Children's Hospital	 American Academy of Pediatrics DEDICATED TO THE HEALTH OF ALL CHILDREN
Group 4	 CDC SAFER • HEALTHIER • PEOPLE™	 Marshfield Clinic Health System	 Public Health Prevent. Promote. Protect. Door County

Academy of Pediatrics and the Wisconsin chapter of the American Academy of Pediatrics. One group chose the CDC, and one chose a parent advocate group (Voices for Vaccines).

The chosen message and image often influenced the choice of sponsor. For example, a health care organization or health department at the state or county level could provide health recommendations. All groups chose at least one local sponsor. Frequently, participants explained those choices as being based on relatability or familiarity. For example,

I like the CDC and the American Academy, but, again, that doesn't really bring it down to a more local level. I like how UW Madison is more local. It's one of those that's pretty much known

everywhere in Wisconsin, whereas the Wisconsin Chapter of American Academy of Pediatrics is local, but I've never heard of it. (Group 3, Participant 1)

A participant from Group 4 added,

Local organizations, . . . could be important too because, if I take my kids to Marshfield Clinic, obviously, I'm putting trust in the pediatricians there. (Group 4, Participant 5)

Not every group favored national-level organizations. Some, like the participant cited below, saw negative connotations related to experiences during the COVID-19 pandemic:



FIGURE 2 Each Group's Final PSAs

And people over the years, especially since COVID . . . have gone very distrustful of large organizations trying to push these, you know, vaccines. (Group 2, Participant 3)

Others felt different. For example, from group 3,

I guess I can say the opposite, and I don't mean to be contradictory, but since the pandemic, I feel like I turn to the CDC or the government sites to get away from all the opinions . . . I just wanted something that was concrete and official and science-backed. (Group 3, Participant 6)

Group 2 was the only group to choose Voices for Vaccines. They liked that it represented a family advocacy group rather than a health care organization or health department, which they felt would be more likely to provide blanket health recommendations. One participant said,

[Voices for Vaccines] won with it being advice for families, from families. It gives more of a personalized advice versus something from the CDC. (Group 2, Participant)

Final PSAs

The final PSAs reflected the already-discussed themes, including the power of images featuring providers, children, and parents, the relatability and familiarity

of images and sponsors, and the positive interpretation of local organizations. Each group's final PSAs are presented below with a summary of final discussions and decision-making.

Group 1 chose two options for their final PSA (Figure 2). Both images depict healthy children in health care settings. Messages varied, reflecting differences in perceptions around relatability. Group 1's first PSA emphasized the decision-making process contributed to by both parents and physicians. Overall, the group leaned toward the first PSA ("You and your child's doctor. . .") but appreciated the relatability of the second option, including its ability to make people "kind of chuckle" (Group 1, Participant 2). In both cases, the group chose local sponsors—the Wisconsin Department of Health and the University of Wisconsin Health Children's Hospital.

Group 2 maintained its chosen image, depicting a community with a message that emphasized community goals. Voices for Vaccines and the Wisconsin Chapter of the American Academy of Pediatrics were chosen to highlight a relatable voice. As one participant put it,

We're going for community, Wisconsin, inclusiveness, representation . . . [so] the Wisconsin Chapter of American Pediatrics and the voices of the families in partnership would just cover all the bases. (Group 2, Participant 5)

Group 3 stayed with their idea to visually depict healthy children at play within the shape of the state of

Wisconsin as a symbol of localness. The chosen text in this PSA also referenced state statistics and had a local and national-level sponsor, like Group 2. One participant said, “*And so sometimes being promoted by multiple organizations also solidifies in my mind like, ‘Oh, yeah, it’s not just like a local thing’*” (Group 3, Participant 2). The specific statistics were favored because they were thought to invoke emotional responses. The soccer picture was also chosen to depict the message (keeping your children healthy and active) and relatability (soccer is in all communities).

Group 4 put together two messages to make their ad and chose an image that matched (hospital setting). The statistics-based message was preferred, coupled with language stressing the importance of coming to one’s conclusion about the importance of the vaccine. This group felt it was essential to have one local and one national sponsor (CDC and Marshfield Clinic). The picture for this ad was chosen to match the message about how many children are sick and hospitalized. The image also features a concerned parent playing a role in the child’s care.

► DISCUSSION

The extent to which the participants chose the same language, images, and logos was surprising. Groups originally had eight textual messages, 21 images, and nine sponsors from which to create their PSAs, and participants were encouraged to imagine new elements. Yet, participants chose components of only four messages and five sponsors. Images were also strikingly similar, depicting children, parents, and providers. Moreover, all groups chose a combination of two sponsors for their final PSA, and three of the four groups chose a combination of one local-level and one national-level organization.

Several themes ran through group discussions. The first of these is “familiarity/relatability.” Regarding sponsors/logos, all groups chose a local health care organization or public health agency and noted these organizations’ reputation and/or recognizability for parents in rural Wisconsin. Familiarity/relatability was also observed concerning activities, such as soccer, or consequences of illness, such as missing work, which is in keeping with the findings of previous studies with rural communities (Adhikari et al., 2022; Frew & Lutz, 2017; Yuan et al., 2022), as well as conceptual understandings of trustworthiness (Adhikari et al., 2022; Jamison et al., 2019; Passmore et al., 2019). However, we also hasten to point out that perceptions of relatability were variable and dependent on family experiences and interpretations. Making assumptions about what might

be relatable to parents in a rural community may have negative consequences. For example, our participants reacted strongly to using the word “rural” in messaging, interpreting it as condescending rather than relatable. Moreover, there may not be a single message that is read as relatable, as participants had varying experiences. Finally, our findings contradict the common assumption that national-level public health organizations, like the CDC, are uniformly distrusted in rural communities.

Providers and health care settings also figured prominently in the PSAs that participants developed (Yang et al., 2023). Not surprisingly, all images used in the final PSAs included children. In choosing a sponsor/logo, participants selected health care organizations. Such entities were seen as having the knowledge and authority to issue vaccination recommendations. Participants also expressed feelings of trust for local and familiar health care organizations, a sentiment also described by other authors (Albers et al., 2022; Frew & Lutz, 2017; Newcomer et al., 2020). There were also other nuances associated with health care settings that were meaningful for participants. The message “*You and your child’s doctor are the real experts on your child’s health. Talk with your child’s doctor about flu vaccines*” was popular in initial choices and was eventually chosen for a final PSA by Group 1. This message not only featured the competence of the local health care provider but also the importance of parents playing roles in health care decision-making, which was sometimes drawn in contrast to national-level organizations that “push” vaccinations—a sentiment shown to impact vaccine acceptance in other rural settings (Williams et al., 2013). Participants also chose themes centered around the community. For example, Group 2’s final PSA featured a “community” image and a matching message. While many health promotion interventions have been community-based, built upon face-to-face contact and social ties (Koskan et al., 2023; Schoeppe et al., 2017), our findings suggest that community may also be meaningful for audiences if it appears in static messaging.

Finally, there is conflicting evidence regarding the use of statistics in vaccine promotion (Okuhara et al., 2018; Sundaram et al., 2018). Our study finding reflects this complexity. While no charts made it into any group’s PSA, two groups chose a statistic: “*605 Wisconsin children were hospitalized for influenza in the 2019–2020 flu season.*” Each group coupled the statistical-based messaging, perceived as a strong motivator for action, with images of children. Each group also added messages, “I’ll never think of the flu as no big deal again” and “Talk with your pediatrician about flu vaccines for your child,” emphasizing personal narratives and active parental roles in decision-making, respectively.

► STUDY LIMITATIONS

Like many qualitative studies, our sample is small and is not representative of the diversity of rural-living parents and caregivers. Therefore, some interpretations of messages made by our participants may vary in different communities. Indeed, our findings may have been different had our sample been more diverse. In particular, the finding that “relatability” is important to vaccine messaging should be taken as a general recommendation. What, specifically, participants find “relatable,” as noted, can vary considerably across populations, geography, or time. Therefore, researchers or practitioners interested in health promotion messaging should take steps to discover what might be “relatable” to the specific audience they are seeking to reach.

► IMPLICATIONS FOR PRACTICE

Overall, this study indicates that fertile ground for health promotion can be identified even in contexts where attitudes toward public health are negative or mixed, as was true regarding vaccination following the pandemic, and might be true for other health concerns in the current context. Initially, we believe that our findings are specifically helpful for pediatric vaccine promotion in rural communities. However, there are implications for all types of health promotion in rural contexts. For such communities, our participants stressed the importance of an emphasis on parental experience and expertise in health decision-making in combination with local providers. As such, messaging to similar audiences should make use of images and message text that emphasize the knowledge of parents and local providers. For our participants, this meant images that depicted interactions between parents and providers as well as message text such as “*You and your child’s doctor are the real experts on your child’s health.*” The rural-living parents in our study also stressed the importance of their local context in effective health messaging in several ways. Initially, they warned of the dangers of “stereotyping” rural audiences, which could mean simply referring to “rural-ness” in health promotion. The local context was conveyed through the use of local sponsoring organizations for health messages and the use of local health statistics. Similarly, parents also preferred messages that featured content that was familiar and “relatable.” The meaning behind the depiction of activities, such as soccer, in messaging, however, may vary across various audiences. Exploring this issue with the community is advised through co-design or by other means.

► IMPLICATIONS FOR RESEARCH

Our most immediate suggestion for future research is a subsequent quantitative exploration of our findings to determine their representativeness. It would be useful to determine which of our findings hold for other rural audiences and which may have more narrow applicability. This could have broad implications for health promotion. In addition, the co-design process may be replicated to explore the meaning of message components and their ability to move audience attitudes and perceptions of social norms for a range of health behaviors among a broad variety of audiences. Indeed, we would strongly recommend that co-design be used for health promotion in contexts where there is public disagreement and where an audience’s perspective may be particularly dissimilar to that of public health professionals. The co-design method can produce actionable directions for health messaging while accounting for the variability of opinions within groups, like our own participants. In such studies, we would urge researchers to make use of focus groups for the co-design process. Because participants were exposed to the views of others in our groups, they were encouraged to find consensus and, thereby, actionable paths forward for messaging in their community. Overall, it would be useful to see the application of these methods in other contexts to determine cross-group utility.

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Supplemental Material

Supplemental material for this article is available at <https://journals.sagepub.com/home/hpp>.

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