Factors Influencing Trust in Agencies That Disseminate Tobacco Prevention Information

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Published online: 3 February 2018

Abstract Several health-related agencies administer national and targeted public education campaigns to provide health information and change health-related behaviors. The trust the public has in these agencies as the source of the message impacts the effectiveness of their communication campaigns. In this study, we explore the perceived trust of agencies that communicate health messages in the tobacco control field. As part of a larger tobacco regulatory science study, we conducted six 90-min focus groups comprising 41 participants. Five main themes emerged pertinent to the agency: (1) its integrity, (2) its competence, (3) its motives, (4) how it is portrayed in the media, and (5) skepticism and mistrust about it. Given the significant resources spent on health messaging to the public and potential benefits offered by this communication, an understanding of public trust in the agencies as the source of health messages is important. Findings suggest health information may be ignored or discounted when there is mistrust in the agency sending those messages.

Keywords Health messaging · Federal government · Health behavior · Trust · Media

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Introduction

Information about disease prevention and high priority health issues is frequently communicated to the public through media campaigns. Recent campaigns include *Tips from Former Smokers* by the Centers for Disease Control and Prevention (CDC); *Smokefree Homes* by the Environmental Protection Agency (EPA); and *Million Hearts*® by the Department of Health and Human Services. The US Food and Drug Administration (FDA), which is charged with communicating and educating the public, especially youth, about the harms of tobacco products, launched *The Real Cost* campaign in February 2014 (Center for Tobacco Products, 2016). Since significant amounts of time and resources are invested into these campaigns, government and not-for-profit agencies have a strong interest in conveying public health information effectively to inform and prompt behavior change. The public's level of trust in these agencies as the source of the health-related messages may also be a key factor in the effectiveness of public communication campaigns (Kowitt, Schmidt, Hannan, & Goldstein, 2017; Schmidt, Ranney, Pepper, & Goldstein, 2016).

In tobacco control, it is particularly important to consider the risk communication literature, as both government and not-for-profit entities participate in tobacco prevention messaging to the public (Avery, 2010; Hesse et al., 2005; Rains & Turner, 2007). When communicating risk related to issues of health and well-being, the extent to which people trust or distrust the risk communicator determines how people process the risk information and comply with health recommendations (Siegrist & Zingg, 2014). Risk communication from a distrusted source may be disregarded as unreliable or self-serving (Siegrist & Zingg, 2014). Evidence-based public health messages and the institutions that publicize them are not by default perceived as trustworthy to the public (Bangerter, 2014), although trust in health agencies may positively influence people's willingness to adopt recommended behaviors (Siegrist & Zingg, 2014).

A model of trust in government agencies developed by Mayer, Davis, and Schoorman (1995) indicated that the construct comprises three main factors: ability, benevolence, and integrity. Kim (2005) expands upon Mayer's model of trust by adding two dimensions: honesty and fairness. Unlike government and for-profit agencies, the trust relationship between not-for-profit and the public is reciprocal in nature, where the not-for-profit is functionally dependent on the public's trust for fulfilling its mission (Bryce, 2007). While both government and not-for-profit agencies disseminate tobacco prevention messages, it is important to understand what dimensions are necessary for the public to trust these agencies.

The concept of trust is widely recognized across disciplines. However, research in this area focuses more on interpersonal and organizational trust in various settings and less on the public's trust in specific agencies (Kim, 2005). Trustworthiness and expertise are the most often cited theoretical dimensions of source credibility (Pornpitakpan, 2004; Sternthal, Phillips, & Dholakia, 1978). Trust is one of the most commonly agreed upon dimensions of source credibility (Berlo, Lemert, & Mertz, 1969; McCroskey, 1966; Whitehead Jr., 1968), and some studies identify

trustworthiness as particularly influential in changing attitudes and behaviors (Pornpitakpan, 2004). Trust in government agencies in particular may be predictive of acceptability of certain health behaviors, for example parental willingness to vaccinate their children (Kowitt et al., 2017; Nan, Zhao, & Briones, 2014). However, there is a lack of in-depth research specific to the level of public trust in government agencies (Kim, 2005) and how that trust relates to the reception of tobacco control and prevention information.

The purpose of this qualitative research study is to examine the trust that adults have in agencies that serve as a source of tobacco messaging and what factors determine that trust. We focused primarily on government agencies but also included the American Legacy Foundation to determine if participants' perspectives differed in regards to a not-for-profit agency. The findings provide insight into the characteristics that the public look for when deciding whether an agency is a trustworthy source of health information.

Methods

Study Design

As part of a larger regulatory study on the source credibility of tobacco messages and campaigns, we conducted six focus groups. Topics explored included where participants seek health information and their perceptions, attitudes, and beliefs about the trustworthiness of different organizations to communicate tobacco control messages. We conducted focus groups separated by age (young adults ages 18–25 and adults 26–65) and cigarette smoking status (non-smokers and smokers). To ensure inclusion of perspectives across populations, two of the six focus groups strategically included vulnerable populations: one comprised adult African-American smokers and the other adult smokers who identify as gay, lesbian, or bisexual. We did not analyze results from these groups separately but included them in the overall analysis. This qualitative approach allowed us to inductively explore the topic of interest (Kreuger, 1994); rather than reaching saturation, the overall goal of our focus group plan was to gain a rich perspective on the factors that influence trust in health messages from government agencies based on a diverse group of participants (Patton, 1980). Data analysis allowed for the examination of a broader range of experiences of a smaller number of people (Patton, 1980). The study enabled participants to share a variety of experiences and perspectives, while still yielding enough information to develop themes across groups.

Participant Recruitment

In January and February 2014, we recruited participants for focus groups through purposive sampling methods. We disseminated study promotional materials through various media including newspaper, radio, TV spots, email lists, and Craigslist. Promotional materials encouraged interested individuals to visit the study website, complete an online eligibility screener, and call a toll-free number for information about the study. One member of the research team contacted potential participants

to confirm eligibility and schedule focus group sessions. For each focus group, we recruited approximately 12 people in order to have 6–10 participants available for discussions. Eligible participants included adults ages 18–65 who were able to read and understand English and who did not have cognitive or visual impairments.

Focus Groups

Research staff held focus groups at a university campus conference room or other private location from January through March 2014. Three researchers trained in qualitative research methods conducted each 90-min session. Two qualitative Research Specialists (MV and RT) guided participants through each of the planned questions and used probes to elicit deeper discussion. Each focus group was digitally recorded. A note taker took detailed notes during the focus group discussions, recording the main ideas and opinions expressed and key terms used. Following focus group discussions, research staff debriefed and added additional information to case notes as needed. Participants received a $50 Amazon gift card for participation in the focus group. This study was approved by the Institutional Review Board at the University of North Carolina at Chapel Hill.

Focus Group Guide

The research team, which included members with expertise in public health and communication, developed the focus group discussion guide (see "Appendix") using an iterative process, developing questions in accordance with the study aim. We reviewed current research on trust and source credibility to develop open-ended questions to explore the trustworthiness of agencies as the source of health messages, with an emphasis on those who regularly communicate health and tobacco control messages to the public. The focus group guide included a series of general questions about health concerns, health information channels, and knowledge and attitudes of different agencies. Questions specifically addressed perceptions related to six government agencies and one non-profit agency: the US Food and Drug Administration (FDA), US Environmental Protection Agency (EPA), US Public Health Services (more commonly known as the Surgeon General), National Institutes of Health (NIH), National Cancer Institute (NCI), Centers for Disease Control and Prevention (CDC), and American Legacy Foundation. The guide specifically asked: (1) "Do you trust this agency to give you accurate health information?" and (2) "Please describe any positive or negative feelings you have about this agency." We instructed moderators to probe on each question to further explore trustworthiness or credibility of health organizations and agencies.

Analysis

An independent professional service transcribed each recording verbatim from the digitally recorded focus group discussions. We then imported each transcription into ATLAS.ti 7.0, a qualitative data analysis program (ATLAS.ti Scientific Software Development GmbH, Hardenbergstr. 7, Berlin, Germany). We addressed the

research question by initially conducting a dual review of two transcripts to aid in the development of a codebook containing preliminary codes. We used inductive open coding techniques as described by Straus and Corbin (1990) along with the constant comparison method (Miles, Huberman, & Saldana, 1994). The constant comparison method generates theory by employing a systematic method of joint coding and by using explicit and agreed upon coding and analytic procedures. Four coders, three of whom had participated as co-leader or note taker in the focus groups, constituted the data analysis team. We reached consensus on codes and set rules for their use as well as identified salient themes. Each transcript was then independently dual-coded, and discrepancies were resolved by discussions with one team member who served as the "primary coder" to maintain consistency across transcripts. We then performed "code and retrieve" analyses, sorting the resulting text excerpts by coded categories and then identifying prominent themes within and across participant groups. By reviewing existing research, we were able to recognize components in our data that were similar to established dimensions of trust (Mayer et al., 1995; Kim, 2005), and to identify novel themes that emerged from our specific research question. This article includes illustrative quotes that best represented key themes, which integrate our findings into existing theoretical frameworks.

Results

The six focus groups included a total of 41 people consisting of 23 women and 18 men (see Table 1). Participants were primarily White ($n = 25$) with slightly less than a quarter African American ($n = 10$) and almost two-thirds of the participants were current smokers.

As is typical of qualitative research, participants did not discuss their opinions about agencies in silos but rather in a fluid fashion; therefore, many quotes overlapped during coding. Five main themes emerged from the focus group data as dimensions of perceived trustworthiness of the selected agencies to provide health information to the public: (1) integrity, (2) competence, (3) motives, (4) how the agency is portrayed in the media, and (5) skepticism and mistrust about the agency. These themes were representative of content discussed throughout the majority of focus groups.

Integrity of the Agency

Issues of integrity and trust that the agency will adhere to a set of principles that are considered acceptable emerged as important factors. Participants discussed their ideas of perceived fulfillment of the agency's mission without bias and with fiscal responsibility. We believe these fit within a broader theme of integrity. Participants wanted to know that agencies are not compromising their mission for any perceived political agenda. "I would be fearful that they have become less objective and been drawn into the political rigmarole around smoking" (participant from Group 5). "I

Table 1 Characteristics of focus group participants

Variable	Total ($N = 41$)
Age in years, *M* (*SD*)	33.1 (11.2)
Range	18–58
Sex *n* (%)	
Female	23 (56.1)
Race *n* (%)	
White	25 (61.0)
African American	10 (24.4)
Asian	4 (9.8)
American Indian	1 (2.4)
More than one race	1 (2.4)
Hispanic origin *n* (%)	
Non-Hispanic	35 (85.4)
Hispanic	6 (14.6)
Lifetime ever smoker (more than 100 cigs) *n* (%)	
No	16 (39.0)
Yes	25 (61.0)
Frequency of current smoking	
Not at all	17 (41.5)
Some days	4 (9.8)
Everyday	20 (48.8)

think it's something political. I don't trust it too much…" (participant from Group 2).

In particular, participants reported that agencies need to demonstrate a lack of bias from industry or people that they regulate.

> …They put too much trust in the people who are most likely to make money from a certain decision. A lot of times you hear about the people who work in the [agency name]. When they retire they end up going to work for the people that they were supposed to be monitoring, and then you wonder was there a, "Hey, let our drug go through and we'll give you a swanky job when you retire?" (participant from Group 3).

Participants reported that agencies should be fiscally responsible and also have strong moral principles. Participants felt that agencies needed to be transparent about how their funds were used. Similarly, participants expressed that agencies should spend their money in a way that has the most benefit to the public and ensure that the money they are spending on research is going to an unbiased resource.

> You should … look at where you're donating your money, because some of the things you think are legit aren't really giving that money to that fund. I was just shocked to think like, "Oh, most of that money is not going to help people with cancer…." (participant from Group 1).

> A lot of times there are the studies that they sponsor, they don't really pay a lot of attention to who they give the money to. They often give the money to people who are the biggest violators of the rules [they try to] investigate (participant from Group 3).

Competence of the Agency

Participants discussed agencies' past performance when evaluating the agencies competence. Participants reported that agencies are evaluated as to how they perform their role, for example the FDA's role in approving medication. Participants reported the need for agencies to be accountable for their actions or inactions with regard to their stated competencies.

> Most of the reviewers said not to approve it, yet they did. And every physician who is seeing this come down the pike is saying people are going to die on day one that this is released. And they have no idea why the [agency name] has approved it (participant from Group 5).
> I think I trust it with drugs. … if they're demanding, "We need ten years' worth of research to show that this medication actually does this," then I have more confidence (participant from Group 1).

Some participants had perceptions about the role and responsibility of an agency, and if the agency failed to fulfill its role, it was viewed more negatively. Even if these perceptions did not align with the true function of the agency, a failure to meet these expectations still resulted in negative opinions. "I think they have a good mission, but I think their carry through is not that good…It's like their mission idea is very noble and very good, but that's not what they end up doing" (participant from Group 3). "And when you said [Agency Name], I was going to say no…they came out and said that the air at 9/11 was safe for the first responders to breathe. It wasn't. Thousands of people died from that" (participant from Group 2).

More discussion focused on the perception that some agencies are the only actors in their particular regulatory arena, and it is better to have them than not to have a regulatory source. "I think I trust them. Because there is so much they research …. I would rather go with something [agency name] approved than not" (participant from Group 2). "I guess I have positive feelings for them. It's good to know that there is at least some effort being made to inspect food and drugs, and things like that" (participant from Group 2).

Motives of the Agency

Participants evaluated the intention of agency staff, the mission of the agency, and whether participants perceived the agency to be motivated by profit. Though focus groups primarily discussed federal agencies, participants still discussed the agencies in terms of profit; only one of the agencies specifically addressed was a not-for-profit. In the focus group discussion, an important distinction surfaced between the perceived role of a government agency as being not-for-profit compared with for-profit organizations. The defined role of the agency within the government depicting

an altruistic mission “in the interest of the public” elicited agreement among participants that an agency was trustworthy. Agencies that participants *perceived* as having money and profit as a primary motive led them to feel as though they could not be trusted, as the agency might potentially say anything in order to make a profit. Although most of the organizations included in the discussion were funded by taxpayers, participants still described suspicion about profit motives. “I guess that it’s publicly funded. That there isn’t a corporation that’s running it. So the people that are there are not being funded to give out a certain image or information of a product” (participant from Group 1). “I feel they might be influenced by corporate power, or there’s a money factor in there too” (participant from Group 3).

> I would say that I really trust the [agency name]… I think there definitely are issues, but I think most of the issues come from battling corporations. And so their main mission is with good intentions…the information they give out I would take as credible, since they want to protect our air and the water (participant from Group 1).

Media Portrayal of Agencies

According to the focus group data, how an agency is portrayed in the media impacts people’s trust in it and the messages it disseminates. The strength of the relationship between knowledge of the agency’s role and trust in it differs as a function as to whether the media portray the agency in a positive or negative manner. Many participants discussed hearing about different agencies in news media and entertainment and they described how the media’s portrayal had the potential to play a role in the formulation of opinions and beliefs about its trustworthiness. The agencies discussed in the focus groups are often portrayed not only in the news but in TV shows and movies, from which participants may receive accurate, skewed, or inaccurate information.

> But I think that, you know, food and kind of outbreaks and spinach and eggs, I think always get a bad rap in the news and media, and so I can see why people have a negative association with it… (participant from Group 3).

“I mean, if you just think about the media has been portraying all these things in the news about what the government has been doing wrong, and pulling the wool over your eyes” (participant from Group 6). “…the only thing I’ve seen portrayed was just not cool” (participant from Group 6). Many participants felt comfortable commenting on an agency’s competence, integrity, and motives, regardless of their level of knowledge about it. Many participants commented on agencies based on preconceived notions of what the agency did, much of which related to what they had heard in the media. Media portrayal regularly came up in the focus group discussion.

Skepticism and Mistrust About Agency

Skepticism and mistrust about agencies also frequently came up in focus group discussions, often because participants lacked knowledge of the agency and its diverse roles. Participants discussed these two concepts interchangeably, and did not often differentiate between concepts of skepticism and active mistrust. Many acknowledged they had little concrete data on which to base decisions about trust or did not fully agree with certain actions of the agency. This resulted in expressions of both skepticism and mistrust. When the moderator asked "Do you trust this agency to give you accurate information?" A participant from Group 2 stated, "I don't know them. So, no."

> Well, everything is basically a high risk; you never know who's being truthful with you, whether you're looking at them in person, the internet or on the phone… [there's] no way to really know who's being upfront, you just have to kind of try it and see, or get a second opinion (participant from Group 4).

"So much money is going into cancer research and everything; why haven't they found a cure? I think it's they don't want to find a cure" (participant from Group 2).

Discussion

Consistent with previous models of organizational trust (Mayer et al., 1995), our study indicates that integrity, competence, and motives are dimensions of the perceived trustworthiness of the agencies we studied. Our study expands this model by including dimensions of both media portrayal and skepticism and mistrust. These findings confirm and expand previous research on trust and translate the existing body of literature to tobacco control and prevention campaigns.

Our themes of integrity, competence, and motives parallel Mayer's et al. (1995) factors of trustworthiness—(1) integrity: adhering to a set of principles that a party finds acceptable; (2) ability: competencies that enable a party to have influence within a specific domain; and (3) benevolence: the extent to which the trustee is believed to want to do good. Our research also indicates that media portrayal of agencies and skepticism and mistrust are other important factors the public considers when determining whether an agency is a trustworthy source of health information. Although these novel themes deviate from Mayer's proposed model of trust, honesty is included in Kim's conceptual model of public trust in government agencies where public cynicism is a factor (Kim, 2005).

According to the existing body of literature, organizational transparency (i.e., disclosure, clarity, and accuracy) precedes organizational trust (Mayer et al., 1995; Schnackenberg & Tomlinson, 2014). Research further indicates that organizations whose communications are transparent gained respect and trust (Auger, 2014). This was evident in our focus group discussions, during which participants made judgments about the trustworthiness of the agency based on whether they knew of the agency, what they knew about the agency's role, and the agency's past performance. Participants interpreted an agency's transparency regarding its role or

mission, financial transactions, and motives as an indicator of trustworthiness. Our findings of integrity, competence, motives, media portrayal, and skepticism and mistrust further operationalize previous research that describes dimensions of organizational trust and trustworthiness (Mayer et al., 1995).

Focus group participants did not always know the function of the agency, but they still commented on the agency's integrity, competence, or motives. This is perhaps due in large part to how each agency is portrayed in the media, which was an additional and important influential dimension of trust and how individuals perceive it. Our participants indicated that media is a primary source of information about these agencies and in turn is highly influential in the public's process of forming impressions about them, including beliefs about their trustworthiness. Communication scholars note the power of media to influence public opinion: the more an issue is covered in the media, the more the public perceives it to be important (Glanz, Rimer, & Viswanath, 2008). Similarly, this echoes prior research indicating that journalists' decisions regarding portrayal of certain topics can have a profound impact on public opinion (Holton, Weberling, Clarke, & Smith, 2012). Consequently, it is important for agencies to recognize that the way they are portrayed in the media may have a significant impact on how the public perceives their health communication messaging. Not only should agencies work in the interest of the public, but they should also maximize their potential for positive public relations and communication with the public.

Our focus group discussions moved outside the margins of trust and distrust and into expressions of skepticism when participants were not aware of, acquired misinformation about, or were not in full agreement with the role of the agency. The public may have mixed feelings regarding the source of health messages, which manifests itself as a sense of skepticism about the agency or message source, and such feelings may significantly impact reception of the message. Trust is important when individuals lack sufficient knowledge to make decisions (Siegrist & Cvetkovich, 2000). When the recipients of health communications do not have firm knowledge about the sponsoring institution, they use a range of rationales to help them decide whether or not to trust the sponsor and potentially the communication (Walls, Pidgeon, Weyman, & Horlick-Jones, 2004). Our findings suggest that trust is not binary and cannot be measured with one metric (Cook & Gronke, 2005). Having trust in an agency, waiting for more information to judge (i.e., skepticism), and believing that an institution is acting against public interest (i.e., mistrust) are separate ideas (Cook & Gronke, 2005). Some studies indicate that a majority of Americans rate themselves at the midpoint or towards the more trustful end of the continuum, raising the possibility that the American public is more skeptical than distrusting (Cook & Gronke, 2005). It is likely that skepticism appeared as a thread in our discussions because participants were not confined to a binary choice of trust or distrust but instead could describe their opinions in a more nuanced manner.

Our research suggests that without trust in the communicating agencies, information related to tobacco prevention could be ignored or discounted. As such, there will potentially be little to no movement on the current population-level health consequences of tobacco use (e.g., 480,000 smoking-related deaths, despite decades

of public health communications about the dangers of smoking; US Department of Health and Human Services, 2014). As noted, the actual role of trust in government agencies as the source of tobacco prevention information has not been widely studied. Our findings indicate that when such an agency is seen to be working with honesty, completing its job successfully and efficiently, working in the public interest, and is portrayed positively in the media, the public will have more trust in that agency and consequently in its communications. We believe these results may be even more salient for local and state groups, as they are responsible for many tobacco control policies and messaging to the public. In addition, the public may have more interaction with local and state agencies than with federal agencies (e.g., for driver licensing, car registration and inspection, real estate and rental laws, Medicaid and SNAP benefit disbursements). Also, although we focused primarily on government agencies, we included American Legacy Foundation to see if participants' perspectives differed based on government versus not-for-profit status. As described, not-for-profit status contributed to a perception of benevolence and integrity consistent with the structure of not-for-profit agencies where their purpose or mission is to serve a need the public wishes served (Bryce, 2007), while the *perception* of for-profit status (regardless of actual status, as in the case of government agencies that are clearly not-for-profit) negatively impacted trustworthiness.

Similarly, trust in government-sponsored tobacco communications may not be directly related to trust in government in general but may be based on the agency's response to previous health emergencies (Larson & Heymann, 2010). This is important information, considering the government currently invests large amounts of time and millions of dollars in communication campaigns specifically related to tobacco: the first of three rounds of the *Tips from Former Smokers* campaign ran for 3 months in the spring of 2012 and cost $48 million (Xu, 2014). *The Real Cost* campaign initially ran for at least 12 months and will continue to air in the media and will cost well over $115 million (U.S. Food and Drug Administration, 2014).

This study has several limitations. We did not sample with the intent to conduct subgroup analyses of the data, though it is reasonable to believe that different groups of people may have different experiences and perceptions of government agencies. The diversity of participants in our focus groups ensured that varying viewpoints were represented but we did not parse out in separate analyses by demographic group (i.e., African American and LGB adults). That said, a primary strength of this study is the robust qualitative method used to code and analyze the data, including multiple, independent coders for each transcript; iterative development of the focus group guide and codebook; and in-depth thematic analysis of all relevant quotations.

To extend our findings and better understand how people form trust or mistrust in agencies, there is a need to examine whether the source of a campaign moderates its effectiveness. A future study should quantitatively test our three dimensions of trust in health communication by comparing agencies on competence, motives, and integrity and describe how they relate to trustworthiness of the agency; this would also be relevant to evaluations of tobacco prevention media campaigns. Given the extent of government resources spent on anti-tobacco campaigns, an understanding

of public trust in government agencies and the messages they disseminate is a key component to creating effective tobacco messages overall. Our results also confirm and expand findings from previous research on organizational trust and translate them to agencies that develop anti-tobacco messages.

Implications

Our findings suggest that the public's trust in agencies that produce anti-tobacco messaging depends on their assessment of their integrity, competence and motives. However, media plays a significant role in the public's perception of the agency, and the media can easily create public skepticism and mistrust. National, state, and local health promotion campaigns should consider the role of agency source in effectiveness of their communications. When the media portrays the agency as honest, competent, and working in the public interest, the public is likely to have more trust in the agency and its tobacco prevention and control communications.

Acknowledgements We would like to thank Jennifer Greyber for her editorial assistance in preparing the manuscript for submission.

Funding Research reported in this publication was supported by Grant Number P50 CA180907 from the National Cancer Institute and the FDA Center for Tobacco Products (CTP). The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH or the Food and Drug Administration.

Compliance With Ethical Standards

Conflict of Interest The authors declare they have no conflicts of interest.

Appendix

Study Aim 1: Focus Group Guide

Greeting: Welcome and Thank you for being here today. We really appreciate you taking the time to participate in this discussion.
Role: My name is__________. I will be the moderator for the discussion. My role today will be to ask some specific questions and to keep the conversation going. We have a lot to cover, so I may need to change the subject or move ahead with the discussion. But, please stop me if you want to add anything or if you have any questions. Our discussion today will last about 90 min.

We are fortunate to have some help today. I'd like to introduce you to our co-moderator, __________. S/he may ask some clarifying questions as they come up.

The note taker for today is ________________. His/her job will be to take notes during the discussion. We want to be sure to get all of the important things you say.
Purpose: Before we get started, I wanted to talk a little bit about the purpose for the group and about confidentiality. I think everybody here knows why we're here, but let me go over it just in case. We are part of a research team at the University of

North Carolina at Chapel Hill. Today's focus group is interested in discussing how you get information about health issues, what organizations you believe provide trustworthy information about health issues, and your thought about any recent health advertisements and campaigns you have seen or heard. We will also show you some logos of health organization and ask your thoughts about what these organizations do.

We're going to be having a group discussion. It's not an interview where I ask a question and each person answers the questions and we move on to the next one. It's a discussion. We'll be putting topics on the table and the idea is for everyone to participate in the discussion. What's particularly helpful is if somebody says something and you're sitting here thinking, "Yeah, that's sort of like what I think" we want to hear that. But we also want to hear from you if you are thinking, "NO, that's not how I think about it." We want to hear similarities and differences among the group. There is no right or wrong answer to these questions. Your participation in today's focus group will help create messages about tobacco products that are easily understood and trustworthy.

Before we begin, I would like to state that the conversation is being audio-taped to help us remember what is said during this discussion. You may ask me to turn off the recorder at any time or simply say you do not want to answer a question. I would like to stress that everything said here today will be confidential. What you say will be used only to help us with our research. Nothing you say will be connected with your name. We would also like everyone to keep things confidential, so whatever you say and whatever you hear someone say, we would hope that it wouldn't go out of this room. I hope you will feel free to speak openly but be aware of our limits in protecting your confidentiality. Lastly, if possible I would like to ask that you turn off the volume of your cell phones and pagers to minimize possible distractions.

Section I: Health Concerns and Channels (30 min)

Let's start today's discussion with having everyone tell us….

1. What they believe are the most important health issues for people their age?

Probe [If nothing is mentioned by participant—(say) So this can be anything from a cold, acne, to a spot on your skin. This can be something in the past or something you are just interested in knowing.]

2. When you are interested in finding information about these types of health issues, where do you go?

Probe [find a book, contact your physician, read a magazine, search for it on a computer, ask a friend, ask a parent]

Moderator Instructions: (1) Reiterate and prioritize the responses discussed by participants, (2) Discuss only 1 to 3 of the channels reported by participants, (3) Ask questions 3–5 for each channel, and (4) Start with the most frequent response

3. What made you choose to use [**insert channel**] as a source of information?

Note: for internet How do you choose the place to search for your information? Why do you choose this particular website?
Probe [Is it because it is the first one on the list, provides easy and understandable information?]

4. How do you know this source is providing you accurate health information?
5. How do you determine if this source of information is trustworthy?

Moderator instruction: Question 6 is asked after going through 1–3 of the channels

6. When was the last time you saw health information, even when you were not looking for it?

Probe [while using the computer (ads), TV ads, while waiting in the physician's office, posters at work or school; Facebook, Instagram, twitter, etc.]
Note taker: List all channels mentioned by participants
Now let's talk about health information about cigarette smoking and other tobacco products.

7. As you think about the health information you know and don't know about smoking cigarettes and using other tobacco products, what kind of health information would you like to know more about?

Probe [may start conversation about e-cigarettes or other tobacco products, Ask whether they want to know benefits of quitting versus health risk]
Probe [warnings, ingredients, tips on quitting?]

8. If you want to find information about **[list health issues mentioned by participants]**, where would you look?

Note taker: List any channels that are *different* from first set of responses.
Moderator Instructions: Discuss whether the new channels are trustworthy or not (use questions below as a guide).

9. What made you choose to use [**insert channel**] as a source of information?
10. How do you know this source is providing you accurate health information?
11. How do you determine if this source of information is trustworthy?

Let's move the topic of discussion towards pro health advertisements you may recall seeing or hearing in the past about stopping smoking or avoiding tobacco products.

12. What stop smoking or tobacco prevention advertisements do you recall?

Probe [Advertisements with real smokers, true stories about family members who smoke, Place to call to help quit smoking]

13. Are you aware of which types of organizations sponsor these campaigns? What are they?
14. How do you know **[insert name of organizations participants provide]** is providing you accurate health information?
15. How do you determine if this source of information is trustworthy?

Section II: Logos (25 min)

I would like to give you a brief questionnaire. Please complete it on your own and hand it back to me when you are done. (handout the Logo questionnaire)

Now we are going to go through each of the logos on your brief questionnaire and talk about each one. Please look at the screen. (EPA, CDC, Surgeon General, FDA, American Legacy Foundation, NIH, NCI)

Moderator Instructions: (1) Focus group participants view one logo at a time and receive questions 16–20 for each logo, (2) Moderator point to the logo and say the agency full name.

16. Have you ever heard of the [**insert agency full name**]?

Probe [Where have you seen the logo before?]

17. What do you know about this agency?

Probe [What do you think this agency is supposed to do?]

18. Do you recall seeing this logo on anything related to smoking or tobacco use?
19. Do you trust this agency to give you accurate health information?
20. Please describe any positive or negative feelings you have about this agency?

Probe [Do they do a good job? Are they reflected positively in the media? Are they experts in their field?]

Moderator Instructions: click to slide with all logos

The next slide has all the logos. I have just one question regarding all the logos.

21. Which one of these agencies do you trust the most for providing accurate health information?

Probe [If the group seems to trust all government organizations, ask why they trust the government to provide accurate health information]

Section III: Knowledge/Attitude of FDA (15 min)

Now I would like to discuss one particular agency in more detail. The US Food and Drug Administration, or FDA.

Moderator Instruction: Go to next slide of the FDA logo slide

Moderator tells group: The Family Smoking Prevention and Tobacco Control Act signed into law on June 2009 established the US Food and Drug

Administration (FDA) as the "primary Federal regulatory authority with respect to the manufacture, marketing, and distribution of tobacco products". This means that one thing the FDA will do is to better inform youth, young adults and adults who use any tobacco products about the health risks of those products. Specifically, FDA will require tobacco manufacturers to list ingredients, report levels of harmful constituents in smoking products, and require health warnings on labels.

22. Were you aware of this new role for FDA?

Probe [if no one knows about this role, ask if they have any questions about what you just described. You can also describe some of the new FDA responsibilities such as inspecting retail stores to make sure tobacco advertisements are not giving free samples, no single cigarette sales are occurring, and FDA is in charge of disclosing the ingredients of cigarettes to the public.]

23. Given that the FDA is now the primary federal regulatory agency for tobacco products, what do you think about the new role for this agency?

Probe [What are your concerns? What will make you less concerned? Is FDA the right agency for this job?]

24. What do you think FDA should do to help consumers of tobacco products better understand the health risks?

Probe [How should they communicate information to the consumers of cigarettes and other tobacco products?]

Moderator Instruction: clicks to the slide with the Surgeon General's Warning on a cigarette packet.

Please take a look at the next slide.

25. What do you think about the current Surgeon General's warning labels on cigarette packs?

Probe [Do you think it helps people stop smoking? Should they be changed? If so, how?]

26. Describe the level of trust you have for information you receive from the Surgeon General?

Probe [Evaluate their response to this question based on whether the Surgeon General was considered the most trusted agency from the logo list….why they trust it or don't trust it?]

Moderator Instruction: clicks to the slide with the Surgeon General's Warning but FDA Logo.

Please take a look at the final slide (cigarette packet with FDA logo).

27. What do you think would be the impact of adding an FDA logo to warning labels about the harms of smoking and using tobacco?

Probes [Will this make people think tobacco use is safer, will it help people to recognize the harms of smoking? Will it help smokers quit?]

28. Since the FDA is associated with protecting consumers, would putting an FDA logo on cigarette packs cause people to think cigarettes are safer?
29. Is there any other agency/organization that you believe would be better than the FDA to list on cigarette warning labels?

Moderator Instruction: If there is an additional 5–10 min ask the following two questions.

Since we are not at the end of our time, I would like to ask a few additional questions. Up to this point, we have discussed the trustworthiness or credibility of health organizations and agencies. I would like to end the group asking questions about the credibility of other industries.

30. How trustworthy do you believe information is from the pharmaceutical industry?
31. What do you think about information from the tobacco industry? How trustworthy is the information on the pack and in product advertisements?

This concludes our focus group questions.

32. Is there anything else we have not yet discussed that you would like to mention related to what we've been talking about?

Thank you very much for taking part in this discussion today.

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